The Royal Wolverhampton NHS
NHS Trust

Health Scrutiny Panel

Report title:	Update on Mortality Agenda at RWT: 5th March 2020
Report of:	Dr Jonathan Odum, Medical Director
Portfolio	Public Health and Wellbeing

Recommendation(s) for action or decision:

The Health Scrutiny Panel is recommended to:

Note the report

1.0 Introduction

1.1 The Trust has reported a position of elevated standardised mortality ratio. This paper reports the recent improvement in the mortality metrics and presents the work that has been being undertaken in the last year to scrutinise and act upon the potential causes for the outlier status of the Standardised Hospital Mortality Index (SHMI) indicator. The Trust board has been reassured through data analysis that the increased SHMI is not an indicator of avoidable mortality. However, work continues to review and where possible, enhance quality of care provision across admission pathways with elevated SMR's.

Work also continues to address coding and data capture with respect to accuracy and quality of completeness.

This report provides an update on the impact of these initiatives so far and describes future work envisaged.

2.0 Background

2.1 Trust Mortality rate

The Standardised Hospital Mortality Index (SHMI) is the most commonly used indicator to compare the number of deaths in the Trust with the number expected on the basis of average England figures, taking particular characteristics e.g. age profile into account. The score includes the deaths in hospital as well as those that occur within 30 days of discharge over a rolling year. As previously described (presentation to Health Scrutiny Panel February 2019), there are limitations to the measurement, for instance the index does not take deprivation of the population into account or severity of illness at the time of hospital admission. Nevertheless a high score should act as a smoke alarm and an opportunity to scrutinise all aspects of work within the trust that could contribute to the mortality rate.

2.2 The Trust has seen a SHMI score that has been an outlier since the reporting period April '16 - March '17. At its peak the SHMI was 1.22, but since reporting period April '18 to March '19, the trend has seen an improvement, so that the latest position shows a score of 1.097(categorised as 'as expected', within the control limit), October '18 to September '19 (Fig 1& Fig 2).

Fig. 1 RWT SHMI Trend

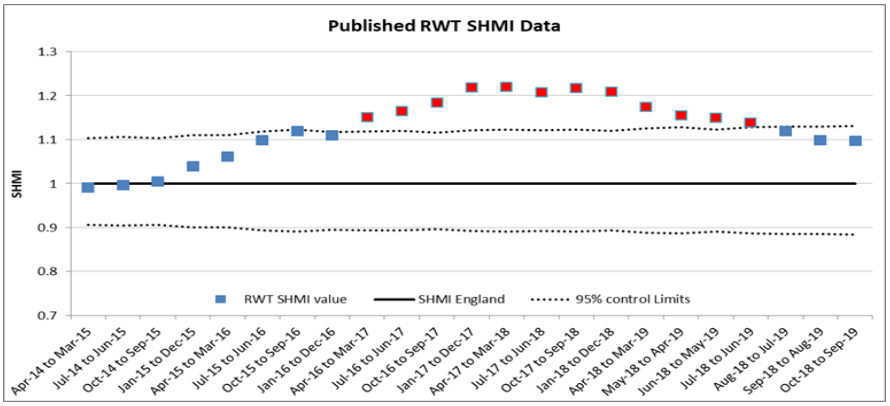
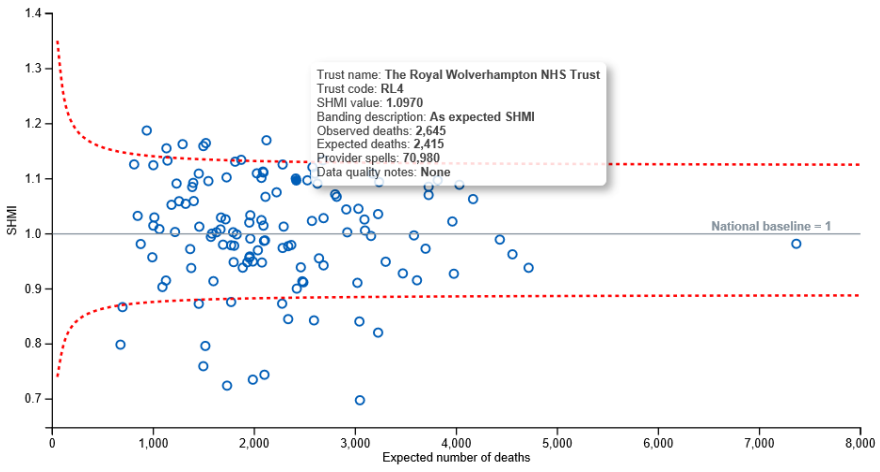
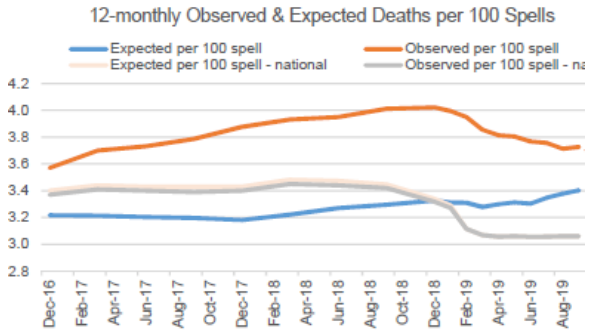


Fig. 2 Funnel plot comparing RWT SHMI with other English Trusts



The change in SHMI score has coincided with a reduction in observed deaths and an increase in expected deaths bringing the two metrics closer in line (Fig 3). The score when the two lines converge will be 1.0

Fig. 3 Observed and Expected Deaths at RWT compared to national average.



The Trust crude mortality rate has shown the same pattern, a rise in 2017/18 and now a decreasing trend, Table 1

Table 1 Trust crude mortality rate (inpatients only)

Period	No of Ordinary Discharges	No of Inpatient Deaths	Crude Mortality
2015/16	68888	1908	2.77%
2016/17	69538	1914	2.75%
2017/18	67758	2078	3.07%
2018/19	69558	2004	2.88%
2019/20*	59910	1564	2.61%

*part year April 2019-Jan 2020

2.3 The Trust has a programme of work designed to scrutinise clinical care, provide assurance that gaps in care are identified and acted upon, gaps in quality of documentation are identified and corrected and systems of care provision are developed to the benefit of individual patients and the wider population. This programme of work has developed over the last 12 months and includes;

- Scrutiny and review of deaths in hospital (the medical examiner process)
- Focus on specific diagnostic groups including assurance of clinical pathways
- Quality of coding and documentation
- Learning from deaths including listening to the bereaved
- Provision of end of life care in patient's homes and care homes with an emphasis on admission avoidance where appropriate
- External Review

The work programme in each of these areas is discussed.

2.3.1 Scrutiny and review of deaths in hospital

In January 2019 the Trust was one of the first organisations in the country to introduce the role of the medical examiner (ME). A description of this service was provided to the Health Scrutiny Panel in November 2019. In summary the purpose of the medical examiner system is to:

- Provide greater safeguards for the public by ensuring proper scrutiny of all non-coronial deaths
- Ensure the appropriate referral of deaths to the coroner
- Provide an opportunity for the bereaved to raise any concerns to a doctor not involved in the care of the deceased
- Improve the quality of death certification

Scrutiny: The introduction of the ME role has meant that over 50% of in hospital deaths are scrutinised by an independent medical colleague within days of the death (Table 2). The aim is to achieve scrutiny in over 90% of cases. The current obstacles to achieving this target include vacancies on the ME rota and variable use of the process by directorates. From January 2020 an additional 4 sessions of ME time has been recruited to, with the expectation that these will be in post and start to make an impact from March 2020. The lead ME has started a series of education sessions with clinical staff.

Table 2 Scrutiny and review of deaths

Period	% of total deaths scrutinised by Medical Examiners	% of total deaths referred for further review (from July 19 to Mortality Reviewers)
January-March 2019	43.8%	15.9%
April to June 2019	59.5%	20.7%
July to Sept 2019	53.5%	16.5%
October to Dec 2019	53.6%	17.1%

Review: The Trust's policy, in line with national guidance, is that where potential areas of concern with care are picked up at scrutiny, the Medical Examiners refers cases on for more detailed review and from July '19 this was to a team of mortality reviewers. This process is called a Structured Judgement Review (SJR) and is a standard national process. SJR reviews will include cases where relatives have raised issues as well as a group of conditions were mandatory referral is required i.e. patients who die following an elective procedure, patients with specific mental health conditions and those with learning disabilities. In addition to the mandated criteria, a random selection of 10% of cases are also chosen for review.

The SJR process reviews against standards of care and scores from very poor to excellent across five stages. These reviews allow the organisation to record both good and poor practice. During 2019, 497 cases had been reviewed (reported at 16th January 2020). 32 cases were judged to have had some deficiencies in care and 40 cases were judged to have had excellent care.

Areas of poor practice are usually related to quality of care and have not affected the clinical outcome.

In cases where there had been some deficiencies in care recognised, opportunities for improvements in care have been identified:

- Recognition of deterioration in patient condition
- Compliance with clinical guidance
- Lack of evidence of use of formal end of life documentation
- Delay in investigations
- Improvement in communication with relatives

This system sits alongside the existing 'serious untoward incident' (SUI) process where cases that are identified by the team involved in the care or following family complaint are referred for route cause analysis (RCA). The RCA lead will complete a 'determination of mortality due to problems in care assessment'. This assessment is reviewed alongside an executive team for confirmation and agreement of action plan.

Following RCAs that have been completed for the period of Q4 18/19 to Q2 19/20 4 cases were identified where there was a 50% or more likelihood that care, or omission in care contributed to the death of the patient. Each of these cases are subject to robust action planning including local and trust wide improvement plans.

2.3.2 Focus on specific diagnostic groups

During 2019, in response to alerts of high SHMI for specific diagnostic groups, the Trust reviewed a cohort of cases and clinical pathways related to the following:

- Cerebrovascular disease (CVD)
- Pneumonia
- Chronic Obstructive Pulmonary Disease (COPD)
- Chronic Renal Disease
- Sepsis
- Senility and organic mental health disorders
- Iron deficiency and other anaemia
- Skin and subcutaneous tissue infections

There was specific learning in each diagnostic group, for example improvement required in time to antibiotic from identification (sepsis) and improvement in timeliness of referral for non-invasive ventilation (COPD) but common themes included:

- Requirement for improvement in quality of documentation that would support correct labelling of primary diagnosis
- Requirement to improve recording of co-morbidities
- Requirement for improved support for patients to allow end of life care to occur in their own homes (or nursing homes) rather than reliance on admission to hospital

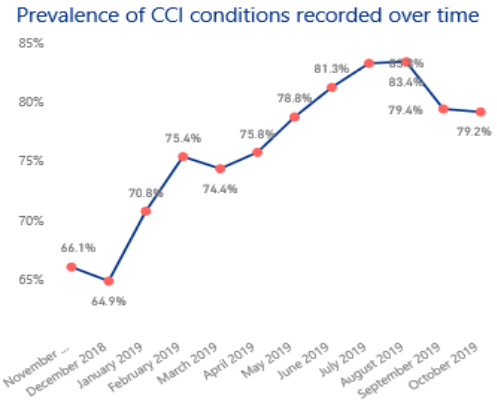
- Quality improvement programmes have been commenced across the organisation with positive outcomes seen in the areas of sepsis, pneumonia, and CVD. There is also quality improvement work with acute kidney injury and congestive heart failure to improve services for patients.

2.3.3 Quality of coding and documentation

It is important that the clinical data documented throughout a patients stay in hospital, and particularly at admission, is accurate and complete as this data feeds the algorithm which produces the deaths that are expected within the trust over a given period and this in turn affects the SHMI. The Trust has previously demonstrated that the depth of coding produced was good but that specific morbidly scores (Charlson comorbidity) were not captured as completely as required. This has led to a number of initiatives including redesign of the trust coding protocol, education of clinicians, regular meetings between coding and emergency portal clinical teams and retrospective case note review.

The effect has been to improve the Charlson comorbidity capture, see Fig 4

Fig. 4 Increase in Charlson Comorbidity (CCI) conditions at RWT



This along with other coding initiatives has served to more accurately describe the mortality risk of patients at admission and has contributed to the increase in the expected deaths with the subsequent impact on SHMI. Works continues to maintain this level of accuracy in an efficient and timely fashion.

2.3.4 Learning from Deaths including engagement with families

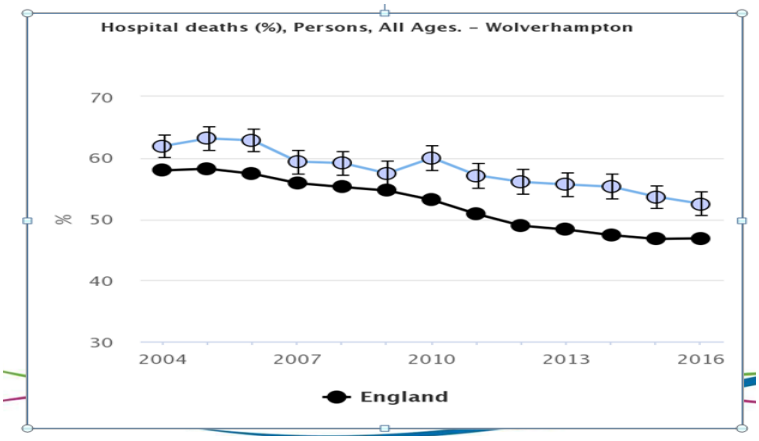
Through the medical examiner process the Trust is now proactively speaking with families within days of bereavement to hear their experience of care provided to their loved ones. For instance during the period September to December 2019, 226 families were contacted from the Bereavement Centre. Most families appear to be grateful for this contact and see it as a positive care initiative. 12 of these families were supported by PALs to discuss the care provided with the clinical specialties. The discussions will have included requests for clarity about treatment as well as potential concerns in care. The opportunity for improvement continues to be that of improving communication between Trust staff and families or patients.

2.3.5 Provision of end of life care in community settings

The Trust has previously reported that more people die in hospital in Wolverhampton than the national England average, see Fig 5, source Public Health England.

In 2018, 52.5% of the population died in hospital compared to the national average of 45.4% and West Midland 48.1%. The greatest contributor to this difference between Wolverhampton and national rates, being the number of patients that die in care homes (19% vs 22.5%) and hospice (4.0% vs 5.9%).

Fig. 5 Percentage of hospital deaths occurring in hospital compared to England 2004-2016



A variety of initiatives have been initiated between RWT community teams, Wolverhampton CCG and other community providers e.g. Compton Care and nursing homes, in an attempt to support an increase in use of advanced care planning with the intention of avoiding admission to hospital for end of life care. We intend to measure the impact of ongoing interventions working collaboratively with our partners (Wolverhampton CCG and Public Health).

2.3.6 External Review

Throughout the last year the Trust has used external, independent review and opinion to assure the board of the progress against this agenda. This includes:

- Working with a senior surgeon in the NHS who has held a range of management and leadership posts including Royal College of Surgeons Director for Professional Affairs, Medical Director at West Midlands Strategic Health Authority, and Deputy Medical Director at NHS Improvement. As a result, he had wide experience in clinical governance, patient safety, medical leadership, and medical engagement. He held a yearlong post at RWT, acting as reviewer of clinical pathway delivery across the organisation, recommending areas for change including quality improvement methodology and provided mentorship for clinical and medical leads. He reported regularly to the board.

- Working with Price Waterhouse Cooper, who have reviewed the data collection systems, identified areas for change and now provide intelligence with their predictive models to identify potential data quality issues on a case by case basis.
- Regular submission of review of alerting diagnostic groups to CQC when requested.
- Audit of Learning from death processes via Trust auditors Grant Thornton UK

2.4 Future work

2.4.1 Monitoring of SHMI

Through its predictive modelling work with PWC the Trust believes that the SHMI will continue to fall towards the figure of 1.0 during 2020. Nevertheless the Trust will continue to monitor the mortality rates in specific diagnostic groups and where a rising trend is seen will instigate case note and clinical pathway review. The Trust is also committed to continuing the quality improvement methodology that it started in 2019.

2.4.2 End of Life Care

As described above provision of end of life care in community settings rather than in hospital has been a constant theme in case note reviews and we know that Wolverhampton is an outlier compared to other English CCGs. Through the ICA the partners will continue to develop the ongoing work in an effort to identify and provide services for those people at the end of life and in their preferred place of care

2.4.3 Review of Out-of-Hospital Deaths

Most primary care providers currently review the care of patients who subsequently die in their population. However there is no systematic methodology which allows for recording of outcome or learning across organisations. The Trust has begun discussion across the Primary Care Networks and will pilot a system in the RWT primary care practices during 2020.

3.0 Impact on Health and Wellbeing Strategy Board Priorities

Which of the following top five priorities identified by the Health and Wellbeing Board will this report contribute towards achieving?

Wider Determinants of Health		☐
Alcohol and Drugs		☐
Dementia (early diagnosis)	☐	
Mental Health (Diagnosis and Early Intervention)	☐	
Urgent Care (Improving and Simplifying)		x

4.0 Decision/Supporting Information (including options)

5.0 Implications

Please detail any known implications in relation to this report:

None identified

6.0 Schedule of background papers

6.1 The background papers relating to this report can be inspected by contacting the report writer:

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Further information can be found at https://www.england.nhs.uk/wp-content/uploads/2017/03/nqb-national-guidance-learning-from-deaths.pdf