Medway COUNCIL
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Health and Adult Social Care Overview and Scrutiny Committee

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Mortality Rates at Medway NHS Foundation Trust

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Summary

The report seeks to provide an update on mortality rates at Medway NHS Foundation Trust, and work undertaken to progress improvements.

Over a considerable period of time mortality rates at the Trust have varied, at times being outliers in relation to national averages and at other times being within expected ranges.

Improvements carried out as part of the Trust's Patient First strategy over the past two years saw the mortality indices improve. However, the rates have again increased, and as a result actions have been undertaken to better understand why this is and to ensure improvements.

In addition, the governance around mortality has been strengthened in line with good practice, with monthly reporting to the Quality Assurance Committee and quarterly reporting to public Board meetings.

The Trust takes mortality rates extremely seriously, and we are determined to ensure improvements are sustainable. We recognise that system-wide partnership work to improve flow through the hospital is part of the overall picture linked to improved mortality rates.

1. Recommendations

1.1 The committee is asked to note the report.

2. Budget and policy framework

2.1 This report relates to healthcare policy and strategy.

2.2 Under the Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013 the Council may review and scrutinise any matter relating to the planning, provision and operation of the health service in Medway. In carrying out health scrutiny a local authority must invite interested parties to comment and take account of any relevant information available to it, and in particular, relevant information provided to it by a local Healthwatch. The Council has delegated responsibility for discharging this function to this Committee and to the Children and Young People's Overview and Scrutiny Committee as set out in the Council's Constitution.

3. Background and progress

3.1 The Standardised Hospital-level Mortality Indicator (SHMI) produced by NHS Digital, and the Hospital Standardised Mortality Ratio (HSMR) produced by Telstra Health Intelligence, both published monthly, are the two mortality indicators that Medway NHS Foundation Trust uses for monitoring mortality, as do all other NHS trusts. SHMI is the recognised NHS England mortality index; both indices provide national benchmarking. They are both expressed as a ratio of the observed number of deaths compared to the expected number of deaths adjusted for the characteristics of patients treated at a Trust. Summary Hospital-level Mortality Indicator (SHMI) - Deaths associated with hospitalisation - NHS England Digital

3.2 It is important to note that while mortality indictors are a good way of detecting potential areas of further investigation, they should not be used in isolation or as a measure of Trust performance in terms of quality of care. They are described as 'smoke signals' to highlight areas to investigate to understand if there are issues with quality of treatment or care.
SHMI FAQs (digital.nhs.uk)

4. Summary Hospital level Mortality Ratio (SHMI)

4.1 SHMI reports on mortality at trust level across all NHS trusts in England, and is published monthly by NHS Digital. It is the ratio between the actual number of patients who die following hospitalisation at a trust and the number that would be expected to die on the basis of average England figures, given the characteristics of patients treated there. SHMI takes account of, age, sex, method of admission to hospital, diagnosis, comorbidities and in-year seasonality.

4.2 SHMI differs from other mortality indicators as it includes all deaths outside of hospital, within 30 days of discharge, as well as all hospital deaths. Measurements of in-hospital deaths can be compared to those out of hospital. The data is presented as a 12-month rolling average and is published five months in arrears.

4.3 The Trust's SHMI value for the most recent reporting period of May 2023 to April 2024 is 1.19 and 'higher than expected'.

SHMI trend

4.4 The SHMI value for the Trust had shown an improvement, but has deteriorated over the last few months. Coinciding with the ‘higher than expected’ and deteriorating SHMI values, the percentage of deaths attributed to in-hospital, rather than out of hospital, is notably higher now than in previous years.

Hospital Standardised Mortality Ratio (HSMR)

4.5 Telstra Heath UK is used to collate the second mortality indicator, the Trust’s Hospital Standardised Mortality Ratio (HSMR) data. HSMR data is published monthly, approximately four months in arrears. HSMR is presented as a 12-month rolling trend so that changes can be compared to the last 12 months’ worth of data.

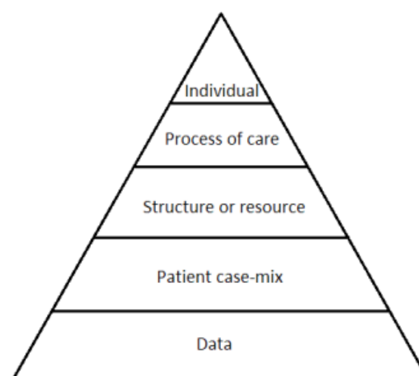
4.6 The Trust’s HSMR for the recent reporting period of April 2023 to March 2024 is 113.79 and within the ‘higher than expected’ band. The Trust has been in the ‘higher than expected’ banding over the last two years.

4.7 The reason for the ‘higher than expected’ value is because the expected rate (the number of deaths the indicators calculate) is lower than the crude rate (the measure of the number of deaths within a population over a specified period of time).

4.8 The expected rate of mortality is a statistical measure and not a count of patients. It is calculated using a number of variables including age, gender, year/month of admission, method of admission – elective and non-elective, primary diagnosis on admission and comorbidities.

Approach to investigating mortality indices outside the expected range

4.9 National guidance when investigating a higher than expected mortality SHMI is to consider the issues highlighted in this diagram:



Lilford R., Mohammed M. A., Spiegelhalter D., Thomson R. Use and misuse of process and outcome data in managing performance of acute medical care: avoiding institutional stigma. Lancet 2004; 363: 1147-54.

4.10 More likely explanations are listed towards the bottom of the pyramid, and so it is suggested that these are investigated first. SHMI FAQs (digital.nhs.uk)

4.11 At Medway we have used the nationally recommended approach described above together with seeking advice from external experts at both a local and national level to focus our improvement work.

Data improvements

4.12 During 2023, the Trust introduced a ‘task and finish’ group. This group consisted of key stakeholders to identify and address immediate actions to improve the mortality indicators. The actions from the group were:

- Recording and coding – to support better recording of primary diagnoses, comorbidities and correct consultants for when the patients are admitted onto the wards
- Coding of deaths – support consultants input of coding deceased patients, retrospective changes and audits for missed opportunities
- Palliative care/ end of life care focus – improve access to palliative care options, ensuring the coding for these patients are visible, retrospective changes and audits for missed opportunities
- Treatment Escalation Plans (TEP forms) – more education relating to the Recommended Summary Plan for Emergency Care and Treatment (RESPECT) forms is already available in Kent Medical Care Record (KMCR) for use by clinical Teams and integration of TEP onto Electronic Patient Record (EPR) is in progress for roll out
- Deep dives – develop a Standard Operating Procedure to ensure speciality-led deep dives and collaborative working with Medical Examiners to highlight issues with alerting diagnosis groups
- Learning from partner organisations – national and regional contacts to explore best practice
- Appointment of a clinical Learning from Deaths lead
- System review for monitoring and recording deaths
- Improving communication and shared learning through weekly flashes, newsletters
- Develop Statistical Process Control (SPC) style data to display SHMI data to monitor trends
- Education – pre-recorded sessions available for all clinical leads to share at governance meetings, inductions and refresher courses through Medical Education.
- In addition, data relating to avoidable 2222 calls were reviewed using our Patient First A3 methodology as part of the work to identify root causes and reduce avoidable 2222 calls which is described below.

4.13 By the end of 2023, the Trust had put in place nine out of 11 actions from the Task and Finish group. The outstanding actions include the process for validating each death at Medway to ensure the clinical coding is accurate and the accuracy of Patient Administration System (PAS) in ensuring the correct consultant is listed for the correct patient. Both of these actions form part of the new mortality work using our Patient First methodology.

4.14 Education on accurate clinical documentation is provided to specialties each year. As a result, the Trust has sustained improvement in average depth of coding and comorbidity scoring, and is now currently performing better than the national median for coding metrics which are most indicative of quality of documentation.

Patient case mix

4.15 The south east region is one of the best performing regions in terms of mortality indicators. However, there are variations in healthcare provision across the south east with Medway and Swale having one of the lowest numbers of general practitioners/ head of population as well as a having significant areas of deprivation which is also associated with ill health. In addition, Medway has the highest percentage of over 75s with a frailty condition.

Improvement actions relating to structures of care, resources and process

4.16 Working with the national HARIS project and Getting It Right First Time (GIRFT) programme we have significantly improved our ambulance handover times such that we now have the shortest ambulance handover times in the country, as reported in NHS data.

4.17 Through our Patient First quality improvement work we have also seen a significant improvement in the Emergency Department four-hour waits, such that our current performance for August 2024 was 79.9 per cent. Also using our Patient First approach to improve flow and discharge in the hospital we have achieved a significant improvement in bed turnaround time, enabling beds on our wards to become available more swiftly and earlier in the day.

4.18 However, we continue to have patients who wait in our Emergency Department for prolonged periods of time and from an analysis from GIRFT we range between being 40 and 100 beds short over the course of the year based on the demand for admissions. In addition, we have between 100 and 140 patients who do not meet the criteria to reside (that is, no longer needing acute hospital care) in hospital at any one time. This includes patients waiting for discharge with support at home, rehabilitation, or to be discharged to a care or nursing home. These issues are being addressed through programmes of work across the health and care system as well as through improvements to the discharge process as part of our Patient First strategy.

4.19 From a mortality perspective in his recently-published report following an independent investigation of the NHS in England, Lord Darzi discusses long waits in ED and quotes from a report from the Royal College of Emergency Medicine, “that long waits in ED are likely to be causing additional deaths…”Independent investigation of the NHS in England - GOV.UK (www.gov.uk).

5. Process of care and individual patients

Outlier alerts

5.1 Both SHMI and HSMR monitor and highlight diagnostic group alerts as outliers on a monthly basis. They are designed to signal that a pattern of activity appears to have gone beyond a defined threshold. The alert is triggered when a statistic passes a national benchmark. They act as an alarm bell for potential further investigation, should the number of deaths increase.

5.2 It is important to note that diagnosis groups that trigger an alert do not always mean there is an immediate need to investigate. Telstra Health recommends that a sample of patients is used for deep dive reviews. This is inclusive of monitoring identified diagnosis groups and the number of observed deaths within that group on a month-by-month basis.

5.3 In 2023, deep dives were carried out on respiratory groups and the clinical care was reviewed for a number of these patients. No failings in care were identified for these patients but there were issues with the documentation. These were rectified by the clinical coding team and this was the driver to continue to provide more education to clinicians on the important of documentation and the impact this has on the mortality indicators.

5.4 Acute Cerebrovascular Disease was alerted as a significant outlier for Medway in 2022. An independent Consultant Stroke Physician undertook a deep dive into the performance of the stroke services for Medway and Swale patients, more specifically looking at the impact this has on residents from these areas. The deep dive did not raise any concerns over the management of these patients who were treated at Darent Valley Hospital Stroke Unit or those who were conveyed to Medway and who subsequently died. Clear evidence from The Royal College Stroke National Audit (SSNAP) audits a significantly improved pattern of stroke care across the whole of Kent and Medway compared to the situation before the reconfiguration of services.

Reduction in avoidable cardiac and periarrest 2222 calls

5.5 One of the Trust's Quality priorities between 2022 and 2024 was a reduction in the number of avoidable 2222 cardiac arrest calls.

5.6 We used our Patient First methodology to map our processes and undertook an audit of the responses to high national early warning scores (NEWS). We also undertook a qualitative thematic analysis of incident reports, and performed a root cause analysis to triangulate causes of avoidable 2222 calls.

5.7 Using a multidisciplinary team approach with our resuscitation, outreach, emergency, and acute medical multidisciplinary teams, we identified that the primary causes of avoidable 2222 calls were a failure to recognise and failure to escalate a deteriorating patient, together with gaps in clinical planning. This was triangulated with both quantitative and qualitative data to ensure validity and target interventions.

5.8 Since July 2024, 2222 weekly quality breakthrough objective meetings have been instigated to review, investigate and make improvement to reduce the number of avoidable 2222 calls. This is attended by a member of the resuscitation team, the full multidisciplinary clinical team, colleagues from our business intelligence department to support data analysis and is led by the Chief Medical Officer.

5.9 This improvement work won the South East Region Parliamentary Award in 2023 and was runner up in the Health Service Journal (HSJ) patient safety Awards, also in 2023.

5.10 This result is a significant achievement and demonstrates the positive impact our focused improvement work has achieved to improve patient treatment and care.

6. Structured Judgement Reviews (SJR)

6.1 The Structured Judgement Review process blends traditional, clinical judgement-based mortality review methods with a standard format. This approach requires reviews to make safety and quality judgements over phases of care, where the reviewer/s can make explicit comments about each phase of care and score the care in order to establish if the care was satisfactory or identify any suboptimal care. This in turn allows learning and support for the development of quality improvement initiatives when problems in care are identified. The standardised format of reviews allows analysis to identify themes and trends of learning identified or areas of particularly excellent care where positive learning can be shared.

6.2 It is a national methodology developed by the Royal College of Physicians. Cases for review are identified using set and recommended criteria including referrals from the Medical Examiners. Clinician-guidance-completing-the-SJR.pdf (bsuh.nhs.uk)

6.3 Each quarter, themes from SJR are reviewed and monitored and actions are taken to address the issues from SJRs. For quarter one (2024/25), the top themes and actions from SJRs were problems with communication between teams as well as with families and carers, problems with documentation, delays in imaging, treatment delays and issues relating to bed capacity.

6.4 It is important to note that SJRs are judgements made on the care provided to a patient during their last admission and are not investigations. Where significant issues in care are identified through SJR, these are forwarded to the Incident Review Group (IRG) which is overseen by the Patient Safety Team. The IRG explores the appropriate next steps to further investigate the incident.

6.5 The death of every patient with a learning disability and autism is subject to an SJR. SJRs are forwarded to the Learning from Lives and Deaths of people with a Learning Disability and Autism for LeDeR review.

6.6 In the last financial year, the Kent and Medway LeDeR review highlighted issues with completion of Treatment Escalation Plans (TEP) and Do Not Attempt Resuscitate (DNAR) paperwork issues at Medway. Education to medical teams was provided by the Learning Disability Liaison Nurses to

ensure these were completed appropriately for patients with Learning Disabilities. Work is ongoing in this area as well as ensuring good communication with families and carers and that appropriate mental capacity assessments/best interest decisions regarding invasive procedures and treatments are undertaken.

Shared learning

6.7 All cases discussed at SJR panel are included in the weekly Quality Flash which is shared Trust-wide to disseminate learning across the Trust. The flash includes positive learning identified from reviews and highlights learning and issues identified. All cases for speciality morbidity and mortality (M&M) meeting discussion are forwarded to speciality leads to discuss at their M&M meeting. Cases identified as having ‘significant problems’ in care are highlighted to the Incident Review Group and under the new patient safety (PSIRF) framework, will be agreed as to the appropriate investigation pathway.

6.8 The mortality newsletter includes a case study to highlight learning actions and improvements each month. The Mortality Team has published newsletters each month since March 2024. The Learning Disability team is working with the Mortality Team to include key messages in the newsletter in relation to learning from deaths from patients with a learning disability.

6.9 The new SJR process will look specifically at how the Trust addresses these themes with actions focused on improvement around the themes identified.

7. Safeguarding

7.1 The Trust refers all learning disability (LD) deaths for Structured Judgement Review (SJR) and has 100 per cent compliance with this process. LD deaths are also referred for LeDeR review (Learning Disability Review) to further explore areas of learning, opportunities to improve and examples of excellent practice.

7.2 All deaths also receive independent medical examiner scrutiny with any safeguarding concerns upon first review being raised to the Learning From Deaths team as a factor warranting further investigation.

7.3 Safeguarding forms part of the scrutiny and oversight of the Trust’s SJR review panel and Incident Review Group, where patient deaths are discussed. Any death that has evidence of avoidability is fed into local safeguarding processes for triangulation and exploration of any themes. Similarly, under the Patient Safety Incident Response Framework there is a national requirement to investigate deaths thought ‘more likely than not due to problems in care’ as a ‘patient safety incident investigation’, through which any safeguarding concerns are explored and considered for contribution to the death and any learning opportunities.

8. Next steps

8.1 Mortality and learning from deaths has been identified as the Trust's quality domain focus using the Patient First methodology for 2024/2025. The specific areas of focused work we are now undertaking are:

- Review of emergency admission pathways with a particular focus on patients admitted with respiratory disease
- Further embedding of learning from deaths methodology including Structured Judgement Review (SJR) process to utilise the skills of the full multidisciplinary team with strong links to the specialities to highlight opportunities for learning
- Improving communication with patients and families with regard to End of Life Care (EOLC) decisions and processes ensuring timely referrals to the EOLC team are made, ensuring TEP, RESPECT and Do Not Attempt Resuscitation (DNAR) forms are used and to ensure times for fast track discharged are improved
- Continued work to improve our data quality.

8.2 As described, showing a sustained improvement in mortality for our patients requires a multi-faceted approach and also work across all sectors. As we continue to make improvements in the hospital for our patients as described in this paper, we would also ask for support across health and social care together with the Council so that together we can deliver the best possible outcomes for our community.

9. Risk management

9.1. There are no risks for the Council arising from this report.

10. Climate change implications

10.1 There are no climate change implications arising from this report.

11. Financial and legal implications

11.1 There are no financial or legal implications for the Council arising from this report.

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Appendices

None.

Background papers

None.