

Hospital Standardised Mortality Rate (HSMR)

A briefing for interested parties (including patients, staff, members, visitors, carers, governors and board members)

Introduction

There has been media coverage recently into Mid Staffordshire NHS Foundation Trust, and information about its Hospital Standardised Mortality Rate (HSMR). Following this, the Sunday Telegraph published in its edition on March 29th further comments on the story and included reference to a number of other hospitals at which the HSMR was considered to be high.

One of those hospitals was the Great Western Hospitals NHS Foundation Trust (GWH) (as it was previously known, as Swindon and Marlborough NHS Trust). This paper is prepared to provide all interested parties with more information on HSMR, what has happened in the past, and the current situation at Great Western Hospitals NHS Foundation Trust

Background

Use of HSMR is designed to give a nationally balanced and therefore comparable system of measurement (Standardised In-Hospital Mortality Rates) and also act as an alarm system for organisations to alert them to a potential problem with the clinical outcomes of its patients.

The HSMR rating for a hospital should always be used in conjunction with other indicators and measures to identify whether there is a problem. The issue can then be identified and actions taken as appropriate.

How is HSMR calculated

HSMR is calculated using a term known as “Relative Risk”. This is defined by a risk score being allocated to each patient who enters an NHS Hospital in England. This work is carried out by Imperial College, London. Using information about the patient, the process looks at that patient’s probability of a negative outcome (i.e. the likelihood that the patient will die within their period of care – this can include their care in a number of NHS Hospitals if their care necessitates their transfer between centres as part as part of a continuous care pathway). The risk is calculated based on:

- Age
- Sex
- Method of admission
- Socio-economic deprivation (by electoral ward and postcode)
- First and second diagnosis

- Co-morbidity (severity and combination of presenting conditions)
- Number of prior emergency admissions in the previous 12 months
- Palliative care
- Year
- Month of admission

The nationally expected rate, based on patient types, standardised using all of the factors listed above, is 100.

Scores above 100 suggest a higher level of Mortality than would be expected for a hospital such as ours with the case mix we have.

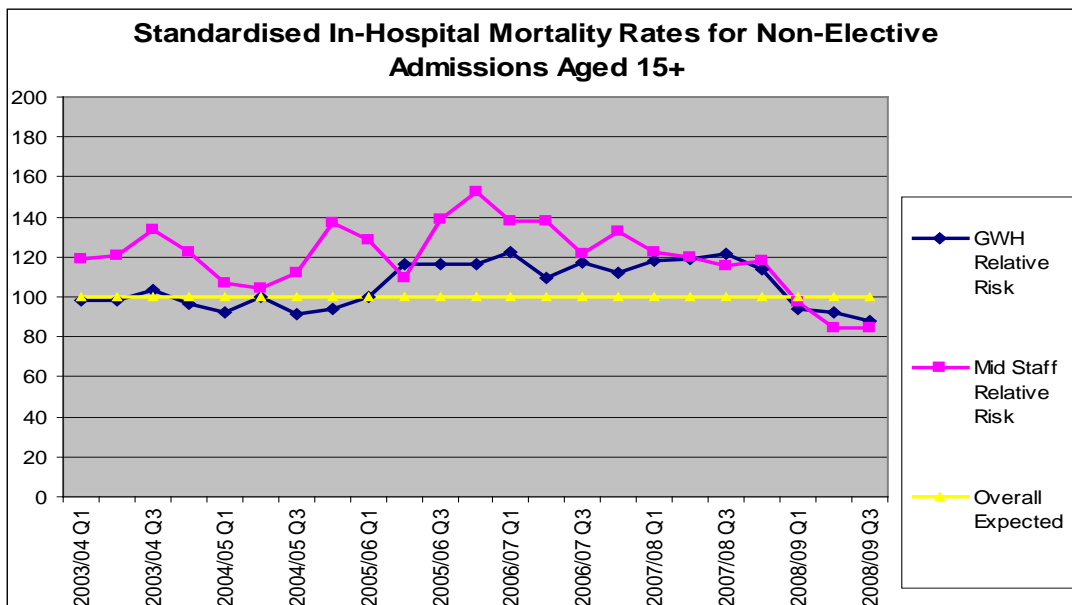
Scores below 100 suggest a mortality rate better than would be expected.

What does this mean at GWH

The graph below shows the relative risk (see above) of an in-hospital death, (tracked by quarter) for recent years, at GWH and Mid Staffordshire NHS Foundation Trust.

It shows that GWH is generally below the Mid Staffordshire NHS Foundation Trust, although still at times above the expected rate of 100 during this period.

The Mid Staffordshire NHS Foundation Trust rates did reach some high levels at certain points and have been consistent outliers for a considerable time. However, both Trusts have shown a marked improvement this year.



Note: Data only counts those patients with an emergency admission aged 15+ years. Data Source Dr Foster.

What actions are being taken at Great Western Hospitals NHS Foundation Trust?

Since the HSMR data was first published we have taken a number of actions which include reviewing and making changes to our clinical practice so that we can reduce the mortality rates, and ensure that the data submitted on our patients is coded correctly.

Amongst the changes we have made to clinical practice include:

- prescribing fewer and different antibiotics which in turn has reduced the numbers of patients contracting clostridium difficile
- investment in new technology
- the introduction of Cardio Pulmonary Exercise Testing for patients before they undergo surgery, which has improved their post operative recovery; this ensures these patients are cared for in the most appropriate care setting, sometimes this is at home, and also reduces the need for hospital admission.
- strengthening the process for the early identification of poorly deteriorating patients in hospital, hence improved responsive care
- strengthened arrangements for patients requiring palliative care.

Implementation of an Infection Prevention & Control campaign to focus staff, visitors and patients on the need for hand washing and standards of cleanliness has resulted in only 6 cases of hospital acquired MRSA from April 2008 to March 2009 and 72 cases of Clostridium Difficile. Both are a significant reduction.

This work and the continued focus by clinical and management teams and regular review by the Board has led to the HSMR rate in 2008 coming down dramatically. The current position for the period from April 2008 to December 2008 for the Great Western Hospital is 94.7. Whilst this is a good performance, we will remain vigilant and ensure that we continue to drive down the incidence of infection

ENDS

Helen Bourner/Teri Stevans
April 3rd 2009

Current

The current annual position for the period April 2008 to March 2009 mortality figure is 93.6 for the Great Western Hospital.

June 1st 2009