

EXECUTIVE SUMMARY
REPORT TO THE TRUST HEALTHCARE GOVERNANCE COMMITTEE

HELD ON 24 SEPTEMBER 2012

Subject:	Quarterly Trust Mortality Report – Sept 2012
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Status¹	N

PURPOSE OF THE REPORT:

To provide the HCGC with a Trust Mortality Report covering current Hospital Standardised Mortality Ratio (HSMR) and Standardised Hospital-level Mortality Indicator (SHMI) values and provide comparator data with other trusts in England.

To address a key recommendation in Prof Alberti's review of Mid Staffs Hospital.

KEY POINTS:**HSMR**

The rolling HSMR for June 2011 – May 2012 of **89.2** for All Admissions is "significantly lower than the national benchmark". The rebased value STH NHSFT for 20011/12 is anticipated to be 97 (within expected range) and we await confirmation of this from Dr Foster in September 2012. The anticipated rebased value for Yorkshire and the Humber is 103.

STH NHSFT	Rolling 12 months HSMR June 2011 - May 2012
All Admissions	89.2 (85.7 – 92.8)
Elective Admissions	72.8 (57.9 – 90.4)
Non Elective Admissions	89.9 (86.3 – 93.6)

SHMI

The most recent information from the IC, published 25 July 2012, covers the period 1 January 2011 to 31 December 2011. The IC SHMI value for STH is **0.92** (0.89 -1.12 *over-dispersion control limits of 95%*) for an expected 3799 deaths.

IMPLICATIONS

	Aim of the STHFT Corporate Strategy 2012-2017	Tick as Appropriate
1	Deliver the best clinical outcomes	√
2	Provide Patient Centred Care	√
3	Employ Caring and Cared for Staff	
4	Spend Public Money Wisely	√
5	Deliver Excellent Research, Education & Innovation	
	CQC Outcome	

RECOMMENDATION(S):

Note that the 2011/12 HSMR is significantly lower than the national benchmark, but this may not be the case on rebasing when the value is within expected range.

The rolling 12 months SHMI value is 0.92. This compares with a value of 0.86 for 2010/11.

Both SHMI and HSMR should continue to be monitored and compared at future meetings, with the additional reporting of crude mortality within the next 3 months.

APPROVAL PROCESS

Meeting	Presented by	Approved	Date
TEG			12 September 2012
HCGC			24 September 2012

Sheffield Teaching Hospitals NHS Foundation Trust

Mortality Report - September 2012

Introduction

This report provides an overview of mortality across Sheffield Teaching Hospitals NHS Foundation Trust as one outcome indicator that contributes to the overall quality of patient care. The report will concentrate on two current measures of mortality – the established Hospital Standardised Mortality Ratio (HSMR) and the new Summary Hospital-level Mortality Indicator (SHMI).

We are currently reviewing the potential to report crude mortality within the next three months as an additional quality indicator to HSMR and SHMI.

1. Hospital Standardised Mortality Ratio (HSMR)

1.1 Trend analysis

The HSMR is an *indicator* of healthcare quality that measures whether the death rate *at a hospital* is higher or lower than you would expect. We access this information through Dr Foster's Real Time Monitoring Tool (RTM).

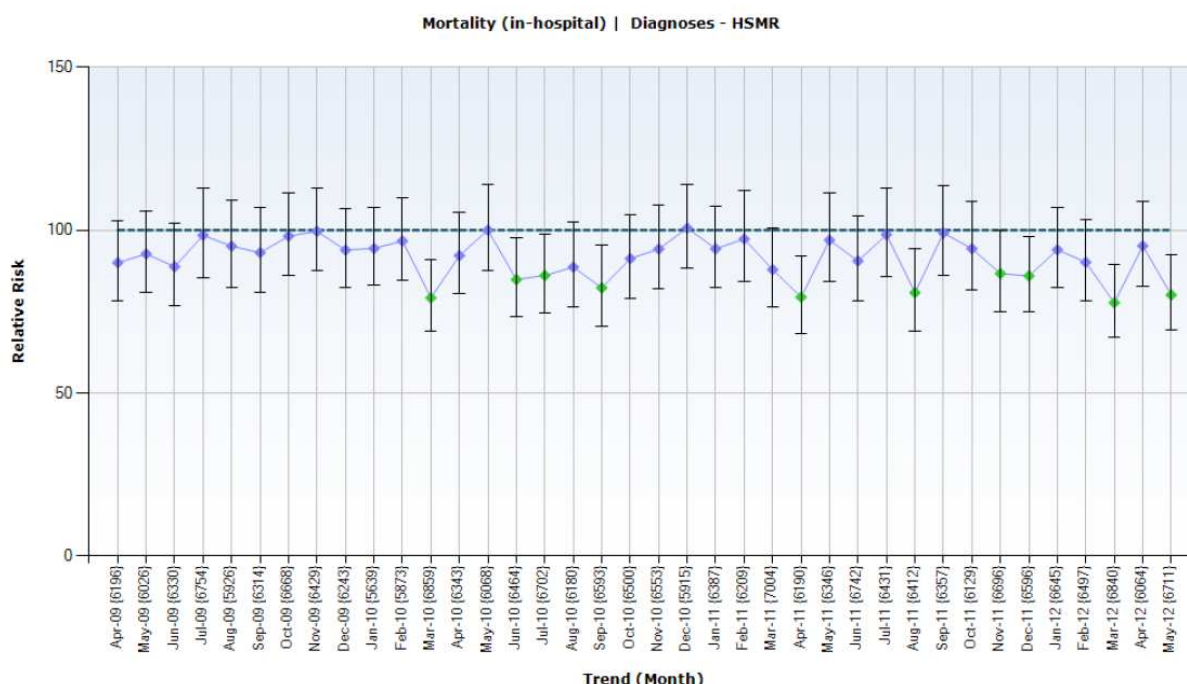
The HSMR compares the expected rate of death in a hospital with the actual rate of death for those patients with diagnoses that most commonly result in death i.e. *it covers the top 56 diagnoses from which 80% of all deaths occur*. When calculating the expected death rate severity of illness, age, sex, deprivation and other factors are taken into account.

The number of expected deaths is compared with the number of observed (actual) deaths and if the number is the same the HSMR score is a value of 100. If the number of observed deaths is less than expected the HSMR value is below 100; if observed deaths are higher than expected then HSMR is greater than 100.

All hospitals in England are included in the model so that a national benchmark can be calculated. The current benchmarking data in RTM is based on the 2010/11 financial year's Secondary User Services (SUS) data.

Chart 1 depicts monthly HSMR values, as calculated using Dr Foster RTM, over the past 38 months benchmarked to the appropriate year. The points highlighted in green indicate a significantly lower than national average mortality that particular month, where average national mortality is equal to 100.

Chart 1 HSMR Trend (Month) between April 2009 and May 2012



1.2 Rolling HSMR June 2011 – May 2012

Dr Foster reports the annual HSMR in their Hospital Guide to enable comparison of mortality rates across all hospitals in England for any particular year. Table 1 indicates the rolling 12 months HSMR as it currently stands.

Table 1

STH NHSFT	Rolling 12 months HSMR June 2011 - May 2012
All Admissions	89.2 (85.7 – 92.8)
Elective Admissions	72.8 (57.9 – 90.4)
Non Elective Admissions	89.9 (86.3 – 93.6)

An HSMR for 2011/12 of **89.2** for All Admissions is “significantly lower than the national benchmark”. The rebased value STH NHSFT for 2011/12 is anticipated to be 97 (see funnel plots in section 3) with confidence intervals of 94 – 101 placing the value within the expected range.

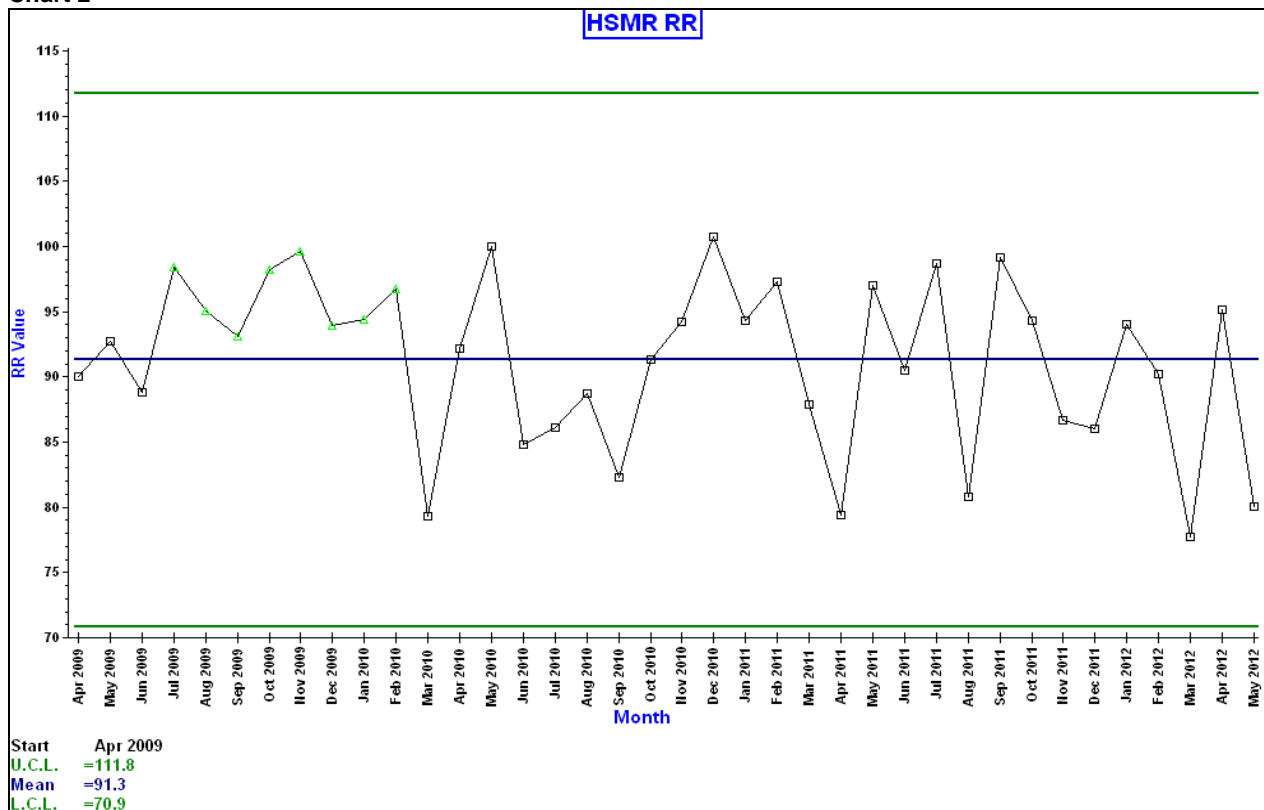
1.3 Statistical Process Control Charts

Chart 2 depicts the average Trust HSMR (91.3) between April 2009 and May 2012 and shows the variability of the actual 38 HSMR values over that time period.

The run of 8 points between July 2009 and February 2010 above the average may either indicate a “special cause event” that would need further investigation, or a temporary change that has since returned to a pattern of *normal variation*.

In future, the mortality reporting process will ensure any “special cause events” are identified in real-time & appropriate action taken.

Chart 2



1.4 HSMR Comparator Charts and Tables

Dr Foster enables comparisons to be made with other trusts in England. The funnel plot below (chart 3) shows relative HSMR values for April 2011 – March 2012 for all the Trusts in Yorkshire and the Humber set against the “background” values for all acute trusts. Sheffield Teaching Hospitals is highlighted in blue.

Chart 3

The background points show the HSMR for the **current financial year** for each acute non-specialist trust in England. Use the controls below to toggle between the current and rebased values.



... and the relative *anticipated re-based* HSMR values for April 2011 – March 2012 are shown on chart 4

Chart 4

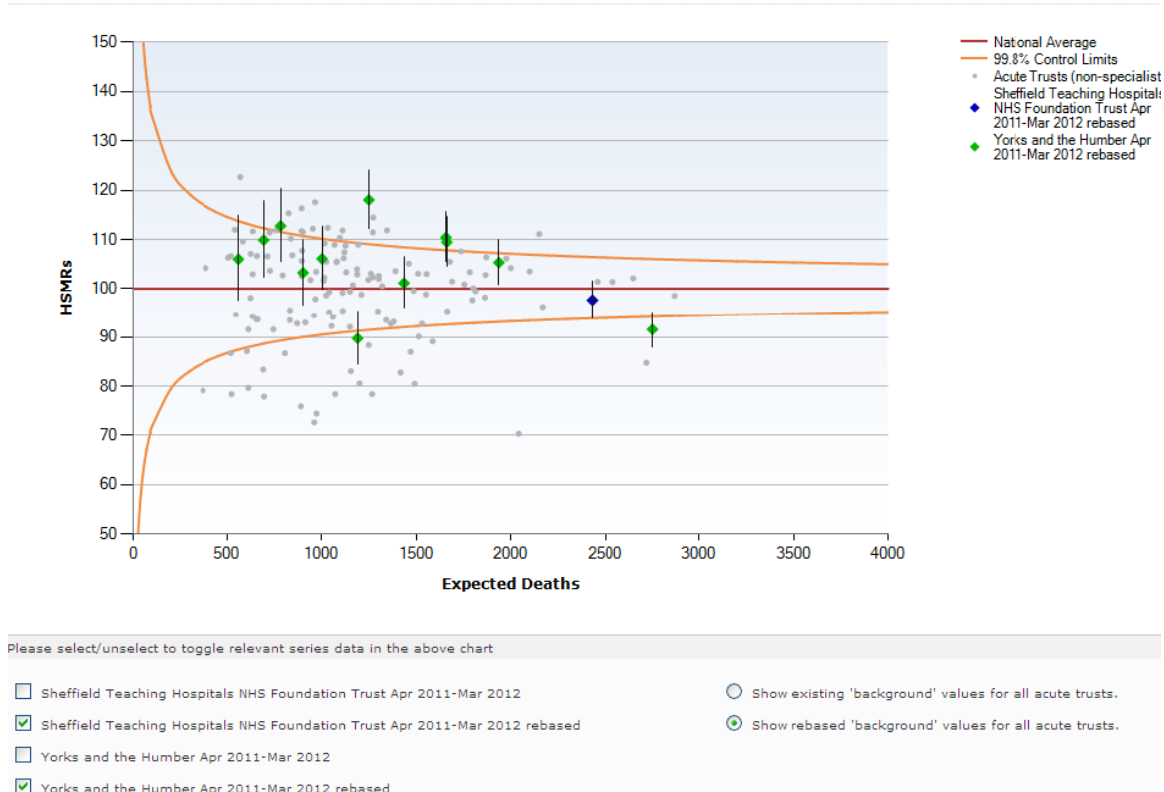


Table 3 below illustrates the comparative HSMR values for the year to date as well as 2008/09, 2009/10 and 2010/11. It can be seen that against the 2008/09 benchmark the Trust HSMR value has fallen i.e., 86, 83, 74, 72 (TYD) across successive years. HSMR values for Yorkshire and the Humber have also fallen but remain above Sheffield values i.e., 100, 90, 82, 76 (YTD).

Table 3

HSMR	HSMR for the 12 months ending:						HSMR YTD
	Mar 2009	Mar 2010	Mar 2011	Jun 2011	Sep 2011	Dec 2011	Apr 2011-Mar 2012
Sheffield Teaching Hospitals NHS Foundation Trust HSMR	86	93	92	91	93	91	89
Low	83	90	88	87	89	87	86
High	89	97	95	94	96	94	93
2011/12 rebased	-	-	-	93	97	97	97
Low	-	-	-	89	93	93	94
High	-	-	-	97	100	101	101
vs 2008/09 benchmarks	86	83	74	73	74	73	72
Yorks and the Humber HSMR	100	101	103	102	100	97	95
2011/12 rebased	-	-	-	104	104	104	103
vs 2008/09 benchmarks	100	90	82	82	80	78	76
England HSMR	100	100	100	99	97	94	91
2011/12 rebased	-	-	-	100	100	100	100
vs 2008/09 benchmarks	100	89	81	79	78	76	74

Source: Dr Foster Real Time Monitoring

2. Standardised Hospital-level Mortality Indicator (SHMI)

2.1 Rolling SHMI 1 January 2011 to 31 December 2011

The SHMI is an *indicator* of healthcare quality that measures whether the death rate at a hospital *and up to 30 days from discharge* is higher or lower than expected.

It is a ratio between the actual (observed) number of deaths at the trust and the number that would be expected to die on the basis of average England figures, given the characteristics of patients treated there. The value produced is evaluated as to whether the mortality within the trust can be described as either 'as expected', 'lower than expected' or 'higher than expected'. One SHMI value is calculated for each trust. The baseline SHMI value is 1.

Developed by the NHS Information Centre (IC) with an industry-wide panel of experts the SHMI methodology is similar to the Dr Foster HSMR but with 3 key differences;

- The SHMI measures in-hospital deaths and deaths outside of hospital for a period of up to 30 days where HSMR measures in-hospital deaths only.
- The SHMI uses 100% of diagnosis groups whereas HSMR uses only 56 groups that account for approx 80% of deaths
- The SHMI does not take into account Palliative Care whereas the HSMR does.

SHMI is the standard indicator for reporting hospital mortality across the NHS (<http://www.ic.nhs.uk/services/SHMI>) and reported quarterly on NHS Choices.

The most recent information from the IC, published 25 July 2012, covers the period 1 January 2011 to 31 December 2011 and reports a SHMI value for STH of **0.92** (0.89 -1.12 *over-dispersion control limits of 95%*) for an expected 3799 deaths (the lowest current SHMI value in Yorkshire and the Humber).

The next update is due for release in October 2012 and will cover the financial year April 2011 to March 2012.

2.2 SHMI & HSMR Comparator Tables

SHMI and HSMR values for a rolling 12 month period between **January 2011 and December 2011** for Sheffield and other large teaching hospitals (Picker comparators) are provided in Table 4 for comparative purposes (not rebased).

Table 4

Peer Jan 2011 – Dec 2011	SHMI	HSMR
University College London Hospitals NHS Foundation Trust	0.72	71.7
Guys & St Thomas NHS Foundation Trust	0.90	69.0
Sheffield Teaching Hospitals NHS Foundation Trust	0.92	90.8
Leeds Teaching Hospital NHS Trust	0.93	85.2
Nottingham University Hospital NHS Trust	0.94	95.6
University Hospitals Bristol NHS Foundation Trust	0.97	86.6
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	0.97	95.5
University Hospitals Birmingham NHS Foundation Trust	1.01	100.6
University Hospital of North Staffordshire NHS Trust	1.04	103.2
University Hospitals of Leicester NHS Trust	1.05	94.2
Manchester University Hospitals NHS Foundation Trust	1.09	100.1

Source: Dr Foster