

EXECUTIVE SUMMARY
REPORT TO THE TRUST HEALTHCARE GOVERNANCE COMMITTEE

HELD 24 JUNE 2013

Subject:	Quarterly Trust Mortality Report – June 2013
Supporting Director:	Dr David Throssell, Medical Director
Author:	Janet Brain, Senior Manager, Clinical Effectiveness Unit
Status	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.

KEY POINTS:**HSMR 2012/13**

The most recent rolling HSMR from Dr Foster for 1 April 2012 – 31 March 2013 is **96 (92-100)** for All Admissions. This is the rebased value and “as expected” when compared with hospitals trusts nationally (taking into account trust case mix). The next data upload to Dr Foster is expected at the end of June 2013.

SHMI

The most recent information from the IC, published April 2013, for 1 October 2011 - 30 September 2012 reports a SHMI value for STH of **0.90** (0.90 -1.12 *over-dispersion control limits of 95%*). This is “within expected range”. The next publication is expected July 2013.

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):

The Healthcare Governance Committee are asked to note the contents of this report.

APPROVAL PROCESS

Meeting	Presented by	Approved	Date
HCGC	Sandi Carman		24 June 2013

Sheffield Teaching Hospitals NHS Foundation Trust

Mortality Report – June 2013

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.

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).

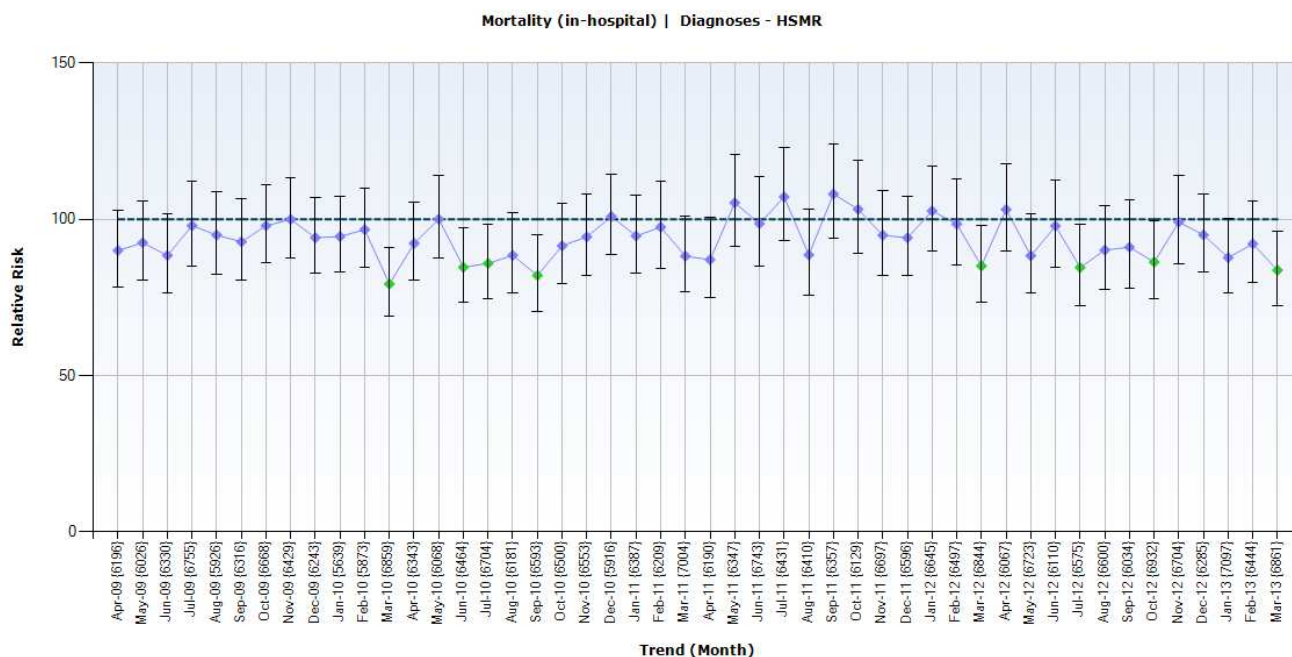
The HSMR compares the expected rate of death in a hospital with the actual rate of death for those patients with diagnoses most commonly resulting in death i.e. *covers the top 56 diagnoses from which 83% of all deaths occur*. Severity of illness, age, sex, deprivation & other factors are taken into account when calculating the expected death rate.

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 2011/12 financial year's Secondary User Services (SUS) data.

Chart 1 depicts monthly HSMR values, as calculated using Dr Foster RTM, over the past 45 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 March 2013



1.2 Rolling HSMR for the financial year April 2012 – March 2013

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.

Dr Foster Real Time Monitoring (now updated to Quality Investigator Tool) enables previewing of the rolling HSMR on a monthly basis. Table 1 indicates the rolling 12 months HSMR from 2012/13 (the most up-to-date data available) and also shows the split between elective and non-elective admissions.

Table 1

STH NHSFT	Spells	Rolling 12 months HSMR * not rebased for 12/13 April 2012 - March 2013
All Admissions	78487	91.4 (87.8 – 95.2)
Elective Admissions	47780	95.8 (77.9 – 116.7)
Non Elective Admissions	30707	91.3 (87.5 – 95.1)

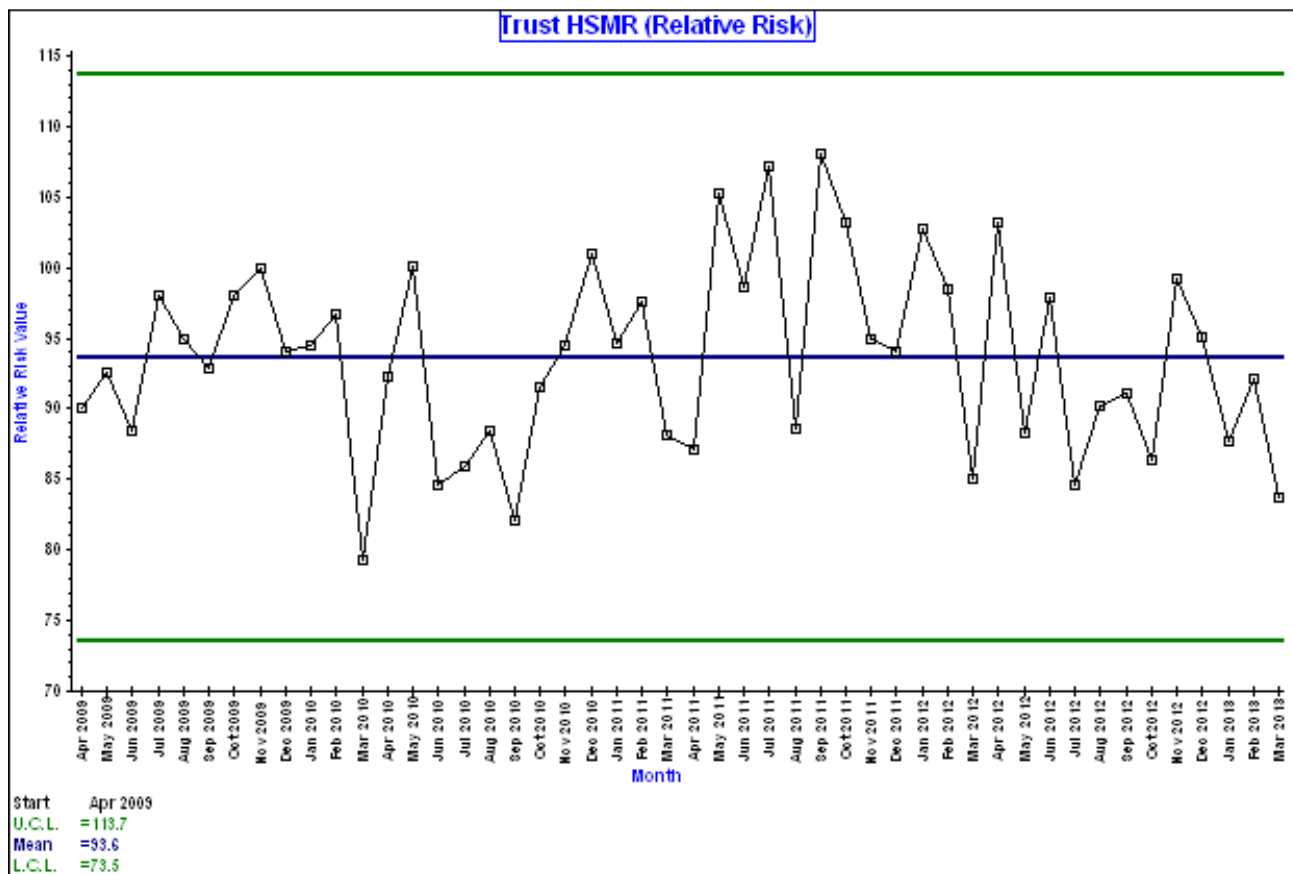
The **rebased** value for this period is 96 (92 – 100) – “as expected”. This is a drop from the Jan 2012 – Dec 2012 value reported last quarter (93.4 rebased to 98).

1.3 Statistical Process Control Chart of HSMR

Chart 2 depicts the average Trust HSMR (93.6) between April 2009 and March 2013 and shows the variability of the actual 48 HSMR values over that time period. This depicts *normal variation*.

A run of 8 points above or below 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. The current mortality reporting process will ensure any “special cause events” are identified in real-time & appropriate action taken.

Chart 2



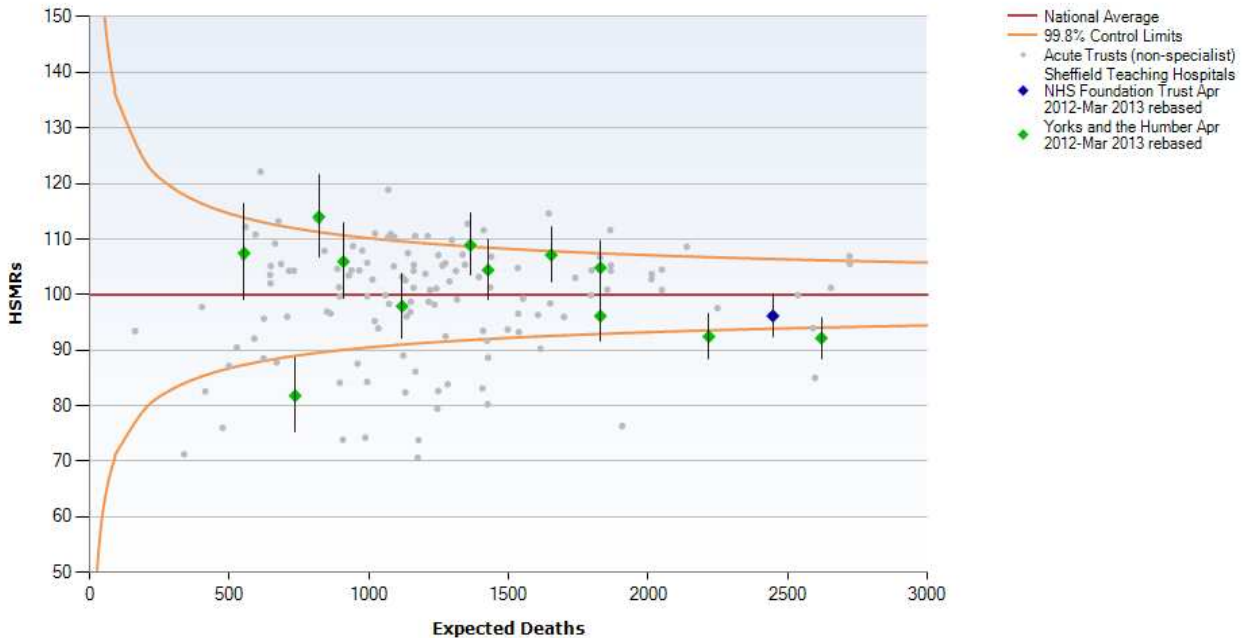
1.4 HSMR Comparator Charts

Dr Foster enables HSMR comparisons to be made with other trusts in England. Any peers may be compared.

The funnel plot below (chart 3a) shows relative rebased HSMR values for **April 2012 – March 2013** for all the Trusts in Yorkshire and the Humber set against the “background” rebased values for all acute trusts. Sheffield Teaching Hospitals is highlighted in blue. Chart 3b shows relative rebased values for the Picker Group.

The background points show the rebased HSMR for the **current financial year** for each acute non-specialist trust in England. The rebased value for Sheffield Teaching Hospitals NHS Foundation Trust is **96 (92 – 100)**

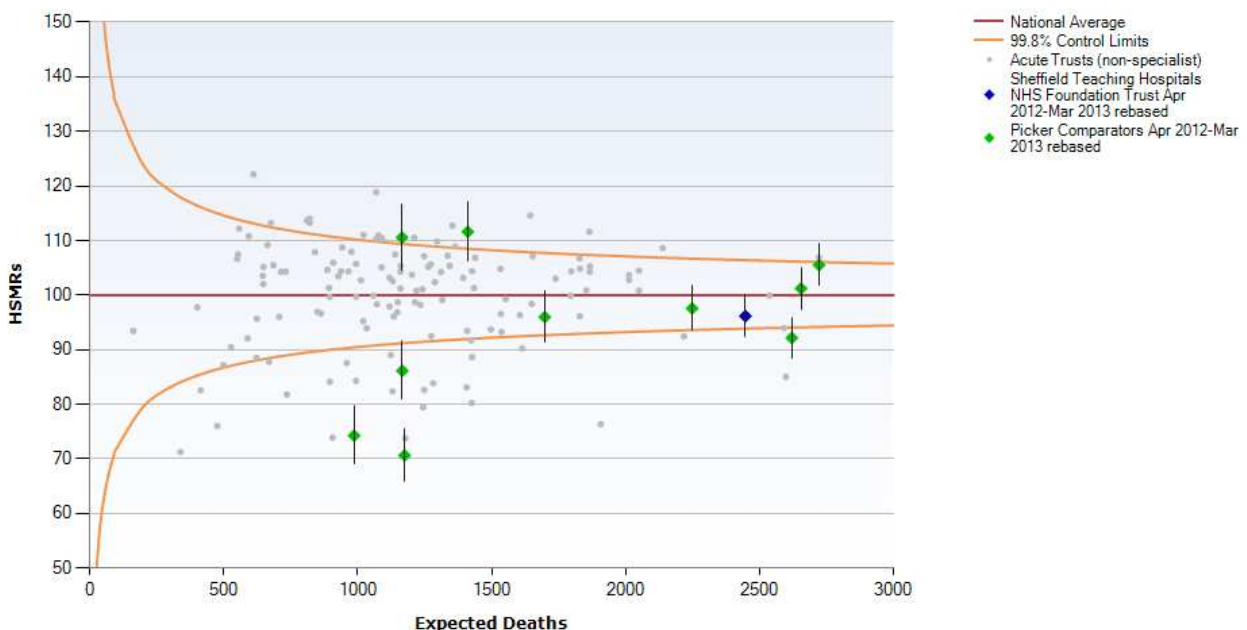
Chart 3a Comparative Rebased HSMRs of Trusts in Yorkshire and The Humber



Three Trusts in Yorkshire and The Humber have significantly low rebased HSMR's, namely (from left to right) Airedale NHS FT, Hull and East Yorkshire Hospitals NHS Trust and Leeds Teaching Hospitals NHS Trust.

Four of the Picker Group of trusts have significantly low rebased HSMRs, namely (from left to right) University College London Hospitals NHS FT, University Hospitals Bristol NHS FT, Guy's & St. Thomas' NHS FT and Leeds Teaching Hospitals NHS FT.

Chart 3b Comparative Rebased HSMRs of the 'Picker Group'



2. Standardised Hospital-level Mortality Indicator (SHMI)

2.1 Rolling SHMI 1 October 2011 to 30 September 2012

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'. This is the "banding".

One SHMI value is calculated for each trust. The baseline SHMI value is 1.

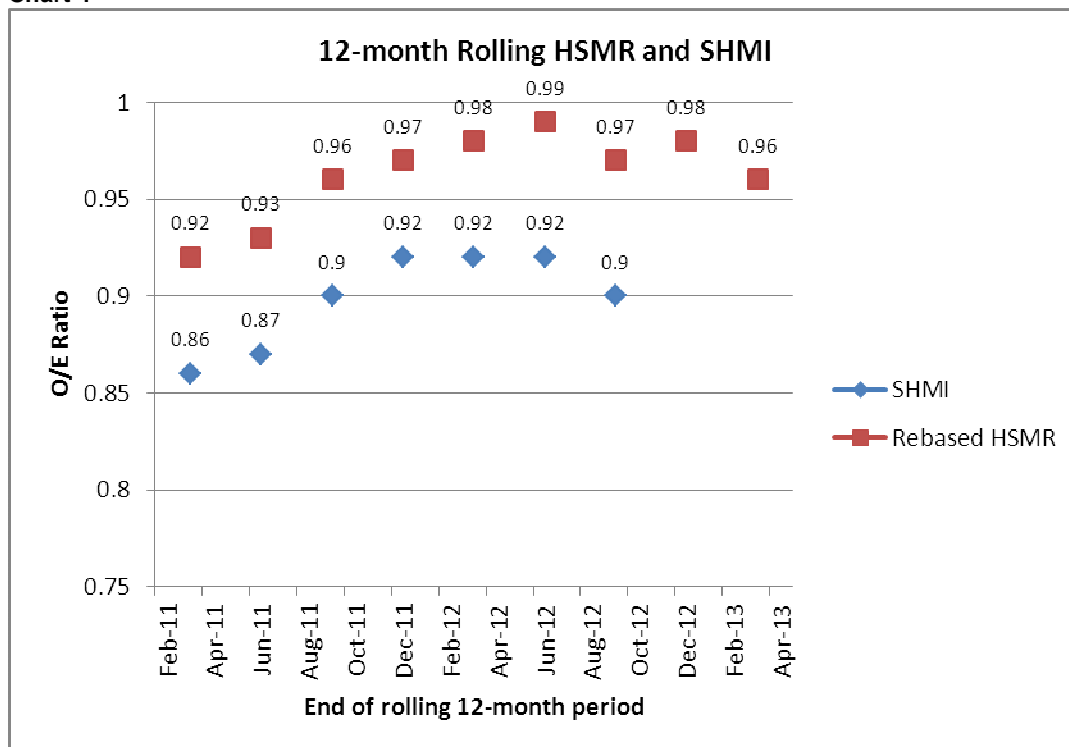
SHMI is the standard indicator for reporting hospital mortality across the NHS (<http://www.ic.nhs.uk/services/SHMI>) and reported quarterly on NHS Choices.

The most recent information from the IC, published April 2013, covers the period **1 October 2011 to 30 September 2012** and reports a SHMI value for STH of **0.90** (0.90 -1.12 *over-dispersion control limits of 95%*). SHMI undergoes rebasing quarterly hence the figures quoted are rebased values. The banding is "as expected" and is the lowest current SHMI value in Yorkshire and the Humber (see Table 4 on page 6).

As SHMI measures death rate up to 30 days from discharge it incorporates ONS data and this accounts for the 6-month delay in the calculation of the SHMI. The next update is due for release by the IC in July 2013.

2.2 SHMI and HSMR Trend Analysis

Chart 4



Source

SHMI: Clinical Indicator Previewer, IC. Values are rolling one year periods, six months in arrears.

HSMR: Dr Foster Real Time Monitoring. Values are rolling one-year periods, three months in arrears.

The rolling 12 month SHMI and HSMR values by quarter for STH since April 2010 are plotted in Chart 4 (HSMR has not been x100 as per the convention so that both SHMI and HSMR can be viewed on one axis). A root cause analysis is underway to further understand the data underpinning the SHMI and the results reported via the Trust Mortality Review Group.

To note:

Dr Foster report SHMI using different confidence limits to those used by the IC and Dr Foster classify the SHMI for STH as significantly “lower than expected” i.e.

Table 2

Provider	Spells	Observed	Expected	SHMI value	LL	UL	Banding
STH NHSFT	103533	3451	3842.31	0.90	0.87	0.93	Lower than expected

Source Dr Foster Intelligence

2.3 SHMI Comparator Tables

Tables 3 and 4 provide the SHMI values for the period **Oct 2011 to Sept 2012** for Sheffield and other large teaching hospitals (Picker comparators) and Yorkshire and The Humber for comparative purposes

Table 3

Peer – Picker Group October 2011 – September 2012	SHMI
University College London Hospitals NHS Foundation Trust	0.68
Guys & St Thomas NHS Foundation Trust	0.83
Sheffield Teaching Hospitals NHS Foundation Trust	0.90
University Hospitals Bristol NHS Foundation Trust	0.91
Leeds Teaching Hospital NHS Trust	0.92
Nottingham University Hospital NHS Trust	0.94
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	0.94
University Hospital of North Staffordshire NHS Trust	1.03
University Hospitals of Leicester NHS Trust	1.05
University Hospitals Birmingham NHS Foundation Trust	1.06
Manchester University Hospitals NHS Foundation Trust	1.11

Source: Dr Foster

Table 4

Peer – Yorkshire and the Humber October 2011 – September 2012	SHMI
Sheffield Teaching Hospitals NHS Foundation Trust	0.90
Leeds Teaching Hospitals NHS Trust	0.92
Airedale NHS Foundation Trust	0.92
Bradford Teaching Hospitals NHS Foundation Trust	0.98
Mid Yorkshire Hospitals NHS Trust	1.02
Harrogate and District NHS Foundation Trust	1.02
Calderdale and Huddersfield NHS Foundation Trust	1.03
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	1.04
Barnsley Hospital NHS Foundation Trust	1.06
Hull and East Yorkshire Hospitals NHS Trust	1.06
York Teaching Hospitals NHS Foundation Trust	1.07
The Rotherham NHS Foundation Trust	1.08
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	1.15

Source Dr Foster