

SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST

EXECUTIVE SUMMARY
REPORT TO THE TRUST HEALTHCARE GOVERNANCE COMMITTEE**HELD 16 DECEMBER 2013**

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

KEY POINTS:**HSMR**

Most recent 12-month rolling HSMR - 1 September 2012 – 31 August 2013

94 (90 – 98) for All Admissions and “lower than expected” when compared with hospitals trusts nationally. The rebased value is not available for this time period.

Year-to-date HSMR (1 April – 31 August 2013)

The predicted rebase for Sheffield Teaching Hospitals NHSFT for April - August 2013 is 100 (94 – 106) and “as expected” when compared with hospital trusts nationally.

SHMI

Most recent 12-month rolling SHMI - 1 April 2012 – 31 March 2013 (published October 2013)

0.88 (0.89 -1.12 *over-dispersion control limits of 95%*). This is in the “lower than expected” range and rebased. The next publication is expected at the end of December 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):

Note the most current HSMR and SHMI values.

Both SHMI and HSMR should continue to be monitored and compared at future meetings.

APPROVAL PROCESS

Meeting	Presented by	Approved	Date
HCGC	Medical Director		16/12/13

Sheffield Teaching Hospitals NHS Foundation Trust

Mortality Report – December 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. The report will present the Hospital Standardised Mortality Ratio (HSMR) and the Summary Hospital-level Mortality Indicator (SHMI) compared with previous months and with other hospitals in England.

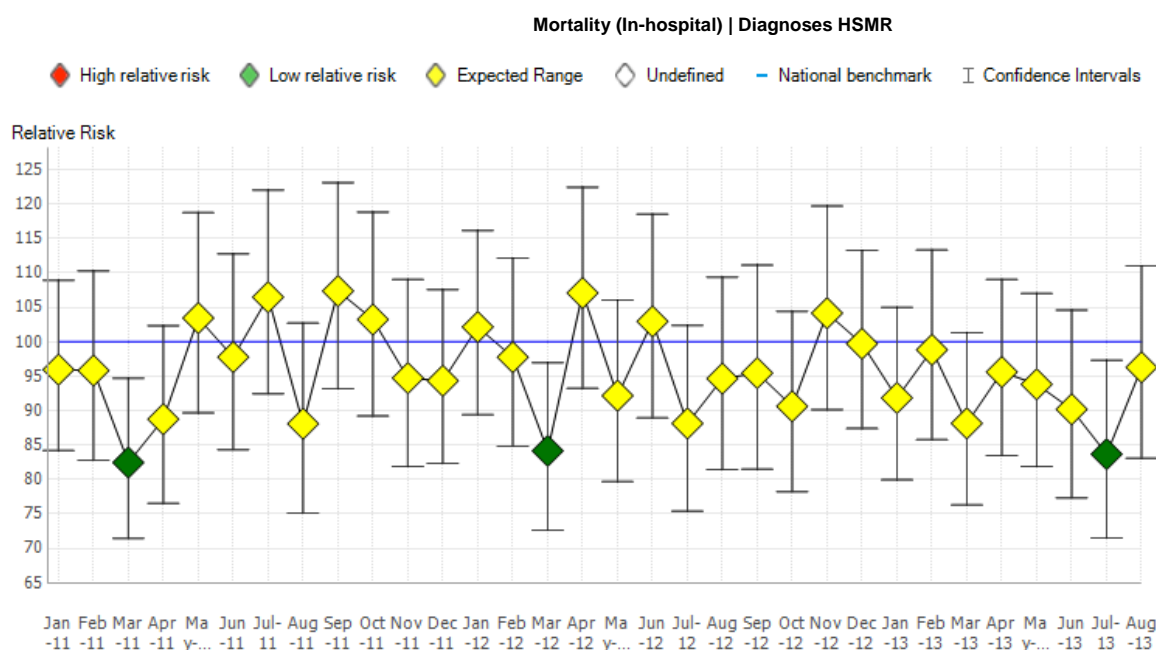
1. Hospital Standardised Mortality Ratio (HSMR)

The HSMR is an *indicator* of healthcare quality that measures whether the death rate at a hospital is higher or lower than would be expected. Dr Foster reports the annual HSMR in their Good Hospital Guide to enable comparison of mortality rates across all hospitals in England for any particular year. The 2012/13 Guide is scheduled for publication in December 2013.

1.1 Trend analysis

Figure 1 depicts monthly HSMR values, as calculated using Dr Foster Quality Investigator, over the past 32 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.

Fig. 1 HSMR Trend (Month) between January 2011 and August 2013



This is also monitored through the use of SPC charts

1.2 12-month Rolling HSMR - September 2012 to August 2013

Dr Foster Quality Investigator Tool enables previewing of the rolling HSMR on a monthly basis.

Table 1

STH NHSFT	Spells	Rolling 12 months HSMR * not rebased yet September 2012 - August 2013
All Admissions	80,897	94.01 (90.28 – 97.86)
Elective Admissions	49, 246	99.98 (80.89 – 122.22)
Non Elective Admissions	31,617	93.78 (89.98 – 97.70)

Table 1 indicates the most up to date data available as a rolling 12 months HSMR from September 2012 – August 2013 and also shows the split between elective and non-elective admissions.

An HSMR for September 2012 – August 2013 of **94 (90 – 98)** for All Admissions represents a significantly lower than expected relative risk when compared to hospital trusts nationally and taking into account trust case mix.

The rebased value for this period is not yet available, but it is available for the year-to-date (1 April – 31 August 2013) as shown in 1.3 below.

1.3 HSMR Comparisons for April – August 2013 (Year-to-Date)

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

Figure 2 is a funnel plot showing the distribution of HSMRs of all trusts in Yorkshire and The Humber for the year-to-date (April – August 2013), set against a background of all Acute Trusts in England (non-specialist). All values shown are predicted rebased values. The predicted rebase for Sheffield Teaching Hospitals NHSFT for April - August 2013 is 100 (94 – 106) and “as expected” when compared with hospital trusts nationally.

Figure 3 shows the HSMR trend compared with the 2010/11 benchmark and the effect of rebasing.

Fig. 2 Acute Trust HSMRs highlighting Yorkshire and The Humber April 2013 – August 2013

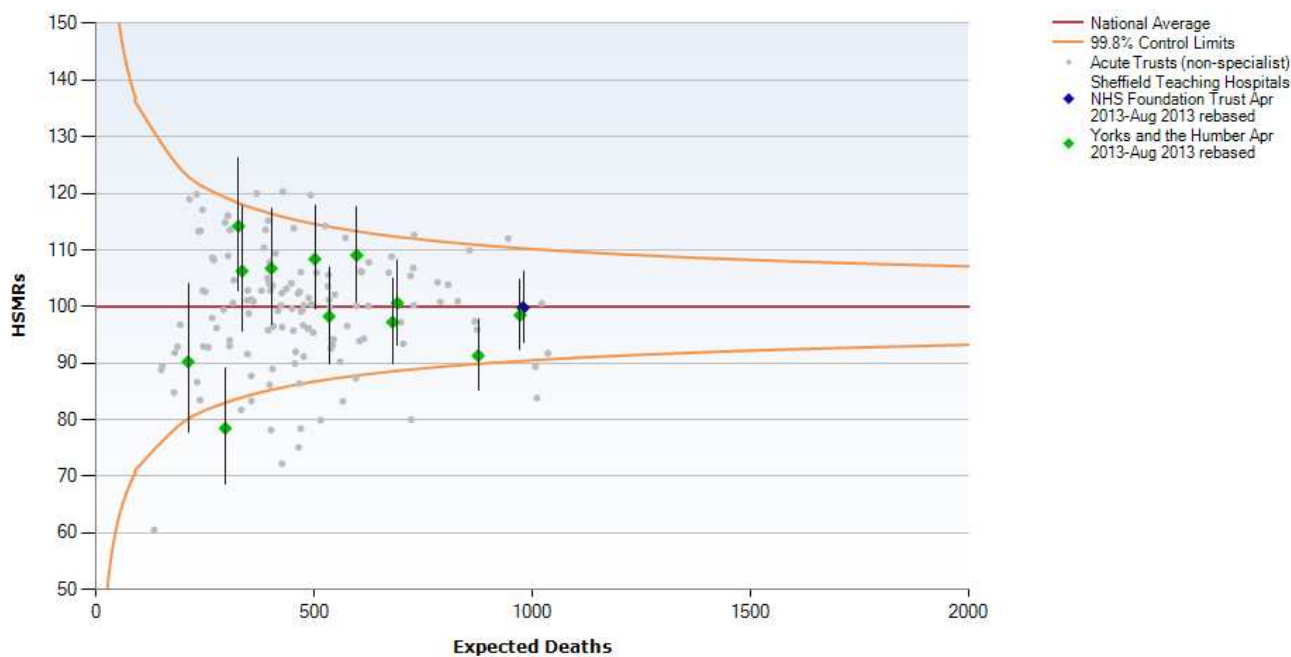
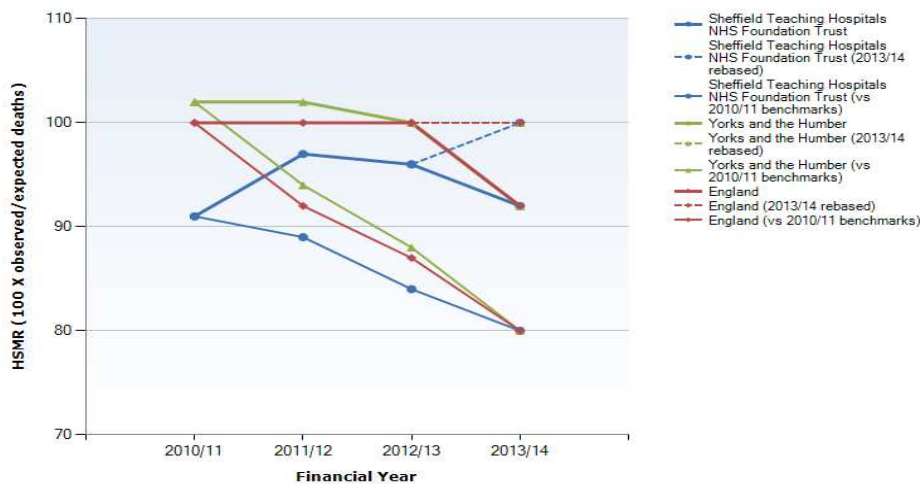


Fig. 3 Trend in HSMR vs 2010/11 benchmarks & showing the effect of rebasing



2. Standardised Hospital-level Mortality Indicator (SHMI)

2.1 Rolling SHMI 1 April 2012 to 31 March 2013

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.

The most recent information from the IC, published October 2013, covers the period **1 April 2012 – 31 March 2013**.

The SHMI value for STH is **0.88** (0.89 -1.12 *over-dispersion control limits of 95%*).

On the funnel plot below, the control limits are shown by the two dotted lines.

- Trusts whose SHMI value falls above the upper control limit are categorised as ‘higher than expected’.
- Trusts whose SHMI value falls between the upper and lower control limits are categorised as ‘as expected’.
- Trusts whose SHMI value falls below the lower control limit are categorised as ‘lower than expected’

The banding for STH NHSFT is “lower than expected” and is the lowest current SHMI value in Yorkshire and the Humber (Table 3). SHMI undergoes rebasing quarterly hence the figures quoted are rebased values.

Nationally, of 142 trusts;

- 7 trusts had a ‘higher than expected’ SHMI value
- 17 trusts had a ‘lower than expected’ SHMI value (including STH NHSFT)
- 118 trusts had an ‘as expected’ SHMI value, i.e.,

Fig 4. Summary Hospital-level Mortality Indicator (SHMI) –April 2012 – March 2013



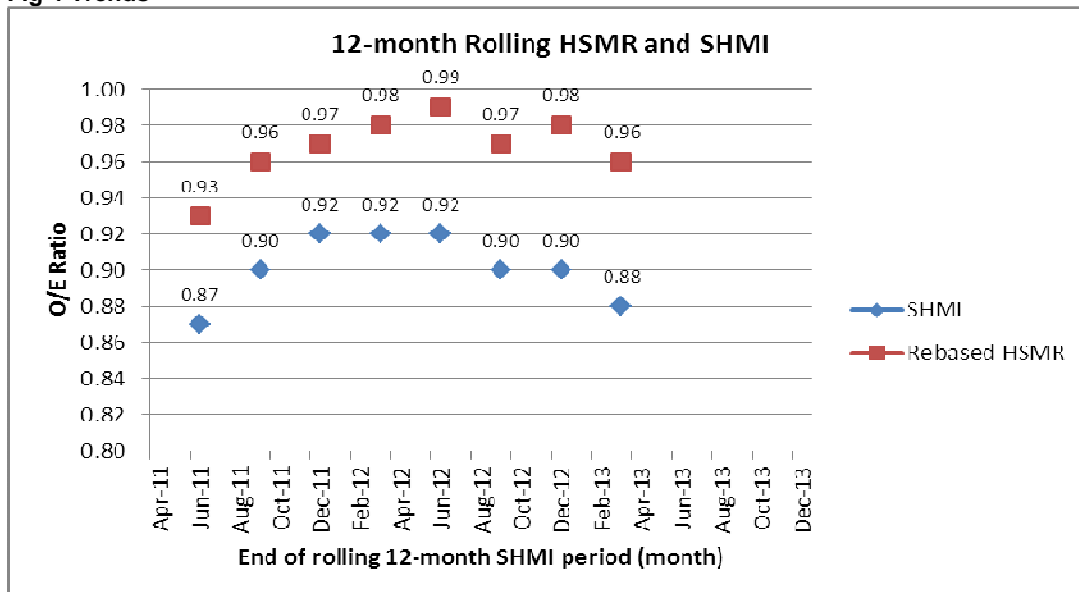
N.B. The figure for the “expected number of deaths” for STH NHSFT is 3961.46

The next update is due in December 2013.

2.2 SHMI and HSMR Trends

The rolling 12 month SHMI and HSMR values by quarter for Sheffield Teaching Hospitals since April 2011 are plotted in Figure 4 (HSMR has not been x100 as per the convention so that both SHMI and HSMR can be viewed on a single graph).

Fig 4 Trends



Source

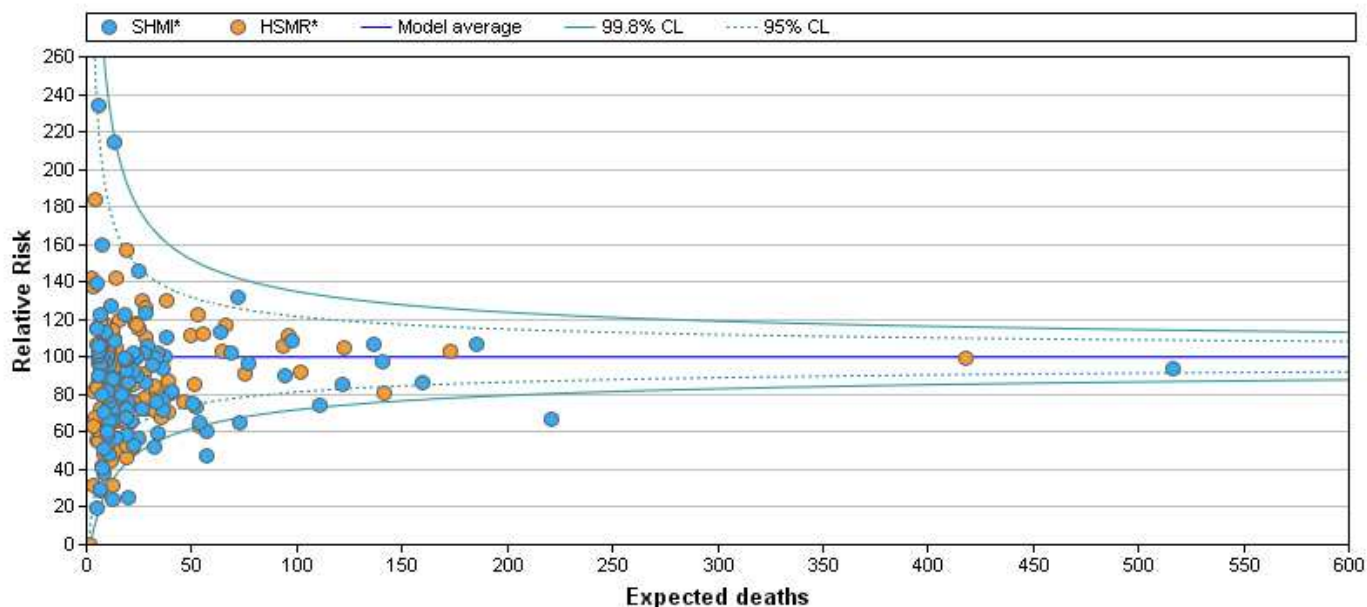
SHMI: Clinical Indicator Previewer, IC. Values are rolling one year periods, six months in arrears.

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

Each quarter analysis of the data underpinning the SHMI is performed. The individual O/E ratios for the 140 diagnosis groups can be calculated manually. The data can be viewed on a funnel plot in the Dr Foster Quality Investigator Tool (figure 5) and this provides one way of highlighting any statistically significantly high results.

The 140 SHMI groups are represented by the blue dots (the orange dots represent the 56 HSMR groups).

Fig 5
SHMI* and HSMR* for Sheffield Teaching Hospitals NHS Foundation Trust by SHMI Group for all admissions in April 2012 to Mar 2013



We are interested in understanding the data behind the 4 blue 'dots' falling between the upper dotted and the solid lines of the funnel as these represent values significantly higher than expected.

SHMI Group	Spells	Expected Deaths	SHMI O/E Ratio
Fracture of neck of femur (hip)	693	71.93	132.08
Short gestation, low birth weight, and fetal growth retardation	655	13.50	214.87
Calculus of urinary tract, Other diseases of kidney and ureters, Other diseases of bladder and urethra	1057	5.54	234.45
Pulmonary heart disease	353	24.72	145.61

Further work and analysis is underway or planned with the relevant clinical teams to review these data further.

2.3 SHMI Comparator Tables

The SHMI values for the period **April 2012 to March 2013** for The Shelford Group of hospitals (Table 2) and Yorkshire and The Humber (Table 3) are shown below. The Shelford Group comprises ten leading NHS multi-specialty academic healthcare organisations.

Table 2 SHMI by provider (Shelford Group) for all admissions in April 2012 to Mar 2013

Provider	Spells	SHMI	Banding
University Hospitals Birmingham NHS Foundation Trust	57089	1.06	As expected
University College London Hospitals NHS Foundation Trust	67036	0.71	Lower than expected
Sheffield Teaching Hospitals NHS Foundation Trust	105862	0.88	Lower than expected
Oxford University Hospitals NHS Trust	108227	0.95	As expected
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	105207	0.92	As expected

Kings College Hospitals NHS Foundation Trust	68984	0.86	Lower than expected
Imperial College Healthcare NHSFT	103221	0.78	Lower than expected
Guy's and St Thomas' NHS Foundation Trust	85235	0.78	Lower than expected
Central Manchester University Hospitals NHS Foundation Trust	99940	1.05	As expected
Cambridge University Hospitals NHS Foundation Trust	70167	0.85	Lower than expected

Source: The NHS IC – SHMI Indicator Data

Table 3 SHMI by provider (Yorkshire and The Humber) for all admissions in April 2012 to Mar 2013

Provider	Spells	SHMI	Banding
Sheffield Teaching Hospitals NHS Foundation Trust	105862	0.88	Lower than expected
Leeds Teaching Hospitals NHS Trust	127237	0.94	As expected
Hull and East Yorkshire Hospitals NHS Trust	89833	1.03	As expected
Mid Yorkshire Hospitals NHS Trust	96128	0.97	As expected
York Teaching Hospital NHS Foundation Trust	75989	1.02	As expected
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	75281	1.06	As expected
Calderdale and Huddersfield NHS Foundation Trust	76965	1.02	As expected
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	57801	1.11	As expected
Bradford Teaching Hospitals NHS Foundation Trust	74284	0.99	As expected
Barnsley Hospital NHS Foundation Trust	42546	1.04	As expected
The Rotherham NHS Foundation Trust	41716	1.12	As expected
Airedale NHS Foundation Trust	29340	0.97	As expected
Harrogate and District NHS Foundation Trust	23839	1.01	As expected

Source: The NHS IC- SHMI Indicator Data