

Publication Summary



Hospital Standardised Mortality Ratios

Quarterly HSMR Release

25 February 2014

About this Release

Since December 2009 Information Services Division (ISD) has produced quarterly hospital standardised mortality ratios (HSMR) for all Scottish hospitals participating in the Scottish Patient Safety Programme (SPSP). HSMRs are calculated when crude mortality data are adjusted to take account of some of the factors known to affect the underlying risk of death. The intention is to allow monitoring of time trends in mortality for Scotland and at individual hospital level. The aim of the Scottish Patient Safety Programme was to reduce hospital mortality by 15% by December 2012. This has been extended to a 20% reduction by December 2015.

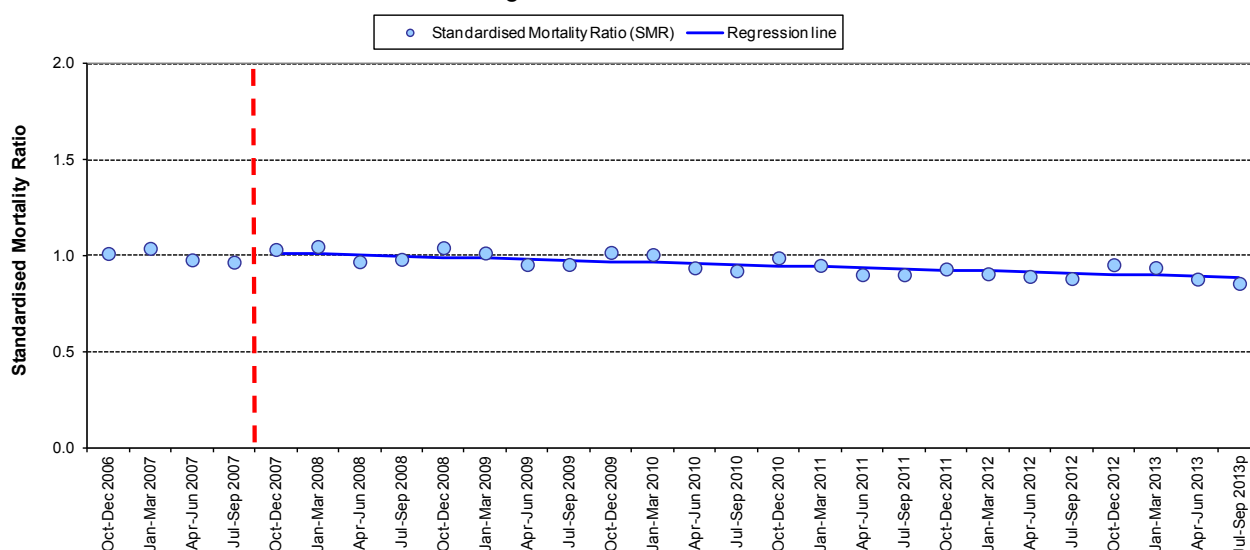
Please note that a refinement has been made to the current HSMR methodology in this latest release. This concerns patients with a 'stay' that overlaps a reported quarter. The refinement accounts for 0.8% of records and does not alter the interpretation or inferences for this or previous publications of HSMR. See the [full publication report](#) for further information.

Key Points

- HSMR at Scotland-level has decreased by 12.5% between October to December 2007 and July to September 2013.
- Twenty nine (94%) of the thirty one hospitals participating in the SPSP have shown a reduction in HSMR since October-December 2007 (end of the baseline period); nine of those had a reduction in excess of 15%, with three showing a reduction in excess of 20%; namely: NHS Ayrshire and Arran's Crosshouse Hospital (31.5%), NHS Greater Glasgow and Clyde's Southern General Hospital (20.2%) and NHS Highland's Raigmore Hospital (20.6%).
- Rolling annual HSMRs show that there was a sustained reduction in hospital mortality between 2009 and 2011; the level thereafter has remained relatively constant.

Standardised Mortality Ratios for deaths within 30-days of admission (with regression line); Scotland, Oct-Dec 2006 to July-Sept 2013^P

The data relating to Chart 1 can be found in [Table A1b](#)



P=Provisional Data.

Background

The HSMR is based on all acute inpatient and day case patients admitted to all specialties (medical and surgical). The calculation takes account of patients who died within 30 days from admission; that is, it includes deaths that occurred in the community (out of hospital deaths) as well as those occurring in-hospital.

$$\text{HSMR} = \text{Observed Deaths} / \text{Predicted Deaths}$$

The Scottish HSMR for July to September 2013 is currently 0.86. Regression analysis for Scotland indicates that by July to September 2013, cumulatively, there had been a 12.5% reduction in hospital mortality since October to December 2007.

As is routine, some elements of the analysis was previously released to NHS Boards on Friday 31st January as management information. This follows a systematic review of the data, which has been carried out by representatives from Information Services Division and Healthcare Improvement Scotland. The purpose of the review is to identify potential patterns in the data and to initiate a dialogue with boards where appropriate. As the emphasis remains on local ownership of the data, a [guidance document](#) has been prepared jointly by Healthcare Improvement Scotland, the Information Services Division, Scottish Patient Safety Programme, and the Quality Improvement Hub.

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Further Information

Further information can be found in the [full publication report](#) or on the [ISD website](#)

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland - and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government Health Department and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#) www.isdscotland.org/About-ISD/About-Our-Statistics/