About this release

In this quarterly publication, Information Services Division provides information on Hospital Standardised Mortality Ratios (HSMRs) from 1 January 2011 to 31 December 2016. An HSMR is a measure of mortality adjusted to take account of some of the factors known to affect the underlying risk of death.

Main Points

- The HSMR for Scotland has decreased by 8.4% between January to March 2014 and October to December 2016.
- No hospitals had significantly higher standardised mortality ratios in October to December 2016 than the national average.
- One hospital had a significantly lower standardised mortality ratio in October to December 2016 than the national average: Western General Hospital (HSMR of 0.74).

Of the 29 hospitals participating in the Scottish Patient Safety Programme, 13 have shown a reduction of more than 10% since January to March 2014:

- Balfour Hospital
- Caithness General Hospital
- Dumfries & Galloway Royal Infirmary
- Forth Valley Royal Hospital
- Glasgow Royal Infirmary/Stobhill
- Hairmyres Hospital
- Inverclyde Royal Hospital
- Monklands District General Hospital
- Queen Elizabeth University Hospital/Gartnavel
- University Hospital Ayr
- University Hospital Crosshouse
- Western Isles Hospital
- Wishaw General Hospital
The Hospital Standardised Mortality Ratio (HSMR) is based on all acute inpatient and day case patients admitted to all specialties in hospital. The calculation takes account of patients who died within 30 days from admission and includes deaths that occurred in the community as well as those occurring in hospitals.

\[
\text{HSMR} = \frac{\text{Observed Deaths}}{\text{Predicted Deaths}}
\]

The Scottish HSMR for October to December 2016 is 0.94. Compared to an index of 1.00, this means that there were 6% fewer deaths than predicted in the period. Analysis for Scotland indicates that by October to December 2016, there had been an 8.4% reduction in hospital standardised mortality since January to March 2014.

It is possible to see a decrease in HSMR without a corresponding decrease in the unadjusted rate of deaths per 100 patients (crude rate). This is because HSMR reflects variations in case mix over the period which calculations of crude death rates do not.

Deaths that occur in hospital may be inevitable because of the patient’s condition on admission. However, there are some deaths that can be prevented by improving care and treatment or by avoiding harm.

Information Services Division (ISD) has produced quarterly HSMR for all Scottish hospitals participating in the Scottish Patient Safety Programme since December 2009. The programme’s aim is to reduce hospital mortality by 10% by the end of December 2018. The methodology used by ISD was updated in August 2016.

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**Further Information**

The data from this publication is available to download from our web page. A [Technical Document](#) is available on how the HSMR is now calculated and describes the methodology used in more detail. A [Frequently Asked Questions](#) document is also available. For more information on HSMR see the [HSMR section of our website](#).

The next release of this publication will be 22 August 2017.

**NHS Performs**

A selection of information from this publication is included in [NHS Performs](#). NHS Performs is a website that brings together a range of information on how hospitals and NHS Boards within NHSScotland are performing.

**ISD and 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. [Further information about our statistics](#).