



T: 0300 244 4000  
E: scottish.ministers@gov.scot

Lewis Macdonald MSP  
Convener  
Health & Sport Committee  
Scottish Parliament  
EDINBURGH  
EH99 1SP

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## **FUTURE CHANGES TO HSMR METHODOLOGY AND REPORTING**

I am writing to inform the Committee of planned changes to HSMR methodology and reporting, which will be implemented and reported from August this year.

As the Committee is aware, the Information Services Division of NHS NSS (ISD) has produced quarterly Hospital Standardised Mortality Ratios (HSMR) for all Scottish hospitals participating in the Scottish Patient Safety Programme (SPSP) since December 2009.

The current HSMR methodology was agreed in 2015/16. Its purpose at that time was to measure change in mortality over time and to enable acute hospitals to monitor their progress towards the SPSP aim of reducing hospital mortality by a further 10% by December 2018. Figures published on 12 February this year show this aim has been exceeded (HSMR decreased by 13.2% between January to March 2014, which was the first quarter after new baseline, and July to September 2018), although final quarter figures representing October to December 2018 will not be published until May 2019.

The end of this phase of the SPSP has presented an opportunity to consider how HSMR methodology and reporting can be refined and updated. Following a review of the existing methodology, ISD has recommended a series of changes designed to ensure that the HSMR remains robust and relevant at each point in time. These recommendations have been discussed with the Scottish Patient Safety Programme Board and agreed with the Scottish Government. They can be summarised as follows:


1. To ensure that the HSMR calculation is based on up-to-date data, it will be rebased to a new three year reference period of April 2016 to March 2019 (the current reference period is January 2011 to December 2013). The reference period will then be advanced by three months for each future reporting period. This will future-proof the HSMR by ensuring it continues to reflect the changing case-mix and service provision of Scottish hospitals.
2. The Scottish HSMR will always have a baseline of 1.0, making interpretation more intuitive and comparison with individual hospitals more transparent. For example, if a hospital's

HSMR is 0.85, it has 15% fewer deaths than predicted. Similarly an HSMR of 1.20 would indicate 20% more deaths than predicted.

3. The HSMR data will allow hospitals to compare their outcomes to the Scottish average at a fixed point in time, in line with the English Summary Hospital-level Mortality Indicator (SHMI).
4. With a dynamic base period, it will no longer be possible to track trends in HSMR over time. ISD will continue to monitor variation in hospital mortality from the Scottish average, however, and patterns in outlying hospitals will continue to be monitored over time. ISD will also continue to provide quarterly trends in contextual indicators including crude mortality, to support monitoring of national trends in mortality over time.
5. While HSMR statistics will continue to be produced and published quarterly, ISD proposes to use a twelve month reporting period, rather than three months as at present, when drawing comparisons against the Scottish average. This will smooth out seasonal variations and provide a larger cohort of patients for smaller hospitals, reducing variation in the reporting of the HSMR.
6. ISD will use more detailed, less aggregated specialty groupings within the modelling, in order to provide more detailed groupings that will enable further in-depth analysis.
7. Rather than being reported in isolation, HSMR will be reported alongside longer-term, quarterly-based crude mortality trends and other contextual indicators, making stronger links to existing relevant indicators produced elsewhere in ISD to provide a more complete reflection of quality and safety across the system

These changes reflect the level of maturity reached in reporting HSMR statistics, where trends have reduced considerably since data collection began in December 2009, and support a wider culture shift towards the sharing of data across the system and continuous quality improvement in NHS Boards. ISD will engage with NHS Boards from next month, to ensure that they are all fully understood. It will publish the HSMR Review and Recommendations report on its website alongside the updated methodology in June. The last HSMR report in its current form will issue for the period October to December 2018 in May 2019, and the new approach will be implemented from August 2019.

I hope this information is helpful to the Committee.

*Kind regards*  


**JEANE FREEMAN**