

Hospital Standardized Mortality Ratio (HSMR)

HSMR: Our Current Year's Results for Hamilton Health Sciences (HHS)

From April 2018 to March 2019, the overall HSMR for Hamilton Health Sciences was 107. This is a significant reduction from the four years prior.

- 2014/15: 118
- 2015/16: 114
- 2016/17: 122
- 2017/18: 118
- 2018/19: 107

What is "Hospital Standardized Mortality Ratio"?

- HSMR is an overall quality indicator that compares a hospital's mortality rate with the national average, accounting for the types of patients cared for. It has been used by many hospitals worldwide to assess and analyze mortality rates and to identify areas for improvement.
- HSMR compares the number of deaths in a hospital with the national average of 100 for the baseline year. It is calculated as the ratio of the actual number of deaths to the expected number of deaths, multiplied by 100.
- It is adjusted for factors such as age, sex, diagnosis, length of stay, comorbidities and admission status.
- A ratio equal to 100 is interpreted as no difference between a hospital's mortality rate and the national average rate of the baseline year. A ratio greater (or less) than 100 indicates that a hospital's mortality rate is higher (or lower) than the national average rate of the baseline year.

How are hospitals using HSMR data to help reduce mortality rates and make improvements?

HSMR is used by hospitals in several countries to assess in-hospital mortality rates and to help organizations identify areas for improvement. HSMR is monitored over time to track progress and make quality improvements based on the results. HHS recognizes there is always more to do to make the care we provide better, timelier and safer. Patients should know that their hospital is safe, that the care they receive is top-notch, and that every effort is made to ensure they receive the highest-quality care possible. Annually reported data helps to show hospitals how their HSMR has changed, where



they have made progress, and where they can continue to improve. Each year, we carefully review the results and work to implement improvements wherever possible.

Interpreting the Hospital Standardized Mortality Ratio Reports

HSMR can be a very effective quality improvement tool and should be seen as a system-level measure. A higher than average HSMR result does not necessarily mean that a hospital is "unsafe" just as a lower than average HSMR does not necessarily mean a hospital is "safe." It is vital that HSMR results be viewed in the context of other performance indicators.

The HSMR is not a measure for hospitals to compare themselves against other organizations, or for the public to use as a measure of choosing where to seek care.

We strongly support the public reporting of quality indicators such as HSMR because we believe it will inspire improved performance, enhance patient safety, and strengthen the public's confidence in Ontario's hospitals.

It is important to note that hospitals – even within a region – often serve different segments of the population with different health needs and is one reason why hospitals have different HSMR values.

What are we doing to continue to improve our HSMR rate at Hamilton Health Sciences?

Under the Excellent Care for All Act, hospitals are required to develop a Quality Improvement Plan (QIP) that outlines clear objectives for improving patient care. Every year the QIP is publicly posted, as one more way we are staying accountable to our community, patients and staff and being openly committed to improving the care we provide. Hamilton Health Sciences has also focused its strategic plan on the reduction of hospital harm (which can lead to in-hospital death).

One of the ongoing ways in which Hamilton Health Sciences identifies opportunities to improve care processes is to review a random sample of deaths that occur at HHS.

HHS has other quality of care initiatives underway that will result in safer care. Some of these initiatives include:

- Reduction of central line infections
- Reduction of surgical site infections
- Reduction of catheter-acquired urinary tract infections
- Reduction of in-hospital sepsis



- Increase the proportion of patients with medication reconciled upon discharge from hospital. HHS has taken steps to safeguard patients against medication errors.
- Monitoring hand hygiene
- Understanding the prevalence and incidence of pressure ulcers
- Safe surgery checklist
- Improving access to care and services

HHS is also part of the American College of Surgeons National Surgical Quality Improvement Program aimed at enhancing surgical quality.