Hospital mortality rates continue to drop

Hospital mortality rates in most areas of Canada are declining, extending a five-year trend, according to the Canadian Institute for Health Information (CIHI).

“The three main drivers [of in-hospital deaths] are pneumonia, heart failure and sepsis … some hospitals have clearly made some strides in reducing deaths related to those patients,” says Kira Leeb, director of health system performance at CIHI, which has released its 2012 data on hospitalized standardized mortality ratios (HSMR) across the country (www.cihi.ca/cihi-ext-portal/internet/en/document/health+system+performance/quality+of+care+and+outcomes/hsmr/hsmr_results_canada).

The HSMR, a ratio of observed deaths to expected deaths, is adjusted for various factors, including age, gender, diagnosis and length of stay. A hospital with a score above 100 exceeds the projected national average for deaths, while strong performers have figures below 100.

The worst regional HSMR score for the year 2011–12 was 127, measured in the central region of Newfoundland and Labrador. The mortality rates in all regions of the province have decreased since last year but continue to exceed the national average. “It’s really important for those facilities to start looking at the data and identify which of their patient population is really driving their HSMR and to focus on efforts to reduce factors related to that,” says Leeb.

Ontario has its share of poor performers, too, with three hospitals receiving scores above 110: Kingston General Hospital (117), North Bay General Hospital (116) and Sudbury Regional Hospital (114). But the province is also home to many hospitals that did well, including the hospital with the lowest HSMR — St. Mary’s General Hospital in Kitchener, which scored a 66. Other hospitals outside of Ontario with low ratios include Foothills Medical Centre in Calgary, Alberta, (77) and Lions Gate Hospital in Vancouver, British Columbia (71).

For the first time, Quebec data has been included in the report, although data for 2011–12 was not available. The latest score for the Gatineau region of the province is worse than this year’s number in central Newfoundland and Labrador. In 2010–11, the area’s HSMR was 133 and has been steadily increasing since 2007–08. Quebec also has other facilities with poor mortality ratios, such as Hôpital de Verdun in Montreal (121) and Pavillon Saint-Joseph in Trois-Rivières (115).

Overall, Quebec’s HSMR decreased by 12% in 2010–11, says Leeb, and the remaining provinces collectively experienced a decrease of 16% this year.

The HSMR is a valuable tool in creating better and safer hospitals, according to CIHI. “Ever since the HSMR measure was first developed and disseminated by CIHI, many hospitals and health providers across Canada have been using it as part of their ongoing efforts to improve care,” states the report, which assesses more than 100 facilities across Canada.
But not everyone agrees. Some health providers have debated the value of the metric, which was developed in the United Kingdom in the 1990s, claiming it can undermine patient confidence in hospitals (www.cma.j.ca/lookup/doi/10.1503/cmaj.109-3728). Critics note that the HSMR doesn’t consider important factors that affect a population’s health, such as income levels. It also correlates poorly with other measurements of quality of care and can lack precision because of coding errors, low-quality discharge abstracts and administration data that’s missing important clinical information, according to one paper on the subject (www.cma.j.ca/cgi/doi/10.1503/cmaj.080010).

“Hospital standardized mortality ratios can inaccurately label good hospitals as poor performers and fail to identify many hospitals with true quality problems,” the paper states. “Moreover, the deceptively low cost of measurement is offset by expenses to institutions that choose to investigate their performance, since, in contrast to other performance measures, hospital mortality ratios provide no indication of the underlying quality problems.”

Another common complaint, often arising from regions with poor scores, is that the HSMR report is merely a scorecard approach to shaming certain medical facilities. The report is not meant to fuel hospital comparisons, says Leeb, but rather is intended to promote quality improvement. Yet publicly releasing data can indeed pressure institutions to create positive change, Leeb acknowledges. “The reality is when you publicly release data, people stand up and take notice.” — Bonnie O’Sullivan, CMAJ