



UNIVERSITY OF MANITOBA | Faculty of Medicine
Community Health Sciences

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NEW STUDY SAYS INTENSIVE CARE UNITS IN MANITOBA ARE BUSY

But hospitals easily keep up with demand

Manitoba's intensive care units (ICUs) operate efficiently, even though the supply of ICU beds in Manitoba is lower than the national average, says a new report from researchers in the University of Manitoba's Faculty of Medicine.

In the most comprehensive study of its kind, researchers from the Manitoba Centre for Health Policy examined the use of intensive care units in the province from 1999 to 2008. They found about eight per cent of those in hospitals need ICU care each year—that works out to be about 0.6 per cent of the adult population of Manitoba. Admission rates were lowest among young adults and rose with age, especially above 55 years. Admission rates peaked at about 80 years old, and then declined among older residents.

The study showed that over a nine-year period, ICU beds in Winnipeg were completely full less than five percent of the time. Outside Winnipeg, ICU beds were full less than one per cent of the time, meaning Manitoba hospitals run their ICUs quite efficiently.

Dr. Allan Garland is an ICU physician with the Winnipeg Regional Health Authority and one of the lead researchers of the report. "Despite having fewer beds than the Canadian average, Manitobans appear to have good access to ICU care when they need it," he says.

What makes this study so valuable is that it includes the entire population of Manitoba and every intensive care unit in the province. In 2007/08, Manitoba had 118 ICU beds. There were 82 in Winnipeg hospitals, nine in Brandon, and 27 more spread among nine rural hospitals.

Over half of all patients were admitted to an ICU because of cardiovascular conditions. However, the study also revealed that the number of people admitted to ICUs for these problems fell over time, which parallels the decreases in heart attack and stroke rates in Manitoba. Other illnesses commonly bringing patients to the ICU were severe infections, lung disorders, accidents or trauma, and poisonings.

This report showed that men accounted for about 60 per cent of patients in ICUs, similar to what others have found. But using a unique approach developed in this study that focused on disparities, researchers found a higher underlying rate of critical illness among men, which explains their higher rate of ICU use.

Researchers also wanted to look at the association between health and wealth in terms of ICU care. Those living in lower income neighbourhoods typically have poorer health status and higher rates of chronic disease than those from higher income areas.

“Given their poorer health status, we expected higher use of ICUs by residents of lower income areas,” says Garland. “And that is what we found, at first. But when we analyzed disparities in ICU care in a more appropriate way, we found the opposite trend. Residents of higher income areas were slightly more likely to be admitted to an ICU.”

Repeated need for ICU care was surprisingly common. One sixth of ICU care was for people who had previously been in a Manitoba ICU during the nine-year study period.

The study also looked at the use of the healthcare system for one year after patients left an intensive care unit, including hospital care, physician visits, prescription drugs, home care, and placement in personal care homes. ICU patients’ use of the healthcare system turned out to be remarkably similar to that of people admitted to hospital but who did not use an ICU. The main difference was that ICU patients were almost four times more likely to be re-admitted to an ICU in the year after discharge.

MCHP is a research unit in the Department of Community Health Sciences in the Faculty of Medicine, at the University of Manitoba. Research scientists and their collaborators at MCHP study health services, population and public health, and the social determinants of health using data from the entire population of Manitoba. Most of the research answers questions of interest to policy makers based on a formal association with Manitoba Health and input from other government departments.



Drs. Allan Garland and Randy Fransoo are available for interviews.

For more information, please contact Jack Rach, communications officer, Manitoba Centre for Health Policy, Community Health Sciences, Faculty of Medicine, University of Manitoba, at 204-789-3669.

The summary and full report will be available for download on April 18 from:
<http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html>