On Death and Dying in Manitoba

End-of-life care has been attracting more and more attention from health planners and researchers in recent years. It is a complex topic, connecting a host of issues such as patient preference, health spending, and quality of life.

Most people want to die at home, surrounded by friends and family. Canadian research, however, shows that, in some provinces, up to 90% of people die in hospital.

Some people have suggested that the tendency to move people to hospital at the end of life is behind rising health system costs. Others suggest that with high-tech medicine, we frequently go to unnecessary lengths to keep people alive who might more appropriately receive comfort-focused palliative care. These viewpoints are common, despite sound research to the contrary.

Palliative care was flagged as a top priority for provincial health ministries in a 1995 report from the Special Senate Committee on Euthanasia and Assisted Suicide. However, a follow-up report, tabled four years later, found few of the original report’s recommendations had been acted upon; it declared end-of-life care was in a state of crisis.

So what is the reality in Manitoba? Are most people dying in hospital? Are they using a disproportionate share of health care services in their final months? And are the resulting costs threatening to bankrupt our health system? This study tries to answer those questions.

How did we do our study?
To find out where people died, what health care services they used prior to death, and how much these services cost, we analyzed data for all 9,436 Manitoba adults (aged 19 or older) who died between April 1, 2000 and March 31, 2001. All data that MCHP analyzes is anonymized, so we cannot identify individual patients or physicians.

In assessing location of death, we classified people as dying in one of five places:

- Hospital
- Long-Term Care: nursing homes and chronic care hospitals (only Winnipeg’s chronic care hospitals were included).
- Home Care
- Other Locations: deaths at home and outside home, but not home care recipients
- Palliative Care: in one of Winnipeg’s two hospital-based units at St. Boniface General Hospital and Riverview Health Centre. Unfortunately, we can only be sure of identifying palliative care services for patients who were in these two units. Many other hospitals set aside beds for palliative care or provide this care on regular wards, but the province’s hospital data doesn’t identify this. Palliative care is also provided through home care, but the reporting on palliative home care isn’t complete.

As part of the study, we also looked at the number of times people were admitted to
hospital in their last six months, and whether this varied by where people lived.

We also looked at people’s health care use and associated costs in their last six months. We studied five areas: hospital days, long-term care days, home care days, physician visits, and prescription drug use. We compared services and costs for people who died to services and costs for the rest of Manitoba’s adult population.

Here’s what we found.

**Location of death**

- Almost half (47%) of Manitobans died in hospital. The largest proportion of deaths occurring outside hospital were in long-term care (24%), while 7% were in one of Winnipeg’s two palliative care units, and 6% among home care clients. The rest, 16%, were in other locations.

- Location of death varied widely across health regions, particularly for cancer patients. Nearly half (47%) of cancer deaths among Winnipeg residents were in hospital, compared to 72% for people living in the rest of Manitoba. Much of this difference is the result of Winnipeg having two dedicated palliative care units: 34% of cancer deaths among Winnipeg residents occurred in one of the units.

- Most long-term care residents (83%) died in a long-term care facility. In contrast, 70% of home care recipients and 58% of people living in other locations in their last six months of life eventually died in hospital.

- Although the overall proportion of long-term care residents hospitalized at the end of life was relatively low, we found considerable variation among nursing homes—7% to 58% in Winnipeg and Brandon—in the proportion of residents transferred to a hospital at least once in their final months (figure 1).
When we looked at how often people were hospitalized in the last six months of life, we saw that most people (86%) receiving home care six months before death were admitted to hospital at least once and 43% were hospitalized twice or more. In other words, 14% of home care recipients were never hospitalized. In contrast, 63% of people in long-term care six months before death, and 32% of people who were in other locations, were never hospitalized.

Health care use

Manitobans who died during the study period (representing 1% of the province’s adult population) used 24% of all hospital days, 24% of long-term care days, 10% of home care days, 4% of doctor visits, and 3% of (out of hospital) prescription drugs in their last year of life.

A number of factors are related to people’s use of health care services at the end of life. These include age, cause of death, location of death, region of residence, neighbourhood income, and marital status. One example: individuals in the under-65 age group who died of cancer typically used more hospital, long-term care, and home care days, more doctor visits, and more prescription drugs than those who died of cardiovascular diseases. The opposite was the case for the 65+ age group.

Use of hospital days rose sharply during the final month before death among people over age 65 who died in hospital; conversely, among individuals who died in a long-term care institution, use of hospital days decreased in the last month of life.

Costs

In their final six months of life, those Manitoba residents who died accounted for a fifth (21%) of the province’s total health care costs.

Deaths in hospitals and long-term care facilities cost significantly more than deaths among people receiving home care. And deaths among people receiving home care cost more than deaths in other locations (figure 2).

The average amount spent on end-of-life care for people 75 and older was considerably higher than that spent on the next youngest age group (65 to 74). The 75+ age-group in fact accounted for nearly three-quarters (72%) of total spending on end-of-life care, largely because they were more likely to be in long-term care.

How do we interpret our findings?

About half of all adult deaths in Manitoba occurred in a hospital. Is this too high a proportion? Or about right? The question of what proportion of deaths “should” occur in hospital is a difficult one to answer. When asked, most
people state a preference for dying at home. Yet some hospital deaths are clearly unavoidable and entirely appropriate. One way to look at this issue is to compare Manitoba to other provinces. By that standard, Manitoba seems to fare quite well: data from 1997 showed the proportion of hospital deaths in Canada ranged from 52% to 87%.

Given the desire of most people to die “in place”, we were encouraged to learn that most long-term care residents died there, and that almost two-thirds of this group were not transferred to hospital even once in their last six months of life. However, the wide variation across nursing homes in the proportion of residents admitted to hospital in their final months—7% to 58% across nursing homes in Winnipeg and Brandon—is puzzling. Further research is required to determine why.

More research is also needed to find out why home care clients—particularly the very old—are hospitalized so frequently at the end of life. In our study, nearly two-thirds of the home care recipients who were hospitalized two or more times were 75 or older. It may be that these short “tune-up” visits enable the oldest-old to stay in their own home longer. We need to determine, however, if this practice is indeed improving the quality of seniors’ remaining life, and whether there are other alternatives to hospital care that might better meet their care needs.

The success of Winnipeg’s two hospital-based palliative care units suggests that investments in these units have made a real difference. But how do we best adapt palliative care to rural Manitoba, where there are fewer deaths? Researchers and planners need to take a closer look at which models of palliative care work best in rural areas.

Our study also highlights a gap in Manitoba’s routinely-collected health care data. While we know that palliative care is provided in many facilities in specially designated beds or on regular wards; Manitoba hospital data reflects only the deaths that take place in the palliative care units at Winnipeg’s St. Boniface General Hospital or Riverview Health Centre.

Also, palliative patients receiving care in their homes are reported in some, but not all, RHAs. Governments and health regions need to work together to ensure that information about palliative care—including costs—is reported consistently wherever it is provided.

Dying people do use more health services than the rest of the adult population, but not, as some argue, a very much larger share. In their final year of life, dying patients used about 25% of all hospital and long-term care days, just 10% of home care days, and less than 5% of doctor visits and out-of-hospital drug costs. Our study explored general patterns of health care use at the end of life; we did not look in detail at specific treatments, procedures, and drugs. Research in this area is warranted, to assess whether the care we’re providing to dying patients is appropriate.

The high cost of dying among Manitoba’s very old is driven not only by hospital care, but also by long-term care. Among the oldest-old, those aged 85 or older, hospital care accounts for 48% of costs, while long-term care comes a close second, accounting for 41% of the costs during the last six months of life. Thus, a large part of the high cost of dying in this age group is associated with caring for frail individuals with heavy needs for extended periods.

In light of projected growth in the province’s 85+ population, we need to understand better health care costs incurred by our oldest adults. Since hospital care accounted for the biggest share of end-of-life costs, we need to determine the potential to reduce these hospital costs. It’s important to research why some nursing homes transfer patients to hospital much more often than others, and the reasons for the multiple hospital admissions of home care recipients.

Finally, to round out our understanding of this complex subject, we must explore quality as it relates to the end-of-life caring experience. Research that examines the perspectives and perceptions of patients, their families, and health providers will help put a human face on questions about end-of-life care options and location of death.