Health in Manitoba: Are We Doing Better?



MANITOBA CENTRE FOR HEALTH POLICY AND EVALUATION

Manitoba's system of universal health insurance is now 30 years old. During that time, our health care system, health care expenditure patterns and the Manitoba population have changed.

To better inform us about the effect of these changes on Manitobans' health and their health care system over the last 14 years, the Manitoba Centre for Health Policy and Evaluation undertook an extensive review of several key measures. We examined information on the health of Manitoba's residents, the rate at which we use health care services, the availability of health care services, and expenditures on those services. We developed a total of 21 measures describing Manitoba's health care system. For 16 of these, we had data for 1985 through 1997 or 1998. For the remaining five measures, data were available only for the 1990s.

Health status

Our most important finding is that the health of Manitobans improved dramatically over the 1985-98 period. However, this improvement was not universal—the health status of residents of northern Manitoba got worse rather than better.

We used two measures of health: the premature mortality rate (PMR), which is the rate at which people under age 75 die; and life expectancy or how many years people are expected to live from birth. Overall, PMR dropped by 14% between 1985 and 1997, and life expectancy rose. For men, life expectancy rose by 2.6 years

(from 73.1 years to 75.7 years), while life expectancy for women rose one year (from 80.1 to 81.1).

These declines in mortality over such a short period of time are extraordinary. To get some sense of the magnitude of these improvements, consider this fact: it was estimated in 1987 that if cancer were eliminated from the U.S. population that Americans would achieve an increase in life expectancy of 2.8 years. Of course, no one has discovered the magic cure for cancer yet. But look at those figures we quoted on the improved health of Manitobans—we have enjoyed an increase in life expectancy almost as great as if we had eliminated cancer in Manitobal.

However, not all Manitobans shared the benefits of improving health. In northern Manitoba, defined as the Regional Health Authorities (RHAs) of Nor-Man, Burntwood, and Churchill, life expectancy did not rise nor did the premature mortality rate fall. Life expectancy for females fell by one-and-a-half years, and for men life expectancy declined by about one year.

As Figure 1 indicates, PMR rose in northern Manitoba. By 1997, the northern Manitoba PMR was 6% above the 1985 level. These changes in PMR and life expectancy in the North over little more than a decade are disturbing. Having uncovered these problems, we have agreed to do more research for Manitoba Health on why the health of northern residents declined so precipitously.

Use and availability of health services

Among the 21 measures we reviewed were the rates at which Manitobans use all of the major types of health care, including hospital, doctor, and nursing home services, as well as home care and prescription drugs. Because of the rising number of people 75 years of age and over in the province, we also focussed on four types of surgery known to improve the quality of life of older adults. In the next paragraph, we report on how the rate at which Manitobans used these services changed over the study period. It is our hunch that most of our findings conflict with impressions created by the media. If you're interested in testing our hunch, try the short quiz (see box) before reading further.

Over the study period, hospital and nursing home admissions and physician supply held essentially steady (they didn't rise or fall by more than 10%), and the surgery rate for

True or false?

- 1 The rate at which Manitobans were admitted to hospitals fell over the 1985-98 period.
- 2 The number of physicians per 1,000 Manitobans fell during the study period.
- 3 The rate at which Manitobans aged 75 years and older were admitted to nursing homes fell over the 1985-98 period.
- 4 The rate at which Manitobans had surgery for knee or hip replacement, coronary artery bypass grafts, and cataract extraction fell over the study period.

The correct answer to all of these questions is "false."

knees and hips, coronary artery bypass and cataracts skyrocketed. Hospital use, measured by the average number of days Manitobans spent in hospital, fell by 20% over the 1985-98 period. At first glance this may seem to contradict the statistic we just reported—that Manitobans were admitted to hospital in 1998 at the same rate as they were in 1985. The explanation is that Manitobans spend less time in a hospital after admission.

Bed closures began in 1992, but the decline in hospital use began in the 1980s, reflecting a change in what physicians and nurses view as good standards of patient care. Remarkably, half the decline in the number of days patients spent in hospitals took place *before* 1992!

Between 1985 and 1998, doctor visits per 1,000 people rose 6% (3% after adjusting for the aging of the population), and prescriptions per resident rose 15% (from six to seven prescriptions per resident). The increase in doctor visits was almost identical to the increase in the supply of doctors. Between 1985 and 1997, the number of physicians in Manitoba per 1,000 residents rose 6.5%.

Adapting to the aging population

One of the most important changes in our population is the growing numbers of us who are 75 years of age and over. Like the rest of the industrialized world, Manitoba has a baby boom generation, and the oldest members of this generation are now just a decade away from retiring.

The aging of our population has intensified public discussion about the impact these changes have had and will have on Manitoba's health care system and on the health of Manitobans. Because we hear so much about the aging population and about concerns that their numbers will swamp the system, we examined several measures of health and health care use for those Manitobans aged 75 years and older.

As was the case for the mortality rate for those under 75, the mortality rate for those 75 years and older fell during the 1985-98 period—in this case, by 8%. In other words, the overall health of older Manitobans, like the

health of all Manitobans, improved substantially over this period.

The data on services used by older residents indicate Manitoba's system has responded well to an aging population. Although more Manitobans aged 75 and older were being admitted to nursing homes, the average amount of time they spent in them fell slightly during the study period. This is likely because older Manitobans are living longer at home, either because they are healthier, or because home care services are more available. Home care expenditures over this period more than doubled—they rose 119% between 1990 (the first year for which information is available) and 1998.

The rate at which Manitoba increased certain surgeries performed most often on older people may be the most surprising finding of this report. Between 1991 and 1998, the knee replacement rate rose 166%, the bypass surgery rate rose 68%, the cataract surgery rate rose 53%, and the hip replacement rate rose 39%—and this was *after* taking account of the increased numbers of older Manitobans.

Expenditures

Despite the fact that more than a quarter of Manitoba's hospital beds were closed during the study period, real hospital expenditures (that is, expenditures adjusted for inflation) fell just 5%.

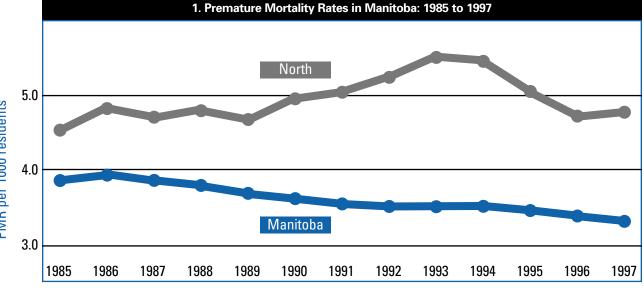
In addition to hospital and home care expenditure data, we had good data on four other types of expenditures. Over the 1985-98 period, spending per Manitoba resident rose 11% for nursing homes, 3% for physicians, and an astounding 65% for prescription drugs. Capital expenditures per resident fell 56%.

Northern Manitoba

Because previous research has shown that the health of Manitobans varies substantially across the province, we also reviewed how health and access to care and use of services changed in the North compared to how it changed elsewhere. Residents of northern Manitoba have a much poorer health status overall, and hence a higher need for health services.

As we mentioned early on, one of the most disturbing findings of this report is the extent to which the health of northern residents got worse. We also found changes in health care use patterns in the North which were not reassuring. Physician visit rates fell by 15% compared with a small increase for Manitobans generally. Northern residents' more rapid decline in hospital use rates also seems strange because it occurred during a period in which their health was falling.

Northern residents' use of nursing home services was much more difficult to assess because we do not have complete nursing



PMR per 1000 residents

home data. (We do not have data on federally operated nursing homes.) However, even when we focus on northern residents' access to provincially funded nursing homes, the changes were not reassuring. Their rates of admission to provincially funded beds was falling, while that for Manitobans aged 75 years and older who live in most other places in the province was increasing.

It is not clear that the decline in the rates at which residents of northern Manitoba use hospital, doctor and nursing home services is related to the dramatic declines in their health documented by this report. After all, the province as a whole cut hospital use 20% over the study period while simultaneously enjoying a spectacular increase in life expectancy. But this pattern in the North—declining health and declining use rates—is unique and warrants further investigation.

The big picture

From our bird's-eye view, two features of the Manitoba health system stand out. First, the health of most Manitobans has improved substantially over a relatively short period of time. Second, the mix of health care services Manitobans got at the end of the 1990s was noticeably different from the mix we got in the mid-1980s. We're using hospitals, and possibly nursing homes, a bit less, seeing doctors a bit more, getting a lot more expensive prescriptions, and spending more on home health care. We are getting many more knee replacement, bypass, cataract, and hip replacement operations.

When we zoom the lens of our bird's-eye view a little closer, we see no obvious problems created by increasing numbers of older Manitobans, but we do see problems for those who live in the North. Overall, older Manitobans are also enjoying better health and have general use trends that resemble those we painted for the population as a whole. Older residents appear to be benefiting especially from the increase in certain surgeries and in home care

expenditures. But the pattern of declining health and declining access in the North is disturbing.

Conclusions

Our study concludes with this observation: "[A] review of the health and the delivery of medical care in Manitoba over the last 14 years suggests that the system works and in fact works well." This conclusion is justified by the dramatic improvements in the health of the average Manitoban, and by the absence of evidence that bed closures or any other change over the last decade and a half has reduced access to necessary health care services. Clearly the mix of health care services has changed somewhat since 1985—away from hospital services and toward other types of services. But our study uncovered no evidence that this shift had adverse consequences.

We close with a note about what we did not study: this project did not track the change in the number of Manitobans without health insurance. The reason is obvious: the rate was zero in 1985 and it remains zero today. Were we painting a bird's-eve view for Manitoba before Medicare, or a bird's-eye view for any American state today, the rate of uninsured would have been a measure worth reporting on. The rate of uninsured people in the United States was 15% in 1985 and 16% in 1998. In fact, one of the most frequent causes of personal bankruptcy in the U.S. is getting sick! To restate our conclusion about the health of Manitobans and the Manitoba health care system—a 14 year review suggests both are doing well.

Summary by Kip Sullivan, based on the report Changes in Health and Health Care Use of Manitobans, 1985-1998, by Noralou Roos, Evelyn Shapiro, Ruth Bond, Charlyn Black, Greg Finlayson, Christine Newburn-Cook, Leonard MacWilliam, Carmen Steinbach, Marina Yogendran, Randy Walld.