Winnipeg Hospital Bed Closures: Problem or Progress?

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THE MANITOBA CENTRE FOR HEALTH POLICY AND EVALUATION

Major bed closures began in Winnipeg hospitals in 1992/93. By 1997/98, almost one-quarter (24%) of the acute care beds in the system were closed (727 beds). From the beginning, this downsizing raised serious concerns: Would fewer beds mean fewer people could get hospital care? Would patients be sent home too soon and too sick? Would more people die because hospital resources were strained? Given recent reports of patients waiting for beds, these questions are even more pressing.

When Manitoba Health began downsizing the hospital sector, the Manitoba Centre for Health Policy and Evaluation (MCHPE) agreed to monitor the impact. This is our third report, and it looks at the period from 1990/91, before any major bed closures, to 1996/97 or, where available, to 1997/98.*

As in our previous reports, we found that bed closures have not, in general, had a negative impact on patients' access to hospitals, the quality of care provided, or the health of Winnipeg residents.

Instead, Winnipeg hospitals appear to have responded remarkably well to a major change by adopting new approaches to the delivery of care. We found that the capacity of the system to treat patients did not change—just as many patients were treated in 1997 as before bed closures. Also, we found no evidence that bed closures have had a negative impact on system-wide measures of quality of care, or on the health of Winnipeg residents.

What about reports by health care professionals and patients about stress on Winnipeg hospitals? MCHPE does not dismiss those reports. However, our study looked at the long-term health effects, and issues of access and quality of care from a system-wide perspective. We are unable to look at specific problems within the hospitals, such as reports that some patients must be treated in hallways when no beds are available. We acknowledge the stress these conditions impose on patients and caregivers.

Patient Access to Hospital Services

Hospitals treated as many people as before bed closures, with fewer resources, because of increased efficiency and a shift in the way care is provided.

- Just as many people had access to hospital services in 1996 and 1997 as they did prior to bed closures, even after taking into account the aging of the population (Figure 1). However, they spent far fewer days there: the number of days spent in hospital per 1,000 Winnipeg residents dropped by 22% in 1997 compared to 1991.
- The decrease in hospital days was largely due to a shift in surgery from inpatient to outpatient settings. (Outpatients go home on the day of the procedure.) Between 1991 and 1997, the rate of adult outpatient surgery increased by 42%, while adult inpatient surgery decreased by 31%. Overall, the rate of

❇ To simplify readability, the description of findings for the fiscal years 1991/92, 1996/97 and 1997/98 (which run from April 1 to March 31) are referred to as 1991, 1996 and 1997. The data are for Winnipeg residents, unless otherwise specified.

adult surgery increased by 5%, even after accounting for the aging of the population (older people get more surgery).

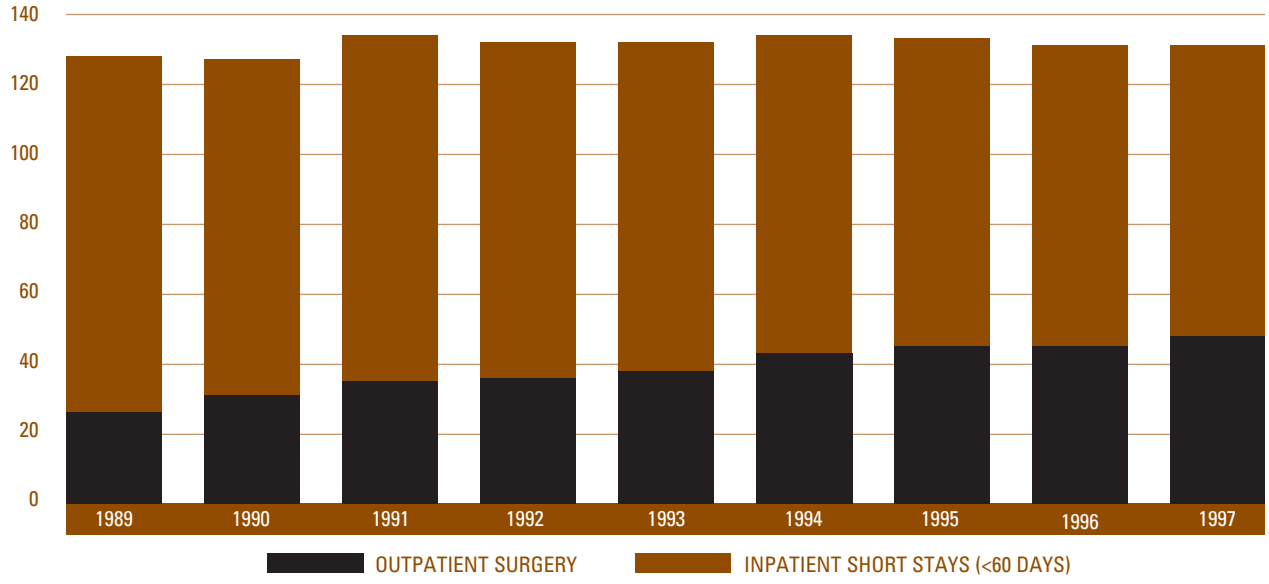
- The number of Manitobans who had specific procedures such as coronary bypass, knee replacements and removal of cataracts increased dramatically in this period—by as much as 169% in the case of knee replacements between 1991 and 1997. (Figure 2)
- During this period, cataract surgery was available in both the public and private sectors. The number of procedures grew quickly in both sectors. In 1997, the public system did 2,051 or 53% more procedures than in 1991, and private cataract clinics did 1,076 or 290% more than in 1991. As of January 1999, the role of private clinics is changing as new provincial legislation bans charging patients for cataract surgery.
- Surgery is not the only thing that sends people to hospital. There was a 6% drop in the number of adult medical patients in Winnipeg hospitals in 1997 compared to 1991. The drop in admissions occurred mainly among the less ill; admissions for medical patients who were very ill and who needed the most complex care did not change between 1991 and 1997.
- The pattern of care in Winnipeg hospitals for people living outside Winnipeg was similar to that of Winnipeg residents. There was a big increase in outpatient surgery and a decrease in inpatient admissions, resulting in the same number of patients treated but with fewer days spent in hospital. Rural residents also had increased access to Winnipeg hospitals for very high intensity services, like coronary bypass.
- Children were much less likely to receive hospital care in 1997 than in 1991: a drop of 27%. The decrease appears to be due to changes in patterns of practice, not reduced access resulting from bed closures. For example, there were fewer ear, nose and throat procedures performed on children, coinciding with the introduction of new clinical guidelines.
- There are still many patients awaiting admission to nursing homes in Winnipeg hospitals, but the length of their wait decreased from 150 days on average in 1991 to 108 days in 1996. This is most likely due to the addition of 328 long-term care beds, mostly in nursing homes, permitting a more appropriate use of hospital beds for acute (short-term) care.

Quality of Care

We also looked for indications that patients were being sent home quicker and sicker from hospital. Measures suggest that quality of care in hospitals has not deteriorated.

- Mortality rates suggested an improvement in quality of care. We looked at deaths within 30 days of discharge for patients treated for three common conditions: heart attack, hip fracture or cancer surgery. Death rates remained

1. Changing Hospital Use: Hospital Cases per 1,000 Winnipeg Residents, 1991 to 1997



stable for heart attack patients and decreased for hip fracture and cancer surgery.

- We tracked patients with three common medical conditions—heart attack, bronchitis/asthma and digestive disorders—to see if they were more likely to visit their doctor's office or an emergency ward within 30 days of hospital discharge. There was no change in frequency of visits between 1991 and 1996.
- Since readmission within 30 days could be an indication of premature release from hospital, we examined what happened to patients treated for 13 common medical, surgical and obstetric categories. Readmissions were counted whether the patient returned to the same hospital or any other hospital in Manitoba. Five of the categories showed an increase between 1991 and 1996, and one showed a decrease. However, readmission rates tend to fluctuate and when 1997 data were added, all but one of the categories (digestive disorders) dropped down to rates that existed before the bed closures began. Since we did not find this pattern in any other category, this finding is puzzling. The impact of bed closures—if any—on these patients is unknown.
- The most striking characteristic found in this analysis, however, is the variation between hospitals in any given year. It was not uncommon to find readmission rates to be twice as high at some hospitals than others; for one category, the difference between hospitals was four-fold. While some differences may be due to patient-mix at different hospitals, it is difficult to see how bed closures could cause such a variation.

Health of Winnipeg Residents

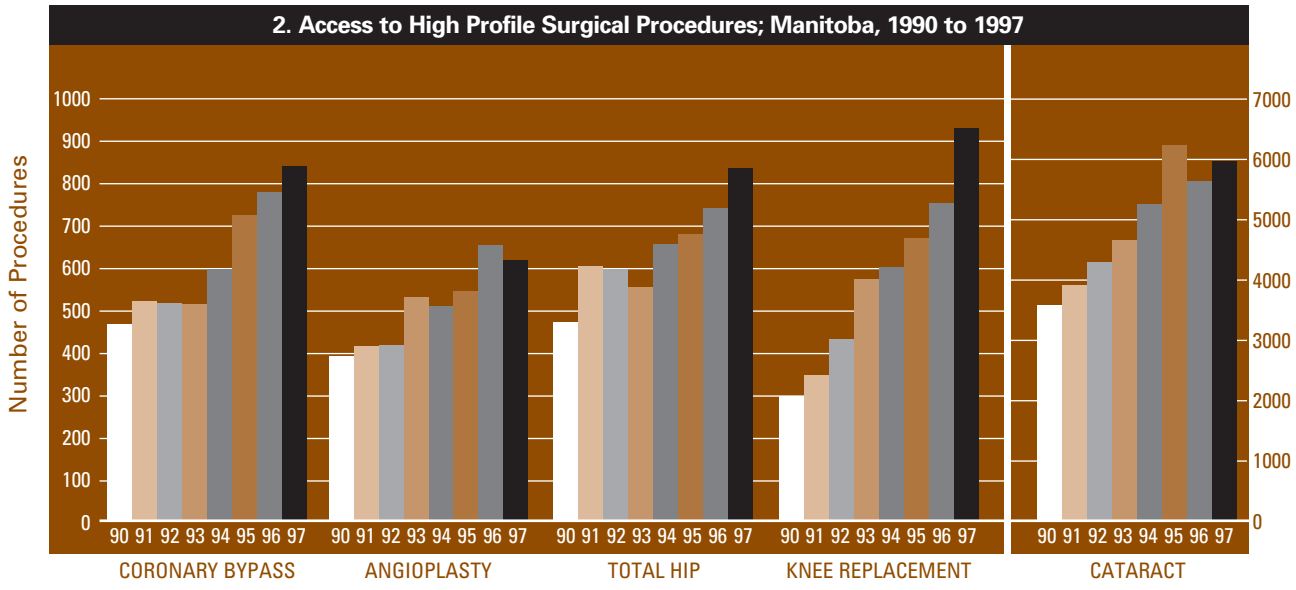
The health of Winnipeg residents remained stable between 1991 and 1996, with one exception. The premature mortality rate (deaths before age 75) rose for those in the lowest income neighbourhoods, yet access to hospital care for this group did not change. So the higher death rate does not appear to be the result of bed closures. These latest findings mean that Manitobans who already had the highest premature mortality rate are even more likely to die early.

Limitations

There are aspects of hospital care that were not examined by this study that warrant attention. Considerable concern has been expressed about patients spending too long in hospital Observation Units because there are no inpatient beds available. Unfortunately, our data cannot consistently distinguish where patients spent their stay in hospital.

The quality of life that patients experience once they are discharged from hospital is important, as are patient and family satisfaction with hospital care. But these things cannot be captured by our data. However, another study focussing on such factors found that elderly Winnipeggers hospitalized after the major bed closures expressed more confidence in the system than those who had not been hospitalized.

2. Access to High Profile Surgical Procedures; Manitoba, 1990 to 1997



Additional Issues

There are four areas that this study suggests need further attention.

Variation in Readmission Rates: In several of the conditions we studied, some Winnipeg hospitals have much higher rates of readmission than others. With the new Winnipeg Hospital Authority assuming responsibility for the delivery of care across the system, it is an ideal time to review indicators of quality at all institutions, and to share best practices between hospitals.

Length of Stay for Medical Patients: Hospital stays for medical patients decreased very little with bed closures. Previous MCHPE research found that up to 60% of the days medical patients spent in urban acute care hospitals could be spent more appropriately in other settings. A critical look at lengths of stay for medical patients could help to determine whether use of hospital beds could be improved.

Home Care: We know that numbers of people registered and per-person expenditures on home care are rising, but we don't know who is receiving these services. Manitoba Health has recognized this gap and asked MCHPE to incorporate home care data into the research database.

Health and Wealth: The deterioration in the health of Winnipeg's poorest residents is cause for major concern. Increased hospital resources are not the answer. The lowest income groups already spend 40% more days in hospital than middle-income residents, who in turn spend 30% more days than higher-income residents. As we have said many times before, when it comes to health, socioeconomic status matters.

Conclusions

Our results show that the Winnipeg hospital system has risen to the challenge of bed closures. Indeed, hospitals treated as many people in 1997 as they did prior to downsizing by adopting successful new approaches to delivering care, for example, shifting surgery from inpatient to outpatient settings.

In addition, we found no evidence that bed closures have had a negative impact on system-wide measures of quality of care. One of our quality indicators is readmission rates. Bed closures have not changed the overall readmission rate; however there have long been marked differences in readmission rates between hospitals, unrelated to bed closures.

Finally, we found no signs that bed closures have had a negative impact on the health of Winnipeggers. Although we found some signs that health is deteriorating in Winnipeg's poorest residents, there was no evidence that bed closures were the cause. We must look outside the health care system for explanations and solutions.

How does this rosy picture square with reports about patients lining emergency room hallways and waiting two or three days for a bed? It must be pointed out that emergency room crowding is not a recent event. Winnipeg newspaper clippings reveal that such concerns were raised in 1989 and 1990, prior to any bed closures. Recent research at MCHPE (not part of this report) demonstrates recurrent increases in hospital admissions for flu, peaking every winter between December and April. Given the predictability of these peaks, it should be possible for hospitals to plan accordingly. Also, programs to increase flu immunizations could reduce the need for hospitalization and should help to modify these peaks.

Hospitals have responded remarkably well to the challenges of downsizing by adopting new ways of delivering care. They are also delivering many more of those procedures known to have clear impacts on the quality of patients' lives: knee replacement, cataract surgery and heart bypass. Readmission and mortality rates have generally held steady. Our results demonstrate that on a system-wide basis, the closure of 24% of Winnipeg's hospital beds has not resulted in fewer patients treated, poorer quality of care or poorer health for Winnipeg residents.

Summary prepared by Marni Brownell and Cheryl Hamilton, based on the report: Monitoring the Winnipeg Hospital System: 1990/91 through 1996/97 by Marni Brownell, Noralou Roos and Charles Burchill.

TO OBTAIN A COPY OF THE COMPLETE REPORT,
CONTACT MCHPE: PH. (204) 789-3805; FAX (204) 789-3910
S101-750 Bannatyne Avenue, Winnipeg, Manitoba, Canada R3E 0W3.
Visit MCHPE on the Internet at: www.umanitoba.ca/centres/mchpe