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# Healthcare Restructuring and Community-Based Care: A Longitudinal Study

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# Healthcare Restructuring and Community-Based Care: A Longitudinal Study

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## **Key Implications for Decision Makers**

The issues addressed in this study are of particular importance to managers and policy makers at all levels — regionally, provincially, and federally. There is considerable concern at the current time with reforming our healthcare system in ways that are cost-effective and, at the same time, appropriate for meeting the current and future health and healthcare needs of an aging population. Regionalization has been adopted as a means for achieving these objectives. Examination of its implications can therefore serve as a guide to decision-making, suggesting future directions and needed modifications. Some of the messages that this program of research provides for decision makers include the following:

- Trends in access to and use of health services appear fairly consistent immediately before and after regionalization, suggesting declines in service, increasing intensity of care, and redirection of specific services. A shift of focus and resources toward a more social, community-based model of care remains to be achieved.
- Declines in resources and access to hospital and institutional care need to be accompanied by increases in resources and access to community-based services like home support and home nursing care.
- When allocating resources, it is important to consider more than medical needs. Doing so puts certain groups (like seniors under the age of 85) at a disadvantage, since many of their healthcare needs are non-medical and require supportive community-based care.
- Switching preventive care out of the doctor's office and into the community may increase the number of people receiving preventive care and even out differences in use between people with different socioeconomic circumstances, and people living in rural versus urban areas. For example, screening programs can be delivered through permanent facilities in urban areas, but mobile facilities may be more appropriate in rural and remote areas.
- The true impact of regionalization in Canada will not be known for several years and after study of long-term effects.

## Executive Summary

### Background

Over the past decade, provincial and territorial governments across Canada have been engaged in a process of reassessing their health policies, restructuring their healthcare systems, and reallocating their health dollars. The need for a shift of focus and resources toward a more social, community-based model of care has been a dominant theme of health reform, with regionalization adopted as way to achieve this and other aims.

However, little is known regarding the ability of regionalization to achieve these objectives. Given the importance of these issues, researchers at the University of Victoria Centre on Aging and the University of Manitoba Centre for Health Policy have collaborated with three health regions in British Columbia and three health regions in Manitoba on this research project, designed to address the impact of regionalization on community-based care. The focus was on the relationship between healthcare reform and restructuring through regionalization and changes over time (1990-1999) in the allocation of health resources, use of health services, and health outcomes. Using administrative data and other sources of information, comparisons were made between three health regions within each of the two provinces and among particular at-risk groups within the overall population. This report outlines some of its findings.

### Findings

The study revealed some of the changes that took place in the regions and the provinces during the years immediately before and after the regionalization of health services in April, 1997.

#### *British Columbia*

British Columbia researchers found numerous changes in health resources, health services, and population health during the years before regionalization (1990/91 to 1996/97). In general, the number of acute and extended care hospital beds declined during this period as did the use of inpatient hospital services. The supply of nursing care also declined somewhat. Yet there were modest increases in access to and use of alternative health services, such as naturopaths and chiropractors, physician services, and outpatient hospital care. Use of long-term residential care also increased somewhat as did community-based home nursing care, along with the intensity of care provided. In contrast, however, access to home support services declined, while the intensity of care provided to those receiving services once again increased. Finally, the overall health of the population also appeared to increase.

Many of the same trends were found during the two years that followed regionalization (1997/98 and 1998/99). However, while extended care, day surgery, outpatient hospitalization, and home nursing care service rates of use all increased somewhat during the years prior to regionalization, each declined over the two years immediately following. Use of alternative health services also decreased during this period, continuing a pattern established shortly before restructuring.

The trends varied somewhat across age groups. While increases in physician visits, outpatient separations, and home nursing care services were somewhat greater among those in the oldest

age groups, decreases in inpatient hospitalizations, home support services, and home nursing care over time tended to be somewhat smaller within these age groups. In contrast, comparisons across income quintiles found little difference in the trends for different groups, while comparisons across regions revealed both similarities and differences in trends.

### ***Manitoba***

Manitoba researchers examined Manitobans' use of all major types of healthcare over time, including physician, hospital, nursing home, homecare, public health, and prescription drug use. Because of the increasing number of residents aged 75 and older in Manitoba, the study also considered the health status and use of care among this cohort.

Over the study period, there was little change in the number of available doctors and the number of physician visits. The number of physicians in Manitoba per 1,000 residents rose little (0.3 percent) from 1990 to 1997, while the number of physician visits per 1,000 residents declined by 1.5 percent from 1990 to 1998. In particular, age-sex adjusted rates for GP visits per 1,000 residents only dropped by 0.6 percent over the study period, and specialist visits decreased by 1.8 percent

Inpatient hospitalizations showed only a small increase (7.2 percent) during this period, while nursing home admissions for people 75 and older held fairly steady. Despite these findings, Manitobans actually spent less time in a hospital after admission, leading to a 20 percent drop in the average number of days spent in hospital. Contrary to popular thought, this drop did not appear to be due to a lack of hospital beds. Bed closures began in 1992, but the decline in hospital use began in the 1980s. In fact, half the decline in the number of days patients spent in hospital occurred before 1992. Similarly, even though more individuals aged 75 and older were admitted in recent years, the average length of time spent in nursing homes has fallen, suggesting that older residents are living longer at home either because they are healthier or because homecare services are more available.

From 1991 to 1998, rates for four types of surgery (knees and hips, coronary artery bypass, and cataracts) known to improve the quality of life for older adults increased substantially (183 percent, 49 percent, 76 percent, and 66 percent respectively, after taking account of the increased numbers of older Manitobans).

The mortality rate for residents aged 75 and over dropped from 95 per 1,000 in 1990 to 92.1 per 1,000 in 1998. Thus, the overall health of older Manitobans, like the health of all Manitobans, improved over this period.

Finally, Manitoba researchers also addressed the impact of changes in the delivery of mammography services in the 1990s on coverage and inequalities in the use of preventive care. The changes implemented included shifting responsibility for provision of these services away from physicians, and providing services through permanent screening facilities in urban areas and mobile vans in rural/remote areas. Since no changes took place in childhood immunization or cervical cancer screening during this period, longitudinal information on these services was used as a control for comparison with the mammography data. The findings revealed a major impact of the breast-screening program implemented shortly prior to regionalization: coverage

rates rose dramatically while longstanding disparities in use (socioeconomic and rural-urban) disappeared. Similar changes were not found with regard to cervical cancer screening or childhood immunizations.

### ***Comparing British Columbia and Manitoba***

Finally, comparative analyses were done to assess differences in the changes that took place over the nine-year period encompassing regionalization. The preliminary findings suggest significant differences between the two provinces, both prior to and following the restructuring. In general, greater use of general practitioner and outpatient services was made by British Columbians while Manitobans made greater use of medical specialists and inpatient hospital services. Before regionalization, lengths of stay in acute hospital care also tended to be somewhat greater in British Columbia.

Rates of change also appear to differ somewhat between the two provinces. Adjusted for age and gender, the rate of change in physician visits was relatively small in each province. However, differences between the provinces seemed greater in the hospital sector. While British Columbia saw somewhat greater declines in inpatient separations and lengths of stay, Manitoba saw a greater increase in outpatient separations.

### **Summary**

Overall, our research confirms significant changes in health resources and the use of health services have taken place over the past decade. Yet findings obtained by researchers in British Columbia provide no clear indication of a shift of focus away from a predominantly medical model of care and toward a broader social and community-based model of care. Declines in acute hospital care resources appear consistent with such a move. However, recent declines in outpatient care, alternative health services, home support services, and home nursing care appear less consistent. The more dominant theme has been one of declines in service, whether in acute medical and hospital sectors or in community-based services. Declines appear to be accompanied by an increasing intensity of care and redirection of services towards those in the oldest age group.

While changes in health resources and services are evident across provinces, findings also suggest somewhat different strategies for health reform within the two provinces. In British Columbia, the focus appears to have been on implementing reductions in inpatient hospitalizations while holding the line on outpatient care. In Manitoba, reductions in inpatient hospitalizations have been offset by increases in outpatient care.

Finally, it should be noted that many of the changes observed were initiated well before regionalization was formally introduced in 1997 and continued thereafter. Research conducted in both provinces suggests that regionalization has not significantly altered the course of change, at least during the short-term. Future research will need to confirm, extend, and refine the analyses over a longer period of time.