
Containing Use and Expenditures in Publicly Insured Long-Term Care Programs

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British Columbia and Manitoba have the most developed and comprehensive publicly financed long-term care (LTC) programs in North America. For U.S. policymakers, these programs are large-scale natural experiments with public LTC insurance. During the 1980s, both provinces successfully contained the growth of public expenditures on nursing homes, and one province successfully contained the growth of public expenditures on home support services, adjusting for population growth. Because provincial cost-control methods are similar to those that some States already use, it is likely that managers could contain the growth of public expenditures once a publicly insured U.S. LTC program was implemented. The level of public expenditure would depend partly on the level of compensation for LTC sector personnel, which is relatively low in the United States.

INTRODUCTION

Of the \$47.9 billion spent on U.S. nursing home care in 1989, nursing home residents and their families paid 44 percent, Medicaid paid 43 percent, and private insurance paid only 1 percent (Lazenby and

Letsch, 1990). Reflecting discontent with current LTC financing arrangements, various reform proposals aim to reduce financial burdens on both individuals and government welfare programs. Some proposals emphasize combining privately purchased LTC insurance with a Medicaid benefit covering either the front or back end of a privately insured nursing home stay, while others stress financing of community-based services or reforms of the present system without Federal involvement (McCall, Knickman, and Bauer, 1991).

One LTC financing proposal would create a universal, comprehensive public LTC insurance program, with strong similarities to programs in some Canadian provinces (Harrington et al., 1991). Although an increasing number of studies have examined the hospital and physician sectors of the Canadian health care system (Barer, Welch, and Antioch, 1991; Evans, Barer, and Hertzman, 1991; Evans et al., 1989; Fuchs and Hahn, 1990; Krasny and Ferrier, 1991; Lomas et al., 1989; Neuschler, 1990; Neuschler, 1991; Newhouse, Anderson, and Roos, 1988; Waldo and Sonnefeld, 1991) in order to draw lessons for the reform of the U.S. system, only one study has examined Canadian LTC from that perspective (Kane and Kane, 1985a; 1985b). After looking at the LTC systems in British Columbia, Manitoba, and Ontario, the latter study concluded that the comprehensive, universal, single-point of entry, publicly in-

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sured LTC programs in British Columbia and Manitoba were viable policy alternatives for the United States.

In contrast, the Ontario system, also reviewed by Kane and Kane, had neither a single-point of entry system, nor case-mix based facility payment, nor comprehensive, case-managed, province-wide community-based services (Ontario Ministry of Health, 1990, 1991).

Although the work by Kane and Kane served an important function in introducing Canadian LTC programs to a wide American audience, it presented data only up to March 1983 for some series, and older data than that for others. Moreover, because of important data limitations, it lacked key information needed to evaluate the performance of the British Columbia and Manitoba LTC systems. Specifically, the Kanes' article and book (1985a; 1985b) did not provide: (1) any home support service expenditure data, except for a single figure for 1982-83 in Manitoba, which did not separate LTC and post-acute care community services; (2) any aggregate home-support use data for Manitoba, except from a 1978 sample survey; or (3) any LTC facility expenditure information for British Columbia. In addition, inconsistent definitions of use and expenditure categories of LTC services, resulting in three different LTC facility use rates for British Columbia, made important direct comparisons impossible between the provinces, let alone between the provinces and the United States.

A central concern in the extended debate over financing U.S. LTC services has been the level of public financial risk inherent in adopting one type of financing mechanism over another. In the United States, the prospect of a fully publicly in-

sured system raises the specter of runaway costs over time, in the face of greatly loosened price constraints on consumer demand. This study determines how well the two most developed publicly financed LTC programs in North America were able to contain LTC service use and expenditures during the 1980s. The experiences of the large-scale British Columbia and Manitoba natural experiments with universal, comprehensive, and public coverage of LTC services are particularly useful for the U.S. LTC financing debate for several reasons:

- **Financing model:** British Columbia and Manitoba provide a pure model of public financing of nursing home and community-based services. In both provinces, need for services, and not income or assets, determines eligibility for nursing home coverage. In 1990, the monthly nursing home resident copayment was about \$510 U.S. (in purchasing power parity adjusted dollars or \$650 Canadian), with no deductibles or cap on length of coverage. All Manitoba, and most British Columbia, clients for home support service paid no fee for these services. Note that in 1989, one Canadian dollar was worth 0.787 of a U.S. dollar, using purchasing power parity adjustments (Metnick, 1992). Although purchasing power parities are calculated for each country as a whole and not for individual provinces or States, they can help provide a rough estimate of the differences in public resources spent on LTC.
- **System maturity:** British Columbia and Manitoba have the most fully developed and mature LTC programs in Canada. Examining long-operating, multifaceted programs avoids the problem

of generalizing from demonstrations too small to be system-changing, and hence too small to indicate what a market equilibrium would look like in a new system (Kane and Kane, 1985b). Both provinces have large, single point-of-entry programs with case management of community services, gatekeeping of facility services, and case-mix-based payment of facilities. They also have highly developed systems for delivering home support service for personal care and in-home maintenance, as well as for other less frequently used LTC services. For more than 19 years in Manitoba and 15 years in British Columbia, providers, consumers, consumer advocates, case managers, and government managers have become familiar with, adapted to, and changed the functioning of a system providing public coverage of nursing home and community care services.

- **Age structure:** As a percentage of the total population, persons 65 years of age or over comprised about 12.5 percent of the total U.S. population in 1989, compared with 13 percent of the population in British Columbia, and 13.1 percent in Manitoba. The age structures within the elderly populations in British Columbia, Manitoba, and the United States were also similar (British Columbia Ministry of Finance and Corporate Relations, 1990; Statistics Canada, 1991b; U.S. Bureau of the Census, 1990).
- **Living standards:** Living standards in the two provinces and the United States are also similar, when expressed in 1989 U.S. purchasing power parity dollars. British Columbia's gross domestic product (GDP) per person, a

proxy for living standards, was only 5 percent lower than in the United States in 1989, whereas Manitoba's GDP was about 18 percent lower than the U.S. average (Lazenby and Letsch, 1990; Statistics Canada, 1991b).

- **Culture:** Residents of British Columbia and Manitoba, like residents of other predominantly English-speaking Canadian provinces, are culturally closer to the United States on average than are residents elsewhere in the developed, industrialized world.
- **Macro contexts:** During the 1980s, provincial managers attempted to contain expenditures in a context very similar to that in the United States. This context has included an erratic economy (and therefore uneven government revenues), declining Federal financial support, taxpayer hostility to tax increases (although not as vocal as in some U.S. States), a rapidly growing and increasingly politically powerful elderly population, heightened expectations on the part of consumers and providers about the type and quality of health care service that should be available, and highly organized and powerful unions. Except for the latter factor, U.S. policymakers have faced similar economic, political, and social constraints.
- **Government roles and policies:** Unlike Medicare, State managers administer Medicaid-financed nursing home programs and Medicaid- and State-only-financed community-care programs. The role of State government is much more important in LTC than in the hospital or physician sectors, and hence more similar to provincial government roles in LTC.

BACKGROUND AND COST CONTAINMENT FRAMEWORK

The British Columbia and Manitoba LTC programs have some important similarities because the managers who designed and implemented the British Columbia LTC system in 1977-78 relied heavily on the Manitoba model of LTC, which had operated since 1973 (for the nursing home program) and 1974 (for the community care program). Nevertheless, British Columbia and Manitoba program managers have acted independently of each other, although LTC managers have shared information and perspectives in interprovincial meetings. Although both Canadian provinces and U.S. States are responsible for implementing LTC programs, Federal regulations for LTC facility or community programs have been advisory in Canada, unlike the situation in the United States (Morford, 1988).

In British Columbia, most ambulatory nursing home residents live in intermediate care facilities (ICFs), while most non-ambulatory residents use extended care units (ECUs). During the 1980s, ICFs and ECUs had approximately two-thirds and one-third of all nursing home residents, respectively. The Continuing Care Division (CCD) in the British Columbia Ministry of Health subsidizes services for residents in ICFs and for clients in the community, whereas the Ministry's Hospital Programs (HP) Division subsidizes services for residents in ECUs. HP also pays for a relatively small third group of residents who reside in acute care beds and are classified as waiting for placement in a nursing facility. This analysis examines LTC use and expenditure for each of the three types of residents and for community clients.

Within Manitoba Health (Manitoba's Ministry of Health), the LTC Programs Division in the Manitoba Health Services Commission (MHSC) subsidizes residents in personal care homes (PCHs), Manitoba's nursing homes. The MHSC Urban and Rural Health Facilities Divisions subsidize people in acute care beds who have been paneled (screened and accepted for nursing home admission), a group that equaled less than 10 percent of the number of residents in PCHs. The Office of Continuing Care (OCC) within Community Health Services subsidizes LTC services for community clients. This analysis examines LTC use and expenditure for all residents in PCHs, as well as paneled patients in acute care beds, and clients receiving services in the community. For both provinces, this analysis excludes residents financed by programs for the mentally retarded or the developmentally disabled.

Cost-containment in publicly insured LTC programs begins with the creation of public budgets for services. Government managers and politicians in British Columbia and Manitoba make LTC budgetary decisions within similar overall decisionmaking and budget allocation frameworks. During the 1980s, Ministry of Health budget requests for LTC were based primarily on past utilization and expenditures, population growth, inflation, and whether or not a division or program was implementing an important initiative. While the CCD prepared budgets for community care and ICF services, and the HP prepared ECU budgets (which were often part of larger hospital budgets), both division managers worked in the Ministry's Institutional Services Division, and coordinated their budget decisions. Although Manitoba procedures were similar, there

was less coordination of community care and nursing home budget requests.

Yearly in each province, the Minister of Health submits one budget request for all Ministry of Health programs to the Treasury Board, a cabinet subcommittee (with its own staff) that makes recommendations to the entire cabinet. In addition to the factors determining the original budget request, the amount that the Treasury Board and cabinet allocate to LTC depends on several other considerations, including: (1) the health of the economy and government revenues, (2) the political priority that the Ministry of Health's expenditures have compared with other Ministries, (3) the priority that community and institutional LTC services have compared with hospital, medical, and pharmaceutical services, and (4) wage settlements. The same factors that influence the size of the approved budget also influence whether the Treasury Board or cabinet will approve supplementary budget requests, and therefore influence the amount of pressure put on program managers to contain expenditures within approved budget amounts.

DATA SOURCES AND METHODS

The British Columbia Ministry of Health provided detailed data from their automated data system on average daily numbers of nursing home residents and home support clients. Data on home support (homemaker) worker hours, as well as data on all LTC service, case management, and program management expenditures came from several data sources, including published British Columbia public accounts (British Columbia Ministry of Finance and Corporate Relations, 1978-89), Ministry of Health annual re-

ports (British Columbia Ministry of Health, 1980-89), and unpublished British Columbia government financial management reports, executive briefing books, and budget request briefing papers. All facility expenditure data for the CCD exclude outlays on mental health boarding homes as well as on homes for mentally retarded persons. (The British Columbia Ministry of Health transferred mental health boarding homes from the CCD to the Mental Health Services Division in the early 1980s.) The data on utilization and expenditure for ECU beds, and on acute care beds used by LTC program clients awaiting placement in LTC facilities, came from the Ministry of Health annual reports (British Columbia Ministry of Health, 1980-89), and from CCD and Institutional Services unpublished data. (I derived estimates of ECU cost per day from unpublished Ministry of Health data on expenditures and bed-days for the unattached ECUs, which have separate global budgets and account for 24 percent of all ECU beds.)

Manitoba facility use and expenditure data came from the MHSC annual reports (Manitoba Health Services Commission, 1981-90). Expenditure data include only outlays on resident and therapy services, and exclude adult day care and drug expenditures. Because the MHSC reports the resident census in PCHs as of March 31 of each year, this study used a 2-year moving average of number of residents, with observations consistent with the April 1 through March 31 fiscal year financial reporting time frame. Manitoba's OCC provided unpublished data on home support hours and expenditures. Data on home support hours were unavailable for 1982-83 through 1984-85.

To express expenditure data in constant dollars, I used the Consumer Price Index for Vancouver, British Columbia, and Winnipeg, Manitoba (Statistics Canada, 1991a). Although the deflated expenditure series do not provide indexes of utilization, they do provide measures of the value of resources consumed. Population statistics also came from Statistics Canada (1991b). In both provinces, public expenditure data exclude client or resident contributions. British Columbia and Manitoba employer and union organizations provided data on LTC staff compensation, whereas U.S. compensation data came from published sources (SMG Marketing Group, 1992).

In order to allow as accurate a comparison as possible between British Columbia and Manitoba LTC facility residents, and between the latter residents and those in the United States, the study included those hospital patients identified by assessors as awaiting placement in an LTC facility. British Columbia data on LTC program persons in acute care beds came from the Ministry of Health annual reports and from the HP data tapes. Manitoba data on paneled hospital patients waiting for placement in a personal care home came from the OCC and the LTC programs division.

I used available British Columbia data to determine how other long-stay patients in acute care beds might affect estimates of use of nursing home beds. Assuming that every day in excess of 30 days spent in an acute care hospital in British Columbia would have been spent in a nursing home in the United States, the elderly's nursing home use would have risen by only 2.9 percent in 1980-81 and by 6.3 percent in 1988-89.

In another effort to provide definitions of use and expenditure consistent with U.S. definitions, this study analyzed data with and without the lowest levels of facility LTC-personal care in British Columbia, and level 1 care in Manitoba. The latter care levels are equivalent to residential care facility or board and care in the United States—that is, sub-nursing home care for disabled residents requiring sheltered living, but no significant skilled nursing care. Although all care levels require care aide (nurse assistant) time, British Columbia's personal care residents require no registered nurse time, whereas Manitoba level 1 residents require only 3 minutes of daily nurse time. Care levels other than personal care or level 1 require significant registered nurse time, ranging from 22 to almost 50 minutes per resident per day, and therefore more closely correspond to the U.S. definition of nursing home care.

Although both programs provide some adult day care, home-delivered and congregate meals, and other smaller budget services, this study focuses on comparing among jurisdictions home support worker service use and outlays because the latter service dominates non-professional community care services. The analysis excludes all professional home care services (such as nursing, physical therapy, and occupational therapy) from estimates of LTC home public expenditures because reporting systems make it impossible to determine how much professional home care went to LTC as opposed to post-hospital care.

Both provincial LTC programs serve the non-elderly as well as the elderly, and some statistics reflect use by both age groups. However, because the elderly account for most LTC utilization and expen-

diture, the analysis often focuses either on the 65 years of age or over, or the 75 years of age or over population groups.

NURSING HOME COST CONTAINMENT

Background Information

British Columbia has a five-level, and Manitoba has a four-level, case-mix-based nursing home provider payment system, in which LTC assessors determine care levels for each resident. British Columbia's PC is the lowest care level, intermediate care 1, 2, and 3 are increasingly higher levels, and extended care is the highest level in ICFs, and is equivalent to care levels in ECUs. Manitoba's care levels rise from levels 1 to 4. As resident disability increases, so do both assessed care levels and funding for direct care and some non-direct care staff time. In the United States, a growing minority of Medicaid programs also have case-mix-based nursing home payment systems with a wide variety of methods to determine care levels and provider payment rates (Fries, 1992; Weissert and Musliner, 1992).

In 1990, British Columbia's LTC program required nursing home residents to pay a copayment of \$512 (\$650 Canadian), and the Manitoba program required virtually identical amounts. Copayments were set at 85 percent of the lowest guaranteed income level for the elderly, which was virtually the same in both provinces. In British Columbia only, about 40 percent of residents in for-profit facilities paid an additional "superior room" charge of between \$3 and \$9 (Canadian) per day. Government programs paid for the remainder of costs for more than 95 percent of nursing home residents in British Columbia, and close to 100 percent in Manitoba. In

British Columbia, the small minority of residents who were completely private-pay lived in either all-private nursing homes or in separate and physically distinct wards adjacent to publicly subsidized nursing homes.

In the United States, Medicaid pays for people requiring nursing home care without sufficient income and assets to purchase that care. Excluding a person's house, the Medicaid deductible includes almost all of a single person's assets, and the copayment equals all of the resident's income, except for \$30 per month (Carpenter, 1988). In 1985, Medicaid and other government programs paid for about 54 percent of bed-days (National Center For Health Statistics, 1989), or a much smaller proportion than the public programs in the two provinces.

In British Columbia, for-profit firms own about 25 percent of all LTC facility beds funded by the CCD and HP. In Manitoba, proprietary firms own 28 percent of PCH beds. In the United States, private ownership of nursing homes is much higher: In 1985, proprietary facilities contained 69 percent of all nursing home beds (National Center for Health Statistics, 1989).

Nursing Home Utilization Performance

From 1980 to 1989 publicly financed LTC facility beds increased by 18 percent in British Columbia, to 24,530 beds, and by 9 percent in Manitoba, to 8,918 beds. After 1983, the growth of LTC facility beds in use virtually ended in both provinces (Figures 1 and 2).

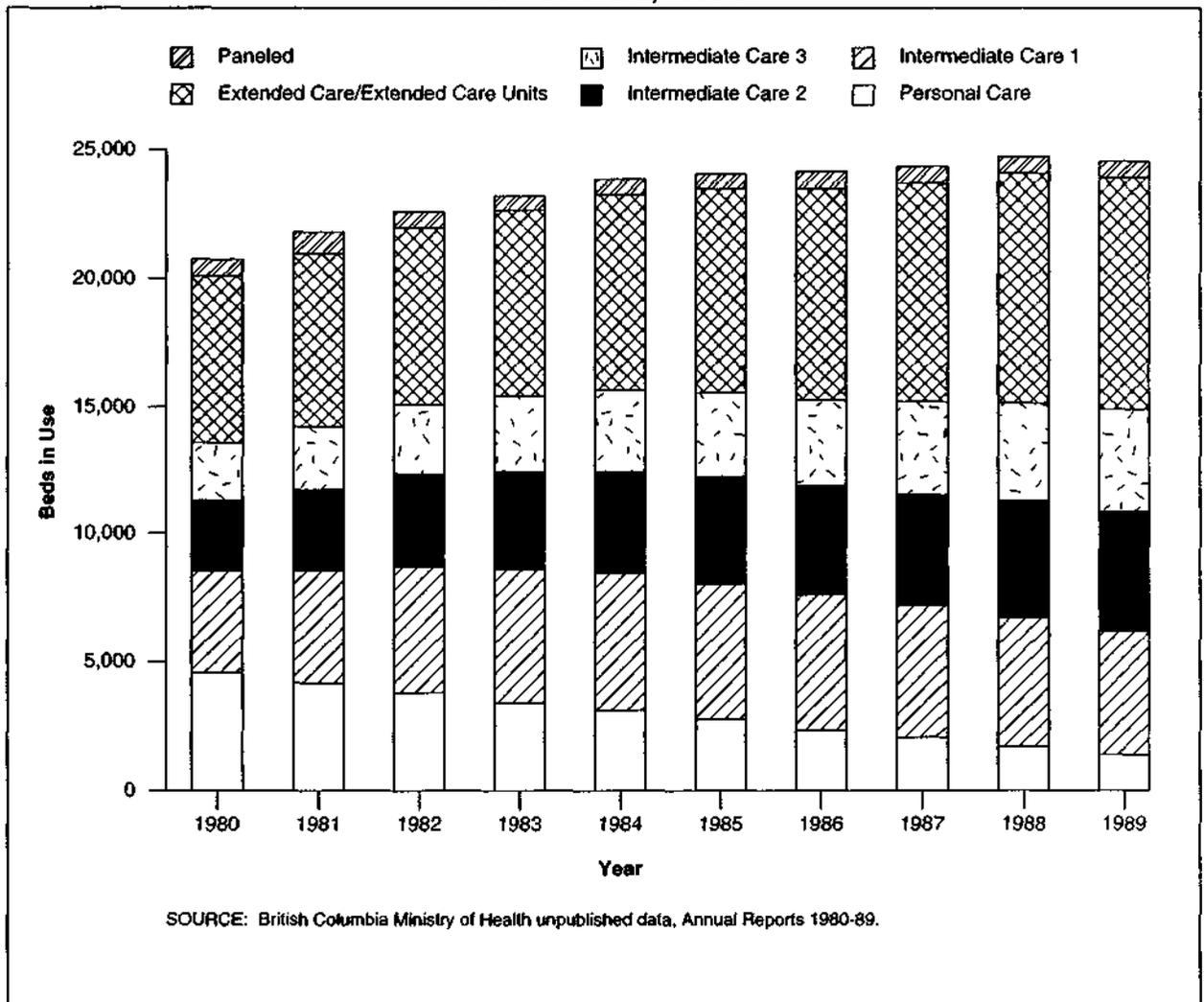
Note that I discuss only beds in use, which have been very close to beds available because of occupancy rates that were 97 percent or higher during this period. Because the 75 years of age or over

group accounted for 80 and 84 percent of LTC facility users in British Columbia and Manitoba, respectively, in 1989-90 (little changed from 1980-81), the analysis focuses on this group's rate of bed use, defined as the number of people 75 years of age or over in publicly financed LTC facilities per 1,000 persons 75 years of age or over in the population.

After remaining almost constant until 1983-84, British Columbia use rates

for the 75 years of age or over group for all types of beds fell steadily from 148 to 122 per 1,000 from 1983 to 1989. Manitoba use rates declined from 143 to 123 per 1,000 from 1982 to 1989 (Figure 3). Including only nursing home-level beds (that is, excluding the PC level 1 or residential care-level beds), use rates for the 75 years of age or over group peaked in 1984-85 in both provinces, and then fell from 128 to 115 per 1,000 in British Colum-

Figure 1
Publicly Subsidized Long-Term Care Beds in Use, by Level of Care:
British Columbia, 1980-89



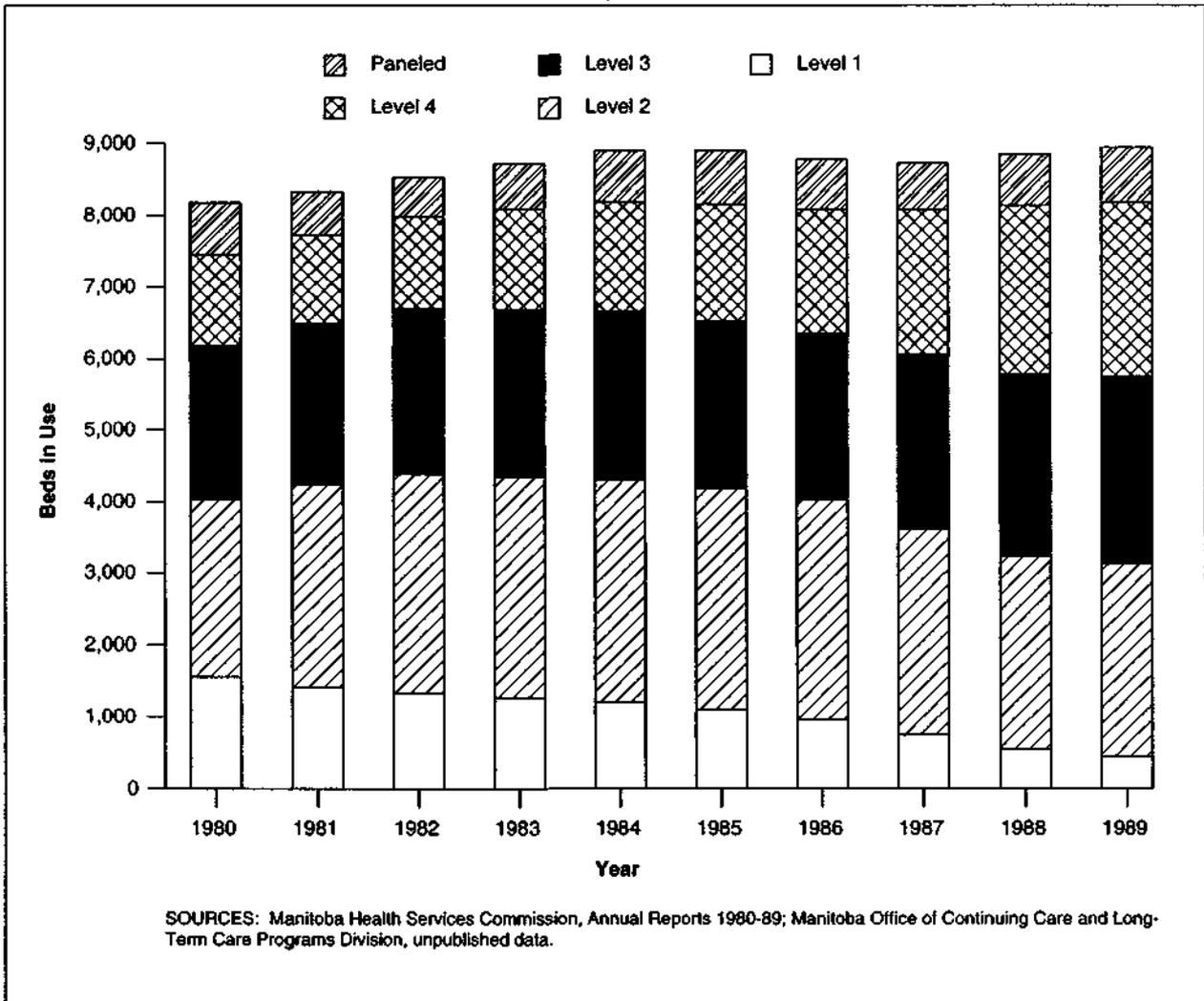
bia, and from 122 to 117 per 1,000 in Manitoba.

Average care levels rose substantially in both provinces (Figures 1 and 2). The number of British Columbia and Manitoba residents grew at the highest care levels (intermediate care 3 and extended care in British Columbia, and levels 3 and 4 in Manitoba), whereas the number of residents fell sharply at the lowest care levels (PC in British Columbia and level 1

care in Manitoba). Since 1984, bed use also has fallen at the next lowest care levels (intermediate care 1 in British Columbia and level 2 in Manitoba).

Although the rapid rate of population growth among the 75 years of age or over group (48 percent in British Columbia, and 30 percent in Manitoba during the 1980s) created pressure to expand the number of beds available for use, it also caused the rising average care levels. As

Figure 2
Publicly Subsidized Long-Term Care Beds in Use, by Level of Care:
Manitoba, 1980-89

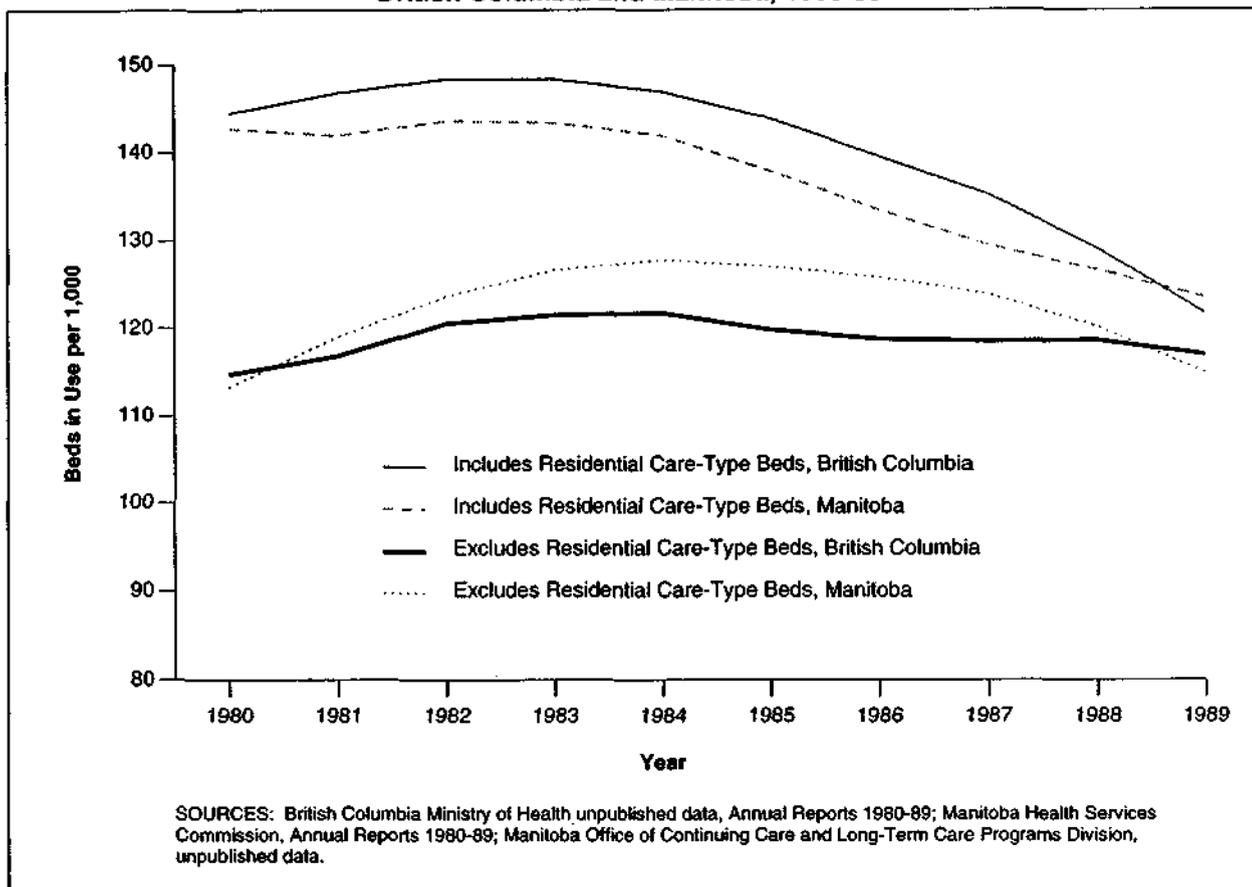


population grew faster than beds, managers virtually ended entry at the board and care level, and cut back on entry at the next highest level of care (intermediate care 1 and level 2). As discussed later, this was part of a policy of using community care to reduce the need for institutional services. Both provinces moved in practice towards the U.S. definition of nursing home care, which includes only those who need daily professional nurse care or supervision.

The latter part of the 1980s saw the growth of LTC facilities in British Columbia providing privately paid-for care, in part a reaction to the drop in publicly fi-

nanced LTC facility beds at the lowest levels. Based on estimates of private-pay bed capacity, occupancy, and levels of care provided by the Ministry of Health and industry sources, the use rate of all British Columbia nursing home level beds would increase by only about 4 percent if private-pay beds were included. There were very few completely private-pay beds in Manitoba at the nursing home level. Note that data on these private-pay beds are much spottier than for the publicly subsidized ones. According to the British Columbia Ministry of Health, in April 1990 there were 2,600 licensed private-pay personal care, intermediate

Figure 3
Rate of Use of Publicly Subsidized Long-Term Care Beds for Persons 75 Years of Age or Over:
British Columbia and Manitoba, 1980-89



care, and extended care level beds in British Columbia. However, nursing home level beds likely accounted for at most one-half of all licensed beds, and many licensed beds were not filled (especially in some of the newer, larger facilities). If the occupancy rate for all private-pay beds were 80 percent, nursing home-level beds in use would rise by 4 percent.

Similar to the trend found in British Columbia and Manitoba since 1984-85, U.S. nursing home use rates per 1,000 persons 75 years of age or over dropped slightly during the period 1977-85, from 99 to 96 per thousand (National Center For Health Statistics, 1989). From 1980-89, U.S. nursing home bed stock also dropped, from 135 to 127 per 1,000 persons 75 years of age or over (Harrington et al., 1992). Moreover, the United States has had a similar trend toward a heavier care case mix. In 1985, residents in U.S. LTC facilities were more frail than were residents in 1977 (National Center For Health Statistics, 1989). Moreover in 1986, nursing home residents were in worse medical condition in high-Medicare homes, and in worse functional condition in "traditional" nursing homes, than in 1982 (Shaughnessy and Kramer, 1990).

Although nursing home institutionalization rates were between 22-26 percent higher in British Columbia and Manitoba, respectively, in 1989 than for the entire United States in 1985, U.S. national averages mask widespread variations in use rates among States. Using State-level estimates of bed capacity and occupancy rates for 1988, and the percent of total U.S. nursing home residents in 1985 that were 75 years of age or over (Harrington et al., 1992; National Center For Health Statistics, 1989; U.S. Bureau of the Census, 1990), nine States had nursing home use

rates equal to, or above, those in British Columbia and Manitoba, including a block of six States near or bordering Manitoba—Minnesota, North Dakota, South Dakota, Nebraska, Iowa, and Wisconsin.

Nursing Home Expenditure Performance

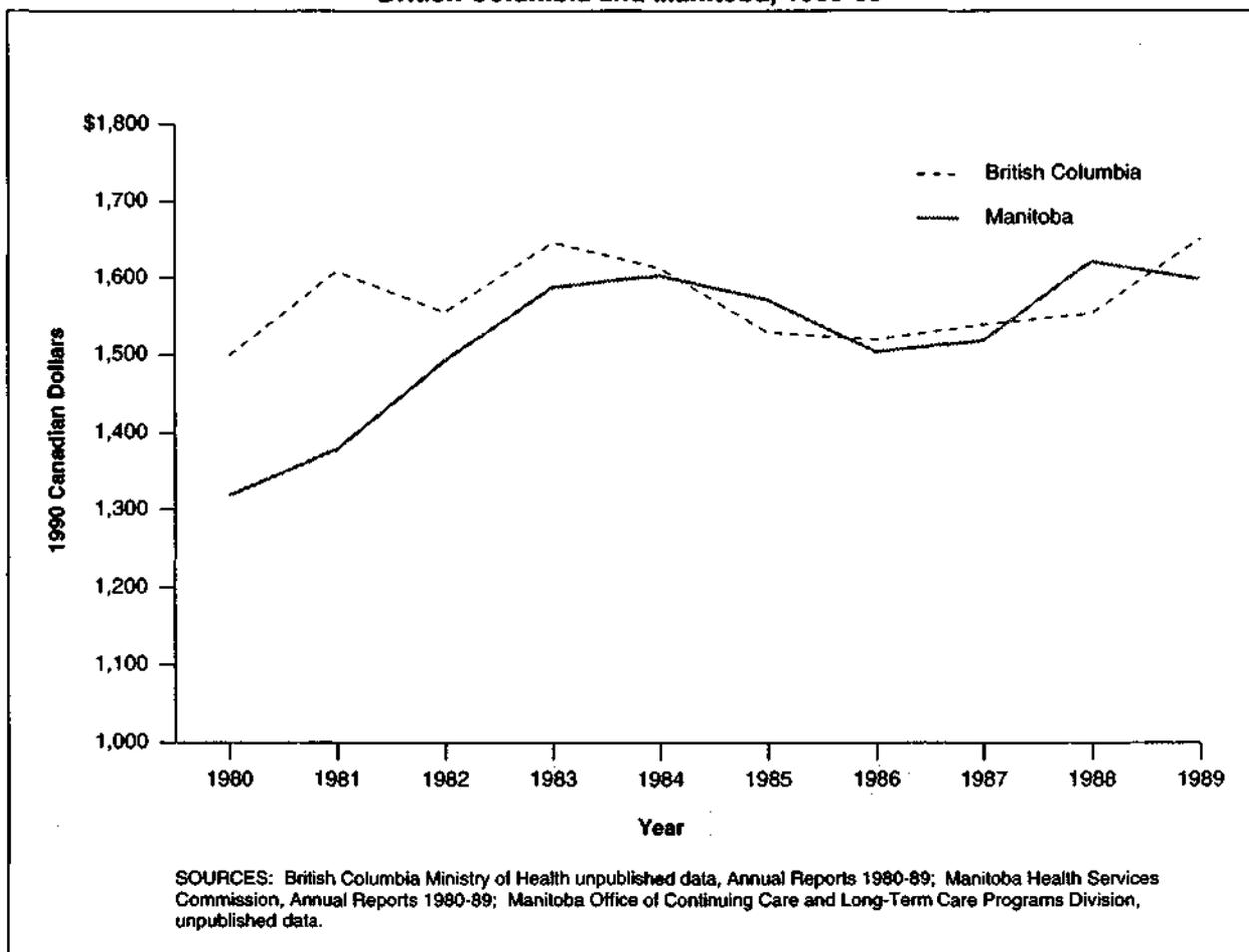
From 1980 to 1989, constant dollar public LTC facility expenditure per person 75 years of age or over in the population rose by only 3 percent in British Columbia, and by 10 percent in Manitoba (Figure 4). Of course, not deflated for population growth, real public spending on LTC facilities increased much more rapidly, rising by 53 percent in British Columbia and by 44 percent in Manitoba. During the decade, real public LTC facility expenditure levels, like bed-use levels, were remarkably similar for the two provinces, and in most years the provinces spent almost identical amounts of public funds per person 75 years of age or over.

In order to compare the rate of growth of public expenditure for nursing home-level services between the provinces and the United States, I excluded Canadian public expenditure on residential care-equivalent beds, Medicaid expenditure on ICFs for the Mentally Retarded (ICFs/MR) (Reilly, Clauser, and Baugh, 1990; Lazenby, 1991), and Medicare expenditure on post-hospital skilled nursing facility care. Growth was similar in British Columbia, Manitoba, and the United States: Real public expenditure on nursing homes per capita 75 years of age or over rose by 8 percent in British Columbia and by 14 percent in Manitoba, compared with 3 percent for Medicaid and the Department of Veterans Affairs (VA) combined. Undeflated for population growth, Medicaid-VA expenditures rose by 32 percent from 1980 to 1989.

In 1989, the level of public expenditures for nursing home services in the two Canadian provinces was much higher than in the United States. Expressed in 1990 dollars, public expenditures on nursing home care per person 65 years of age or over in the population equaled \$1,270 (\$1,613 Canadian) in British Columbia and \$1,245 (\$1,582 Canadian) in Manitoba, compared with \$550 for Medicaid and VA outlays combined. Total public and pri-

vate nursing homes expenditures were also higher in the two provinces. As a percent of GDP, British Columbia nursing home expenditures came to 1.10 percent of GDP in 1989, compared with 1.25 percent of GDP in Manitoba, and only 0.84 percent of GDP in the United States. (Compared with Manitoba, the British Columbia figures are closer to those in the United States because the GDP per person is higher than in Manitoba.)

Figure 4
Real Public Expenditure on Long-Term Care Beds, per Person 65 Years of Age or Over:
British Columbia and Manitoba, 1980-89



Nursing Home Cost-Containment Measures

During the 1980s, provincial managers generally kept expenditures close to budgeted levels through strict control of bed capacity, ongoing gatekeeping and case management, restrained payment rate increases, and increases in the copayment level.

Capacity Control

Managers firmly contained the growth of publicly subsidized beds through their control of decisions on creating, upgrading, replacing, and expanding non-profit facilities, and through control over expansion of bed capacity by for-profit facilities. Several factors influenced these decisions, including measurable need criteria (such as beds per 1,000 elderly in the population), the political influence of legislators or constituents in a parliamentary riding, and the quality of care reputation of the applying groups. Because requests for new beds appear to have greatly exceeded the number of new beds authorized, managers had to withstand intense pressure for bed expansion. In the United States, methods of capacity control vary substantially, ranging from no control at all in some States to strict moratoria on new bed construction in others (Grant, Harrington, and Preston, 1991). In British Columbia and Manitoba, not-for-profit facilities have been more dependent on public managers for financing capital expansion and improvement than have either proprietary facilities in the two provinces, or all types of facilities in the United States. This gives Canadian managers even greater control over capacity than in the United States.

Gatekeeping and Case Management

Managers used gatekeeping of nursing home beds and case management of community services to complement their control over bed supply, as case managers (and in Manitoba panels of professionals) had to evaluate and authorize service for each person applying for nursing home entry. A concerted effort to use home support services more efficiently in British Columbia, and to increase home support service hours in Manitoba, assisted this process of controlling beds in use, as did the increasing knowledge of case managers, caregivers, and providers about what could be done to keep disabled elderly persons in the community. While average wait-list times are unknown, waits for a bed in the facility of choice of individual clients varied from no wait at all to more than 2 years, in part according to the perceived quality of the home and geographic location.

The British Columbia and Manitoba gatekeeping procedures are similar to those in some States that have preadmission screening programs linked to or integrated with home support service programs, permitting case managers to substitute home support for nursing home services (Polich and Iversen, 1987). However, the scope of gatekeeping authority is clearly different. Provincial programs have gatekeepers for all disabled persons requesting a subsidized bed (or almost all nursing home applicants in both provinces), while U.S. State pre-admission screening programs usually apply only to disabled persons on Medicaid, or those who would spend down to Medicaid in a short period of time. This permits provincial managers more control than their U.S. counterparts over the allo-

cation of beds according to need-based criteria.

Payment Rate Levels

Once beds in use are determined, public expenditures depend on care levels, the payment rate for each care level, and resident copayments per bed in use. Although LTC facility use increased in British Columbia and Manitoba from 1980 to 1989, most of the increase in public expenditure for LTC facilities was because of an increase in the real public cost per bed used, which rose by 29 percent and 33 percent in British Columbia and Manitoba, respectively. Three factors can drive up the real cost per bed in these two case-mix based payment systems: staffing guidelines (hours of different types of staff time for each resident at each level of care), average care levels (distribution of residents by assessed care level), and real wages and benefits per employee.

- **Staffing guidelines:** Because Ministry of Health managers kept staffing guidelines mostly unchanged for each level of care, changes in guidelines had little impact on real expenditure change.
- **Distribution of residents by assessed level of care:** Although it is impossible with available data to determine precisely the separate contribution of increased care levels and compensation on expenditures, the substantial impact of rising care levels on staff levels and cost is unambiguous. For example, from 1980 to 1989, increased average care levels in British Columbia's facilities would have caused an 83-percent increase in registered nurse (RN) time, and a 17-percent increase in care aide time per bed, assuming staffing at 100 percent of guidelines. Similarly, in-

creased Manitoba care levels would have increased PCH RN time by 27 percent, care aide time by 18 percent, and licensed practical nurse (LPN) time by 22 percent. Overall, Manitoba personal care home RN, LPN, and care aide hours per resident per day would have risen from 2.37 to 2.85 hours, or by 20 percent.

- **Compensation:** Although nursing home employer associations bargain with LTC and hospital worker unions, the Ministry of Health is always a powerful, if at times indirect, participant in the negotiations, because the government has to agree to pay facilities for any wage settlement increases. Although the precise impact of changes in real wages and benefits on public expenditures is also unclear, overall real compensation for nursing home staff rose in both provinces. In British Columbia, benefit costs increased for all workers, while from 1982-90 real wages rose from 4 to 12 percent for unionized and non-unionized workers in the non-profit and for-profit sector paid by the CCD. In Manitoba's not-for-profit PCH facilities, real wages of unionized RNs and LPNs rose from 14 to 21 percent, depending on job classification. Although care aide real wages were unchanged, benefit packages were enriched. Overall compensation increases were because of: (1) increases in compensation for unionized personnel; (2) increases in the proportion of care aides and nurses who received higher wages and benefits by joining unions (by 1990, almost 90 percent of all British Columbia and Manitoba LTC facility workers were unionized); and (3) disproportionate increases in compensation for non-union

workers. The latter increases were attempts to ease the hiring, retention, and unionization problems faced by non-union facility operators.

In contrast to their control over bed-growth, LTC managers in British Columbia and Manitoba had little control over their real compensation costs per worker. In both provinces, hospital sector negotiations shaped both LTC facility collective bargaining agreements and compensation for non-union workers. In British Columbia, each new hospital sector agreement forced operators in the LTC sector, who were subject to different collective bargaining agreements, to match increases to continue to attract qualified workers. In Manitoba, hospital managers dominated non-profit nursing home operators in their common collective bargaining agreements with hospital and PCH workers, who have common job classifications. These agreements in turn greatly influenced union agreements in for-profit facilities and compensation levels for non-union workers.

Compensation of RNs, LPNs, and nursing home care aides is significantly higher in both provinces than in the United States. Most provincial health care workers are organized into health care unions that are among the largest and most economically and politically powerful in each province. This contrasts with the relatively low level of unionization among U.S. health care workers and correspondingly smaller economic muscle of the U.S. health care unions. Compensation differences are especially great between British Columbia and the United States. In 1990, average hourly British Columbia care aide wages were about \$10 (\$12.75 Canadian), far higher than the

\$5.77 average U.S. nurse aide wage in 1991 (SMG Marketing Group, 1992).

Copayment Levels

The increase in daily copayments by residents of facilities in both provinces played a role in restraining increases in public expenditures by reducing the public share of cost per bed in use. From 1980 to 1989, the real daily resident copayment rose by almost one-half in both provinces. The copayment for nursing home care increased from 75 to 85 percent of the minimum guaranteed income for residents, while the real value of that minimum income also grew. Without these real copayment increases, real public outlays per person 75 years of age or over would have risen by 13 percent (versus 3 percent) in British Columbia, and by 20 percent (versus 10 percent) in Manitoba.

Quality of Care and Consumer Satisfaction

There are no direct measures of quality of nursing home care in the two provinces. Nevertheless, anecdotal evidence strongly suggests that although there is a wide range of quality of care and quality of life in British Columbia and Manitoba nursing homes, quality of care problems are not as severe on average in the two provinces as they have been documented to be in the United States (Institute of Medicine, 1986). In both provinces, LTC assessors regularly evaluate the condition of all residents in nursing homes for payment purposes, acting in the semi-formal role of monitors of quality of care. The leadership of the Manitoba LTC programs division and of the British Columbia not-for-profit nursing home association took active roles in defining qual-

ity of care problems in specific homes and worked with nursing homes to overcome these problems. They also attempted to more generally improve patient care practices.

In both provinces, high staff compensation (relative to the United States), and near parity in compensation between the nursing home and hospital sectors appear to have led to relatively low rates of nursing home employee and administrator turnover. Increasingly, these factors also permitted British Columbia facilities to selectively hire only workers who had undergone the intensive nurse aide program offered in community colleges. Very high nursing home staff turnover rates (SMG Marketing Group, 1992), and low levels of education and training can have a negative effect on quality of care and life in U.S. nursing homes (Garibaldi, Brodine, and Matsumiya, 1981; Handschu, 1973; Stryker, 1981; Waxman, Carner, and Berkenstock, 1984). Overall, there appears to be a reasonably high level of consumer satisfaction with the care provided in nursing homes in the two provinces, and a very high level of political support across age groups for public insurance for nursing home care.

HOME SUPPORT SERVICES COST CONTAINMENT

Background

In British Columbia in 1990, about 80 percent of LTC program home support service clients made no copayments because their income fell below a minimum level determined by a formula that includes some income and excludes other types of income. The remaining 20 percent of clients paid an often small,

income-related copayment per home support visit, up to a maximum of the entire cost of the visit. Privately purchased hours accounted for less than 10 percent of all home support service hours provided by home support service agencies. The LTC program also subsidizes adult day care, in-home and congregate meals, and group homes for some younger physically disabled. Manitoba's OCC clients made no copayments for home support services, whereas private agencies provided relatively little privately purchased home support services. The LTC programs division subsidizes adult day care and respite care.

The CCD in British Columbia manages the LTC program, which is administered at the local level by 16 health units (that are directly controlled by the Ministry of Health), 4 municipal health departments, and 1 regional district. The 21 LTC program jurisdictions vary widely in population and geographic size. LTC program case managers assess and assign care levels to community clients, and authorize the purchase of home support services from proprietary and not-for-profit home support agencies (HSAs) that hire and supervise home support workers. Case managers also monitor the delivery of services. In addition, they act as LTC facility gatekeepers and assess nursing home resident care levels.

The OCC in Manitoba Health has overall financial responsibility for the continuing care program, although program services are delivered through 10 regional health offices and 5 health centers that also provide various other community health and social services. Case coordinators (case managers) assess clients and authorize services, whereas resource coordinators directly hire home support

workers and home care attendants who are government employees.

In the United States, the 50 States have a wide range of community-based LTC programs. States often choose to use a combination of Medicaid, Medicaid waiver, other Federal funds, and State-only funds to create community LTC programs. Because funding streams often are not unified, one State can have several administratively separate community care programs. In some States, programs serve clients with a range of disabilities and incomes, with State-only funds used for clients who may not be disabled or poor enough to meet Federal program requirements. Programs in other States serve only those who are most frail and have the lowest income (Justice et al., 1988; Lipson, Donohoe, and Thomas, 1988). Although organizational arrangements differ, State programs also use case-managers to determine eligibility and allocate services.

Home Support Service Utilization Performance

Four indicators are useful in analyzing trends in home support service use: amount of use (hours), amount of use per capita 65 years of age or over, rate of use (number of persons per 1,000 who use the service), and intensity of service (number of hours per person using the service). The population of those 65 years of age or over (rather than 75 years of age or over) is used to produce per capita estimates because the group 65-74 years of age accounts for a substantial share of total home support hours (about 22 percent in British Columbia in 1990). Moreover, in British Columbia, where age-specific data are available, clients 65 years of age or

over used about 81 percent of all home support hours in 1988-90, and accounted for 84-86 percent of all users between 1980-81 and 1989-90. Because it is reasonable to assume that the elderly's share of the total home support hours was fairly constant throughout the period, the estimates in Figure 5 would have to be decreased by about one-fifth to obtain number of home-support hours used per person 65 years of age or over.

The two provinces had drastically different rates of growth of home support hours. During the periods 1980-81 and 1990-91, home support hours increased by 18 percent in British Columbia compared with 87 percent in Manitoba. As a result, home support hours per person 65 years of age or over in the population dropped by 18 percent in British Columbia, and rose by 55 percent in Manitoba. However, the rapid growth in use of Manitoba's home support services ended in 1986-87 and some convergence in home support use per capita was evident by the end of the decade (Figure 5). In British Columbia, because the proportion of elderly receiving service grew whereas per capita use declined, hours per user of service dropped by about 40 percent during 1980-81 to 1990-91. Although the Manitoba data are too limited to generate similar precise estimates, it appears that both the proportion of elderly receiving service, and hours of service per user grew during this period.

Home Support Service Expenditure Performance

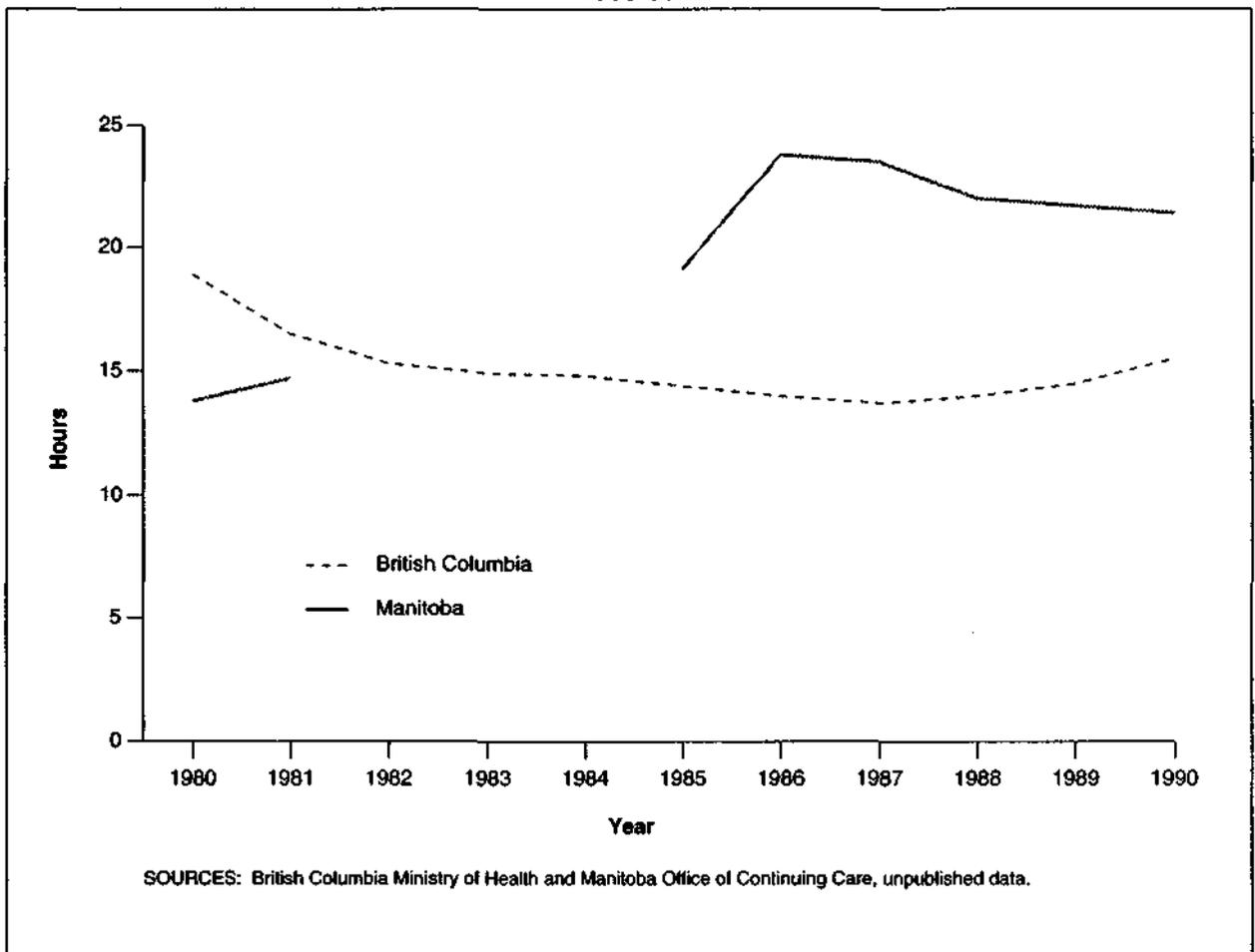
In contrast to similar trends in the nursing home sector, the two provinces had very different trends in public spending on home support and adult day care serv-

ices. From 1980 to 1990, British Columbia's real public spending on home support services per person 65 years of age or over increased by only 5 percent, whereas Manitoba's real spending per person 65 years of age or over rose by 142 percent. As Figure 6 shows, British Columbia's per-capita spending actually fell from 1981 to 1986, whereas Manitoba's per capita spending increased. Per capita home support service expenditure from 1986 to 1990 has risen relatively rapidly in both provinces and even faster in British

Columbia than in Manitoba. Total real spending on home support and adult day care services, unadjusted for population growth, increased by 51 percent in British Columbia, and by 193 percent in Manitoba.

It is difficult to obtain exactly comparable measures of public expenditures on home support services for the two provinces. Because Manitoba's home support service field managers and staff can work for other programs at the same time, there are no separate budget line items

Figure 5
Home Support Hours, per Person 65 Years of Age or Over: British Columbia and Manitoba, 1980-90

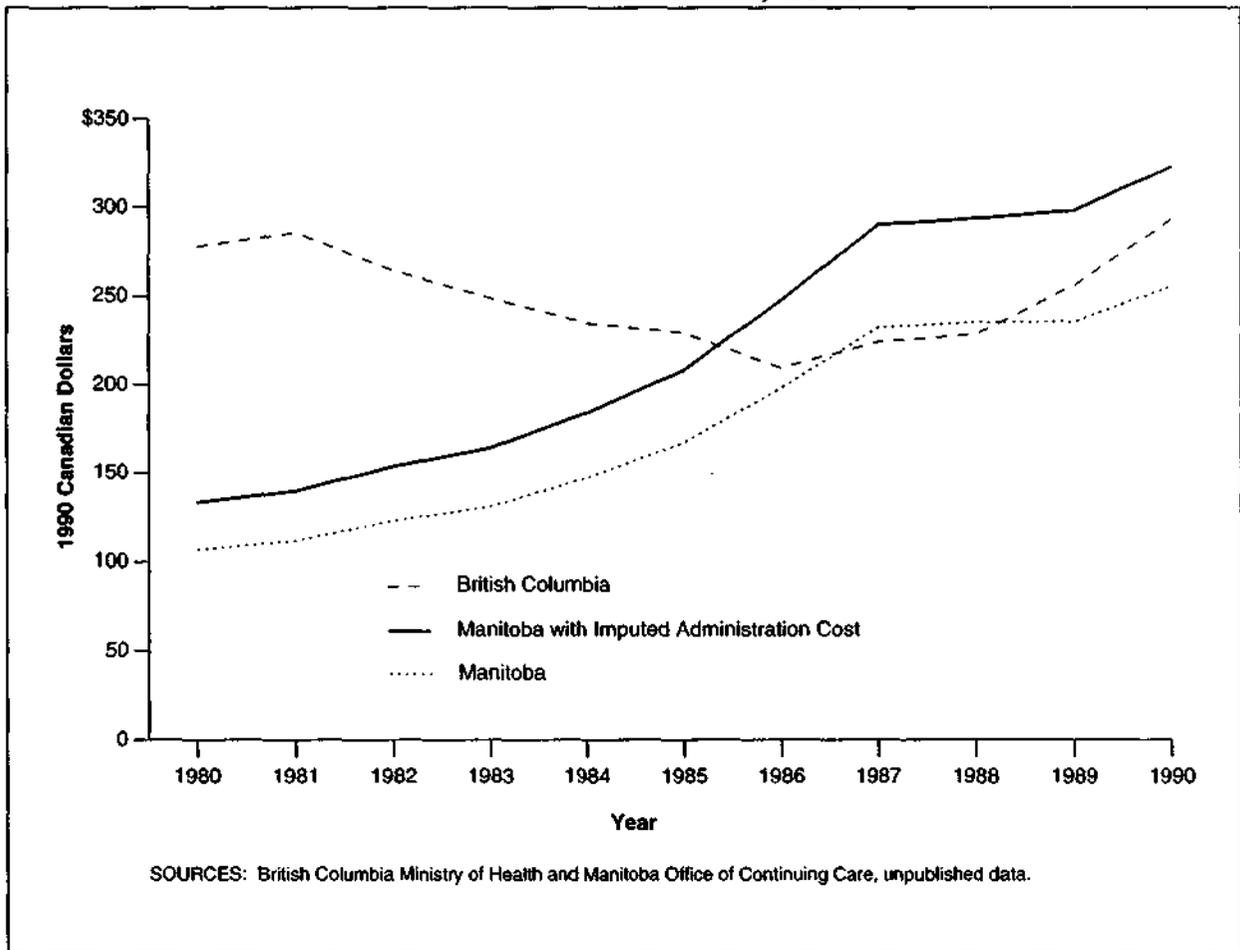


for home support service case management costs, worker hiring, training, and supervision costs, and certain administration costs. Based on rough estimates of the latter expenditures supplied by OCC managers, Figure 6 includes two series for Manitoba public expenditures on home support and adult day care services, one with and one without an imputed 25-percent cost for Manitoba home support overhead costs. While British Columbia spending on home support and adult day care services per capita 65 years

of age or over was more than double such spending in Manitoba in 1980-81, Manitoba's per capita expenditures were about 10-percent higher than in British Columbia by 1990-91, or \$254 (\$323 Canadian) in Manitoba compared with \$230 (\$293 Canadian) in British Columbia.

In 1990-91, British Columbia public expenditures on community LTC services accounted for 0.15 of 1 percent of GDP, compared with 0.19 of 1 percent in Manitoba, while private purchases of home support services from agencies raised

Figure 6
Real Public Expenditure on Home Support Services, per Person 65 Years of Age or Over:
British Columbia and Manitoba, 1980-90



the totals only slightly in British Columbia, and by a negligible amount in Manitoba. U.S. public expenditures on home support services came to 0.06 of 1 percent of GDP in 1985-86 (Lipson, Donohoe, and Thomas, 1988).

Home Support Service Cost-Containment Measures and Cost Inflation

The differences in home support expenditure and utilization experiences in the two provinces are highlighted by the fact that British Columbia and Manitoba had virtually identical rates of use of LTC facilities during the analysis period. This is analytically equivalent to controlling for differences in LTC facility use in comparing home support service experiences in the two provinces.

Control Over Home Support Service Hours

The two different approaches to budgeting and managing home support service hours and expenditures certainly contributed heavily to the contrasting performances of the two home support programs. In British Columbia, Ministry managers annually allocated a fixed number of hours to the 21 LTC program jurisdictions, as well as fixed budgets for case management and other overhead expenditures. Each jurisdiction was expected to meet its budgeted amount. The Ministry of Health has a computerized management information system that enables it to monitor the ongoing performance of the health units, and intervene as needed.

In Manitoba, OCC managers allocated dollar budgets to each regional office and health center. However, during this period

governments felt that, because the continuing care program was a popular entitlement program and an important source of jobs in rural areas, they could not set fixed limits on home support service hours for each jurisdiction, or regularly reject supplementary budget requests by the jurisdictions to pay for more than budgeted home support service hours. Several management problems also reduced control over the program's use and cost, such as absence of a computerized management information system, lack of direct OCC-line authority over the regional staff that delivers the services (and therefore lack of control over expenditures for which it had authority), as well as inadequate numbers of case managers and resource coordinators (Health Advisory Network, 1990). Despite these problems, managers were able to contain the growth of per capita hours starting in 1986-87.

It should be noted that it was relatively easier for British Columbia managers to control growth of home-service use because per-capita use was much higher in British Columbia than in Manitoba at the beginning of the period (Figure 5). In the early 1980s, after deciding that home-support use was excessive and inefficient, British Columbia managers adopted a policy to significantly reduce average home support hours per user over time, especially for the least frail community clients (Halsall, 1991). On the other hand, British Columbia managers, like their Manitoba counterparts, had to contain expenditures during a period in which the numbers of severely disabled persons in the community increased as institutionalization rates fell.

Case Management

In the face of a very low or zero price for home support services, both systems used case managers to determine eligibility for service, and to allocate home support service hours. Although case management was essential to utilization control, both the British Columbia and Manitoba programs were criticized for having case loads that were too high to enable case managers to allocate services efficiently (Auditor General of British Columbia, 1989; Health Advisory Network, 1990).

Compensation

The British Columbia Ministry of Health contracts directly with the home support agencies and works closely with them in determining compensation levels. During this period, home support workers' real compensation increased substantially, accounting for an important part of the increase in total home support service expenditures. In British Columbia from 1980 to 1990, the real price per hour of home support worker service rose by 23 percent (to \$11.88 [\$15.10 Canadian], including agency overhead), accounting for almost one-half of the increase in home support service expenditure. In Manitoba, home support service workers are government employees. Real wages rose by 52 percent during the decade, with virtually all of the increase occurring from 1986 to 1990. Thus, increased hours caused the run-up in Manitoba home support service expenditures from 1980 to 1986, whereas increased compensation accounted for the rise in home support services expenditures from 1986 to 1990.

Both provinces saw widespread unionization of home care workers. In British

Columbia, the Ministry of Health agreed to pay unionized providers for substantial compensation increases due to union contracts, in part because providers wanted to reduce difficulties in recruitment and retention, and increase economic incentives for additional training (Wyatt Company, 1989). Ministry managers granted non-union providers additional resources in order to continue to attract workers and to forestall unionization. In Manitoba, a collective bargaining agreement between the government and unions covered all home care attendants as of mid-1987, the year that saw the beginning of the sharp rise in real wages and benefits. Compensation levels of unionized nursing home and hospital workers had an important effect on home support worker compensation levels, because home support programs had to compete with these other sectors for workers.

Quality of Care and Consumer Satisfaction

As is the case for nursing homes, there are no measures of quality of home support services in the two provinces. For much of the period, British Columbia home support agencies were concerned about high turnover rates and low training levels by the relatively poorly compensated home support service workers. Toward the end of the period, real compensation rose in both provinces, although there is no hard evidence of the effect of the increase on quality of care. Once again, there appears to be a good average level of consumer satisfaction on the part of clients and their caregivers in the two provinces, and very strong political support for publicly insured community care.

Substitution of Community for Institutional Services

An earlier work on British Columbia and Manitoba LTC programs found no evidence of home support services substituting for institutional care, although the authors concluded that "the presence of an alternative system of care makes feasible a policy to restrict the growth of the institutional sector" (Kane and Kane, 1985a). During the 1980s, provincial managers adopted an explicit policy of substituting community for institutional services, and there is strong, more recent evidence that they succeeded. From 1984 to 1989, the increase in British Columbia's publicly financed home support use rates for the 65 years of age or over group almost exactly equaled the decrease in use rates for publicly financed LTC facilities, as total public LTC service use rates held constant at slightly more than 140 elderly clients or residents per 1,000 persons 65 years of age or over. Although a decrease in the residential care-equivalent level of care caused much of the decline in facility use rates, the rate of use also declined for the next lowest level of facility care, which does require skilled nursing care. Thus, some substitution of community services took place for the lowest level of what would be called nursing home care in the United States. Substitution of home support for LTC facility services was also evident in Manitoba. Since 1983-84, Manitoba institutionalization rates declined, mostly at the lowest levels of care, whereas from 1980 to 1986 home support service use per capita increased sharply.

Taken together, other alternatives to public-pay beds had a relatively minor impact on the use rate of such beds. These

alternatives, including private pay beds, an increase in long stay patients (more than 30 days) in acute care hospitals, and the growth of unsubsidized home support services that home support agencies provided, likely substituted for no more than 5 subsidized beds per 1,000 persons 75 years of age or over.

Home support services outlays remained a relatively small fraction of the nursing home budget. Including program management and case management overhead costs, total British Columbia public expenditures related to community LTC equaled between 14-16 percent of public expenditures on LTC facility beds from 1983 to 1989 (the years for which data are available for all expenditure categories). The relative size of the Manitoba community-based LTC program expenditures was only a few percentage points higher than the British Columbia figures.

TOTAL UTILIZATION AND EXPENDITURES

From 1980 to 1989, total real public LTC expenditures rose by 8 percent in British Columbia per person 65 years of age or over in the population, compared with 30 percent in Manitoba. Public expenditures were unchanged in British Columbia per person 75 years of age or over in the population, compared with an increase of 17 percent in Manitoba. Not deflated for population growth, real public LTC expenditures (including assessment and program management in the two provinces, and group homes for the handicapped in British Columbia) rose by 50 percent in British Columbia compared with 55 percent in Manitoba.

It is impossible to make precise comparisons with the United States in rate of growth of total public LTC expenditure because of limitations in public expenditure data on U.S. home support and other community LTC services. Nevertheless, the rate of growth of U.S. total public LTC expenditure would likely be higher than the U.S. figures for nursing home outlays, because home support service programs have expanded relatively rapidly during the 1980s, from a fairly small base.

Although growth rates of public expenditures were similar in British Columbia and the United States, and not very different between the latter two jurisdictions and Manitoba, levels of public expenditure were substantially different between the two provinces and the United States, which is partly because of the shift of the nursing home spending burden in Canada from private to public sources. Expressed in 1990 dollars, total public expenditure on long-term care services in 1989 amounted to \$1470 (\$1,869 Canadian) in British Columbia and \$1,479 (\$1,880 Canadian) in Manitoba per person 65 years of age or over in the population, or about 2.25 times higher than a public expenditure estimate of \$655 per person 65 years of age or over in the United States.

As a percent of GDP, substantially more was spent on LTC in both provinces than in the United States. As previously indicated, in 1989 British Columbia total nursing home expenditures came to 1.10 percent of GDP, compared with about 1.25 percent in Manitoba and 0.84 percent in the United States in 1989. Moreover, it is reasonable to assume that, as a percent of GDP, the provinces also spent substantially more on home support services. This greater spending on LTC is in con-

trast to spending for the entire health care sector, which in 1987 accounted for a significantly smaller share of GDP in British Columbia (8.9 percent) and Manitoba (10 percent) than in the United States (10.9 percent).

At least three factors contribute to the differences in the levels of LTC sector outlays. Compared with the United States, British Columbia and Manitoba nursing home rates of institutionalization are higher, levels and rates of use of publicly financed home support services are greater, and compensation of RNs, LPNs, nursing home care aides and home support workers is also significantly higher. Data are not available on a fourth possible factor, staffing levels per nursing home resident, adjusted for case mix.

Although public insurance very likely led to greater use of publicly financed home support services, the connection between public insurance and higher institutionalization rates and LTC staff compensation is more tenuous. Moreover, some would argue that the higher real compensation of both facility and home support staff in British Columbia and Manitoba creates the conditions for a stable workforce with incentives to obtain training needed to provide higher quality care. That is, it is necessary to pay more to get higher quality of care, regardless of the financing mechanism.

Although public LTC insurance likely played a role in the higher LTC outlays as a percentage of GDP in the two provinces compared with the United States, the very great difference in nursing home staff compensation probably played a much larger role. Further work is needed to determine the precise contribution of each potential factor to the differences in spending on LTC as a percentage of GDP.

SUMMARY AND POLICY IMPLICATIONS

For U.S. policymakers, the British Columbia and Manitoba LTC programs are large-scale natural experiments with universal, comprehensive, and public coverage of LTC services. The results of this research have several implications for U.S. policymakers contemplating a publicly insured LTC system similar to that found in the two provinces:

- Once a universal, comprehensive, publicly financed LTC program is in full operation, policymakers and managers can control the rate of growth of both publicly financed utilization and public expenditure. Provincial LTC program managers had an excellent (British Columbia) and good (Manitoba) record in controlling the overall public LTC expenditure growth, adjusted for population growth. Meanwhile, there appeared to be a relatively high level of satisfaction with the LTC systems in both provinces.
- LTC managers effectively used a combination of policy levers, similar to those found in the United States, to control nursing home expenditures, adjusted for population growth. These levers included control over bed supply, gatekeeping of nursing home services, provision of home support alternatives to nursing homes, unchanging staffing guidelines, restrained payment rate increases, and higher resident copayments. U.S. public managers should be able to use these levers as, or more, effectively in a publicly insured system.
- Real nursing home staff compensation rose at a moderate rate during the period. The highest levels of government, and not the provincial LTC managers, made the final decisions about LTC sector compensation agreements with unions. Often hospital sector wage settlements helped determine wage settlements in the nursing home sector. In this area, the implications of the Canadian experience for the United States are mixed. U.S. program managers often do not have to negotiate with powerful unions, which reduces the chance of rapid increases in public expenditures because of compensation increases. Yet because many U.S. nursing home workers are paid far less than their Canadian counterparts, there could be much more pressure on U.S. managers to increase wages and benefits than on Canadian managers. Obviously, if LTC worker compensation rose to levels even close to those found in Canada, public expenditures would increase significantly.
- It was politically and technically feasible to tightly control home support use and cost over an extended period of time. British Columbia managers lowered home support hours per capita, and achieved essentially zero growth in real spending per capita on home support services. Yet at the same time, there was a very rapid increase in both home support hours and expenditure per capita in the Manitoba program. The comparative experience of British Columbia and Manitoba suggests that, in order to contain home support service utilization in a publicly insured LTC program, the public payer has to have the political will, information, and managerial authority to set and enforce fixed budgets of hours or dollars (or both) for the local agencies that deliver the services.
- Even in these two publicly insured programs, the nursing home sector re-

mained financially dominant within the LTC sector. However, this dominance might be weaker in a U.S. publicly insured system. Because institutionalization rates in the United States are much lower than in the two provinces, the eventual size of the home support sector relative to the institutional sector would likely be greater than it is in Canada.

- In both provinces, real compensation of home support service workers rose rapidly at the end of the period, creating strong cost pressures on public budgets. In part this was because of the initial wide gap in real compensation between nursing home workers and home support workers. In the United States, this gap is substantially less, and home support service workers are far less organized to obtain compensation increases than they are in British Columbia and especially Manitoba. Nevertheless, the absolutely and relatively low wages of home support workers would create potentially important pressures to increase public expenditures in a publicly insured U.S. system.
- In 1989, public LTC expenditures per elderly person were about 2.25 times higher in British Columbia and Manitoba than in the United States. If the United States adopted a publicly insured LTC program similar to the one in the Canadian provinces, the increase in U.S. public LTC expenditures would likely be significantly lower than 125 percent, at least initially, because staff compensation rates are substantially lower in the United States than they are in the two provinces.
- As previously indicated, the role of U.S. State government is much more important in LTC than in the hospital or physi-

cian sectors, and thus more similar to provincial government roles in LTC. Both State and provincial managers intervene heavily in the nursing home markets, using similar policy levers, while State programs have adopted such British Columbia and Manitoba community-care program policies as single-point-of-entry LTC programs, case managed services, and gatekeeping of nursing home services. For the United States, this implies that, financing aside, the transition to a publicly insured health care system similar to that in the Canadian provinces would likely be much easier in the LTC sector than in the acute care sector.

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