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Our Neighbors to the North Receive More Physician Services, Pay Less Per Service

Study of U.S./Canadian differences in use and costs of physician services

SUMMARY

From 1993 to 1995, researchers from the Urban Institute analyzed physician services provided to the elderly in the United States and Canada to determine whether cost or quantity controls (or some mixture of the two) have enabled Canada to hold the line on health care expenditures.

Based in Washington, the Urban Institute is a nonpartisan social policy and research organization.

Key Findings

Researchers found that:

- Canadians receive a higher volume of services than US elderly, but the price per service is lower, resulting in lower overall expenditures for physician services in Canada.
- Elderly Canadians receive fewer surgical procedures than their US counterparts and fewer procedures for which there is low clinical consensus on need.
- Canadian elderly receive more than four times as many home and nursing home visits as US elderly.
- The United States does not appear to spend more than Canada on physician services for the elderly in the last six months of their lives.
- The number of Canadians seeking health care services in the United States to avoid Canadian queues is insignificant.

Funding

The Robert Wood Johnson Foundation (RWJF) supported this project through a grant of $426,509.

THE PROBLEM

Beginning in the early years of the Clinton presidency, health care reform was a major policy issue. The US health care system was criticized for its lack of cost control mechanisms, heavy emphasis on specialty care, and inability to meet even the basic primary care needs of citizens without health insurance.

To determine how to provide the best possible care at the lowest cost, policymakers, clinicians, researchers, and others turned their sights to the health care delivery models of other countries. Canada's health care delivery model was of particular interest to the United States because it appeared to be successful in managing the care provided to its citizens and reining in increasing costs without diminishing patient outcomes.

It was expected that this project would provide a greater understanding of how Canada achieves its health care costs savings and what, if anything, Canadians are giving up to live within a lower health care budget.

This study was preceded by a $25,000, four-month planning grant[1], also to the Urban Institute. The purpose of the planning grant was to pilot test Canadian data using a new method for categorizing physician utilization and expenditures into categories by types of service so that US and Canadian physician services and costs could be compared accurately. Previous cross-national comparisons of health care utilization had used crude and often inaccurate categorization methods.

As part of the planning grant, the researchers met with the Canadian Health Ministries in the three largest provinces of British Columbia, Quebec, and Ontario, to assure their cooperation in obtaining physician claims data for the larger study.

THE PROJECT

The researchers obtained data on 1987 and 1992 physician claims for US elderly from the Medicare program and for Canadian elderly from the Health Ministries of Ontario, Quebec, and British Columbia. Difficulties establishing comparable data categories among the US and Canadian data resulted in delays and an extension of the grant, but eventually were overcome. Population data were used to calculate per-capita utilization among the elderly.

US-Canadian analyses of the data included:

- Comparison of the per-capita level of physician services overall and by type of service.

[1] Grant ID# 020303 from August 1, 1992 to November 30, 1992.

- Comparison of the growth in physician service expenditure, price, and volume overall and by type of service.
- Comparison of the volume of cardiovascular procedures.
- Quantification of physician services provided to Canadians in the United States.
- Comparison of the volume of services provided to patients in the last six months of life.

FINDINGS

- **Canadian elderly receive a higher volume of physician services than US elderly.** However, Canadian elderly receive fewer procedures than their American counterparts. Most physician services received by Canadian elderly are evaluation and management services (e.g., office, hospital, emergency room, home and nursing home, specialist services, and consultations). Canadian elderly receive 18 percent more physician tests than do US elderly.
- **Per-capita expenditures for physician services for Canadian elderly are lower than US expenditures because Canada pays a lower price per service.** The only service category for which Canadian expenditures are higher than US expenditures is home and nursing home visits. Canadian elderly receive more than four times as many home or nursing visits by physicians.
- **Canada appears to be carefully managing the volume of "low consensus" procedures received by the elderly.** Procedures such as cataract surgery and knee replacements are among those for which there is low consensus from clinicians regarding their need.
- **The growth rate for physician expenditures was higher in the United States than in Canada for the period from 1987 to 1992.** Volume growth—versus growth in prices of services—was the primary driver of expenditure growth in the United States. The greatest growth in volume occurred among newly emerging procedures.
- **Global budgets, with accompanying resource controls, appear to result in lower levels of cardiac service use among the elderly, particularly among the very old in Canada.** The volume of per-elderly cardiac procedures was 53 percent greater in the United States than in Canada in 1992. The inter-country volume difference was greatest for surgical procedures, which was 69 percent greater in the United States. Inter-country volume differences were greatest for the oldest age groups.
- **Despite more constraints on resources, British Columbia provided the same volume of services to the elderly during the last six months of their lives as did the United States.** In contrast, decedents (defined as elderly who died in the last six months of 1992) in Quebec received 50 percent more services during the last six months of their lives than did decedents in British Columbia, hospital visits making

up most of this difference. US decedents received about 20 percent fewer services than Quebec decedents and approximately 15 percent more services than British Columbia decedents. US survivors received the most procedures and the least evaluation and management services.

- **It appears that the requirement instituted by Ontario in 1993 that residents seek prior approval for elective services performed in the United States has significantly reduced out-of-country health care expenditures.** From 1987 to 1994, public expenditures for services provided in the United States accounted for less than 1 percent of Ontario's total health care expenditures. The majority of services provided in the United States to residents of Ontario were evaluation and management services, rather than the high-tech services that have a longer waiting time in Ontario. In addition, it appears that a substantial portion of these services were provided on a routine basis to Canadian elderly wintering in warmer climates in the United States. Therefore, it does not appear that Canada's success in containing health care costs was realized by a substantial shift in care to US settings.

Communications

A total of five papers were written. At the time of this report, however, only one had been selected for publication and one other had been submitted for publication. A full bibliography may be found at the end of this report. A detailed poster was also presented at a major conference and findings were presented to a US federal agency. The principal investigators underestimated the work required to construct databases, thus delaying data analysis and the writing of reports. No further dissemination is planned.

AFTERWARD

The Urban Institute had planned for future analyses using the data gathered from this project but currently has no funding. The two principal researchers for the project, W. Peter Welch and Diana Verrilli, are no longer at the Urban Institute.

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BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

Articles

Katz SJ, Welch WP and Verrilli D. "The Growth in Physician Services for the Elderly in the United States and Canada, 1987–1992." *Medical Care Research and Review,* 54(3): 301–320, 1997.

Latimer EA, Verrilli D and Welch WP. "Utilization of Physician Services at the End of Life: Differences between the United States and Canada." *Inquiry,* 36(1): 90–100, 1999. Abstract available online.

Welch WP, Verrilli D, Katz SJ, and Latimer E. "A Detailed Comparison of Physician Services for the Elderly in the United States and Canada." *Journal of the American Medical Association,* 275(18): 1410–1416, 1996. Abstract available online.

Sponsored Conferences

Growth of Breast and Prostate Procedures Among the Elderly in the United States and Canada (poster). Presented at the conference of the Society of General Internal Medicine, San Diego, CA, May 1995.

Presentations and Testimony

Verrilli, Diana, and W. Peter Welch. Presentation of findings to the Health Care Finance Administration, Fall 1995.