the law and do not have sufficient recognition of their right to participate fully in the legal process.

**Comment**

This is an important contribution to the growing debate about the practicalities of dealing with elder abuse. As a lawyer and a council member of *Action on Elder Abuse*, I find it difficult to explain that the law of England and Wales does not recognise any specific concept of Elder Abuse, but that the law nonetheless does provide redress and remedies which it may be appropriate upon occasion to invoke. I commend this article to all those entering the debate.

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**Research and Policy in Canada**

Geoffrey Smith


This article examines in a Canadian setting the implications of demographic change (population growth and ageing) for operating a publicly-funded health care system and investigates how prospective population changes will affect the share of total national income expended on health care over the next several decades. The authors' population projections predict that the percentage of Canadians aged 65 years and over will increase from 10.6 per cent in 1986 to 23.2 per cent in 2041. National projections for the period 1986–2041, with per capita expenses for each age-sex group held constant, indicate that percentage increases in health care and social security expenditures must exceed the percentage growth of overall population to maintain 'constant quality'. On the other hand, the required growth of educational expenditures is projected to be considerably lower than the prospective growth of the total population. However, when the effects of population ageing are isolated from the effects of overall population growth, the former are responsible for the largest share of the projected increases in government health care expenditures.

A case study analyses changes in service provision during the 1980s by Ontario hospitals that were subject to budgetary restrictions. In addition, provincial health care requirements and resource availability are projected for 1990–2010. Between 1980 and 1990, the Government
of Ontario attempted to control hospital costs by reducing the available number of beds. This was accomplished by decreasing the number of hospitalizations per capita and shortening the average duration of stay. While the aggregate number of days of stay in hospital declined by 1.8 per cent for all ages during 1980–90, the average duration of hospitalization for older persons increased. A set of seven integrated computer-based models are used to project health care requirements and resource availability in Ontario between 1990 and 2010. The models are collectively named the ‘System for Health Area Resource Planning’ (SHARP). Two of the SHARP models project health care requirements in terms of the prospective population of health care users and age-sex-specific utilization profiles. A further four models project resource availability in terms of various health personnel, e.g. physicians and registered nurses, and numbers of institutional beds. The seventh model explicitly compares projected health care requirements and available resources in order to identify future imbalances.

The projections disclose that by 2010 the requirement for long-term beds in nursing homes and other non-hospital settings will have increased by over 72 per cent, chronic and other non-acute-care beds by 69 per cent, and registered nurses by 53 per cent. While consequent shortages of these personnel and facilities are predicted, a surplus of physicians relative to prospective requirements is also forecast. On the basis of these findings, the authors examine the feasibility of possible adjustments by Ontario hospitals including further reductions of beds and various changes in work patterns. In general terms, the authors claim that their Ontario projections are indicative of the overall situation in Canada. To conclude, the need to examine critically the assumptions of the models is stressed, while the desirability of viewing health care as an integrated system is affirmed.

COMMENT

This article represents a significant contribution to the debate about the impact of demographic ageing on future health care costs. The crisis mentality evoked by claims that elderly people are progressively swamping the Canadian health care system is increasingly being questioned and challenged. It is now generally recognized that escalating health care costs are not only attributable to demographic ageing, but also to the increased levels of utilization of hospital and institutional long-term care resources by the elderly. By viewing the Ontario health care system in its entirety, the authors of the article are able to project imbalances of service requirements and resource
availability in relation to specific components of elderly health care. Treating their projections with due caution, the authors demonstrate that there are several policy options available for reducing these imbalances. The options include not only service reductions, but also increases in the availability of non-physician personnel and institutional beds, and changes in health care delivery practices.


This article describes the nursing home component of a population-based health information system (PHIS) developed in the Province of Manitoba, and provides analyses of four years’ data (1989/90–1992/93) produced by the system. The PHIS was established in 1992 to develop measures of health and socio-economic status, and to describe provision and utilization patterns of hospital, nursing home and physician resources by the population across the eight health regions in the Province. The PHIS is evaluated here as a tool for determining degrees of distributional equity in the nursing home sector throughout the Province and equality of access to nursing home beds. Advanced age (75 + years) is treated as a primary predictor of need for nursing home care and is used as the denominator for all rate calculations. Crude and age- and sex-standardized rates are developed to enable comparisons across regions and over time. Using the basic approach developed in the PHIS, the article presents regional comparisons of nursing bed ratios, admissions per 1000 elderly people, days of care per capita, mean expected length of stay for new admissions, and median length of waiting time prior to admissions. Several hospital indicators for long-stay patients are also presented. Since Winnipeg, with approximately half of the Province’s population, is classified as a single region, an aggregate of non-Winnipeg regions is also developed to compare nursing home use.

The results reveal that although 315 new nursing beds opened in Manitoba during the four-year study period, the ratio of provincial nursing home beds to the elderly population declined from 134 to 127 per 1000. However, the ratios in most regions are very close to the provincial average over the four years. Patterns of use of nursing home beds are similar to bed availability which is not surprising given high percentage occupancy rates, e.g. 98.3 per cent in 1991/92. While the age distribution of persons admitted to nursing homes remained stable over the four years, there was a trend to admit more people who
required more intensive nursing care. The stability of the mean expected length of nursing home stay across the regions during the study period (4.0–4.2 years) suggests uniform admittance policies across the Province. Notwithstanding the overall decline in the bed to population ratio, two indicators of admission rates generally exhibit downward trends in most regions of the Province; (i) median length of waiting time for admission to a nursing home; (ii) median hospital length-of-stay for persons admitted from hospital. The trends are attributed in part to the impact of 180 comprehensive Senior Support Services projects initiated in Manitoba during 1983/84 to 1993/94 and which provide assistance to seniors with the instrumental activities of daily living, e.g. meal preparation, house-cleaning and shopping. These services may therefore enable people to remain longer in their communities and delay admission into a nursing home. It is anticipated that the future addition of home care data, and further efforts to link the modules of the PHIS, will provide a more complete assessment of the care needs of elderly people.

COMMENT

In Manitoba, the planning and delivery of health services are organized within a decentralized regional framework. The population-based health information system presented in the article usefully contributes to the management of the nursing home sector, by monitoring geographical equity in both resource provision and utilization. In Manitoba, there are four possible levels of nursing home care which are based on the number of nursing hours required. The Province determines where the homes (which are either for-profit or non-profit) are constructed. Admission to the homes is regulated within a single-entry system under the provincial Continuing Care Programme whereby local staff access the need for either home care or an appropriate level of nursing care. The authors of the article convincingly argue that the generally equitable access to services, as disclosed by the data available to the information system, largely reflects the similar criteria used across the Province to assess the need for home care and nursing care. It is noteworthy that the authors plan to develop more complex indices of need which, for example, include living arrangements.

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