

Physician resource planning: ways and means

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Résumé

IL N'Y A PAS DE FAÇON SIMPLE ET GÉNÉRALEMENT RECONNUE d'estimer avec précision le nombre de médecins nécessaires pour une population donnée. Cette lacune constitue une pierre d'achoppement au moment où les associations médicales et les gouvernements provinciaux du Canada assument conjointement la responsabilité de gérer les effectifs médicaux. Dans ce numéro (page 1215), le Dr Noralou P. Roos et ses collègues se servent de l'exemple du Manitoba pour illustrer l'utilité d'une stratégie de planification des effectifs médicaux fondée sur les besoins. Dans cet éditorial, le Dr Roos décrit les questions clés auxquelles il faut répondre pour estimer les effectifs médicaux requis et passe en revue les données probantes actuelles sur les répercussions d'effectifs médicaux plus nombreux ou moins nombreux.

The National Ad Hoc Working Group on Physician Resource Planning was formed by representatives of the CMA and of the provincial and territorial medical associations to develop a national framework for physician workforce planning. In its 1995 report, the working group recommended that the provinces modify their approach to determining physician supply requirements.¹ The group suggested that standard physician-patient ratios do not take into account the fact that some services are obtained by patients outside of their home community and urged that needs-based approaches to physician resource planning be examined.

In this issue (page 1215) my colleagues and I present an attempt to estimate the numbers of generalist physicians required in different regions of Manitoba. To identify areas of surplus and deficit, we used the number of visits actually provided by physicians (that is, the actual practice workloads in various regions) and the visits actually received by residents (recognizing the fact that both patients and physicians travel). By focusing on numbers of visits, we include the great majority of services delivered by generalist physicians in both urban and rural settings. After adjustment for population characteristics (i.e., age, sex and socioeconomic indicators), our analysis suggested that there is a relative surplus of physicians in low-need areas of the province and a substantial shortage in high-need northern areas.

The current state of knowledge does not permit an unequivocal formulation of the best method for determining a population's need for physicians. Benchmarking has recently been suggested as a useful approach.² It involves identifying areas that have relatively low numbers of clinically active physicians without any apparent compromise of patient welfare. After adjustments are made for differences in age and sex across populations, this low deployment level (cited as the number of physicians per 100 000 residents) is proposed as the current best estimate of a reasonable physician workforce. If, in addition, adjustments are made for critical health and socioeconomic differences across populations, benchmarking offers a crude but potentially useful approach to physician resource planning.

In our study, if we had taken physician supply in Manitoba's healthy rural south as a benchmark, at least for Brandon and Winnipeg, we would have identified a substantially greater surplus of generalist physicians in urban areas than we report in our study. Alternatively, the higher levels of physician deployment in Quebec, Nova Scotia, Ontario and British Columbia could have been used as benchmarks for Manitoba; in this case it is likely that most areas of the province



Editorial

Éditorial

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Can Med Assoc J 1997;157:1229-30

‡ See related articles pages 1215 and 1227



would have been shown to have too few physicians. However, if the lower deployment of physicians in Saskatchewan or Alberta had been used as benchmarks, greater surpluses would have been identified. In reality, there is little evidence to suggest that higher benchmarks would be justified. Manitobans enjoy good access to physicians: 84% of the general population and 95% of the elderly population make at least 1 physician contact per year. In fact, it appears that a lower percentage of Manitobans report delays in obtaining health care services than do Canadians generally (4% v. 7%).³

Critics of needs-based approaches to physician resource planning have asked for evidence that increased supply to high-need areas would actually improve the health status of the population. This is a reasonable concern, and one that raises an equally important question: Will reducing physician resources in low-need areas threaten the health of these populations? We have little evidence that a greater-than-adequate supply of physicians results in better health. Winnipeg has the most abundant supply of physicians in the province, and low-income Winnipeg residents have the highest physician contact rate in the province. Nevertheless, residents in low-income areas also have the highest rates of hospital admissions for conditions that physicians have identified as those for which medical intervention is believed to be effective in prevention,^{4,5} early detection or treatment.^{6,7}

Others have found that access to a greater supply of physicians did not reduce hospital admission rates.⁸ We found that areas with a greater physician supply did not have lower rates of premature mortality.⁹ Much of what physicians do cannot be detected by changes in the mortality rate in the communities they serve. However, we have also found that routine physician contact does not appear to lead to improvements in quality of life.¹⁰ Thus, elderly Manitobans who had regular physician contact over a 12-year period were no more likely to age successfully — that is, to reach an advanced age, to continue to function well at home, and to remain mentally alert — than those without regular physician contact.

Despite the likelihood that, at the margin, adding or subtracting physician resources has little impact on health outcomes within a population, it makes sense in the context of capped funding to shift physician resources away from areas of relative surplus toward areas of deficit. Eyles and colleagues,¹¹ using a different approach but a similar logic, suggest that almost twice as much per capita should be spent on delivering physician services to residents in Sioux Lookout (given their poor health profile) than on typical Ontario residents. Even if high rates of contact with physicians might not lead to “better” health, it seems

reasonable to provide people in poorer health with more physician resources than people in better health. Our analyses make it clear that it is both opportune and possible for the medical associations and the provinces to recognize factors that influence a population’s need for physicians and to use this information to develop policies aimed at areas in which there is a clear shortage or surplus in the physician supply.

The Manitoba project was undertaken as part of a 5-year contract between the University of Manitoba and Manitoba Health to establish the Manitoba Centre for Health Policy and Evaluation and by a grant from the Medical Research Council of Canada (HEALNet). Dr. Roos is a Career Scientist with the National Health Research and Development Program and an Associate of the Canadian Institute for Advanced Research.

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