time faculty members. Their greater involvement in clinical care is in part a direct result of the 25% decrease in government funding for pediatric residents at the hospital.

Greenwald raises concerns about the remuneration of part-time faculty members. Pediatricians who participate in office-based teaching do so voluntarily. Their teaching stipends have been significantly enhanced by the AFP. There is an increasing demand for community-based supervision of students and residents rather than for teaching in a tertiary care hospital. I am grateful to our many dedicated part-time faculty members who participate in our medical education programs.

In summary the AFP has provided financial stability for the Department of Pediatrics at the Hospital for Sick Children. The increased service responsibilities have not deterred the maintenance of academic and teaching excellence. In fact, the faculty members' scholarly and educational contributions have steadily increased. Finally, the department has recently embarked on a series of new clinical care programs and initiatives, which could not have been implemented before the AFP. These programs are currently being evaluated for cost-effectiveness and patient outcome measures.

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## More on physician location

In the article "Do physicians locate as spatial competition models predict? Evidence from Alberta" (Can Med Assoc J 1993; 148: 1301–1307), Dr. Malcolm C. Brown analyses physicians' choice of location using a spatial competi-

tion model. The proposed model and the conclusion that "a policy to attract more physicians to rural areas by means of income subsidies is technically feasible but expensive" are presented in isolation of other factors that can affect the free market.

One of these factors is the presence of facilities such as hospitals. This factor alone can determine where most specialists choose to practise. In many cases the choice is further limited by the volume of activities required for a team of specialists such as that in neurosurgery to exist or for the coexistence of other specialties or equipment. Specialists make up about 50% of the Canadian physician population. Their freedom of choice is contingent upon such mundane factors, which also affect the location decisions of family physicians.

In the past few years remote areas in Quebec have successfully recruited physicians with an incentive program that includes an increase of 15% to 20% in relative fees, not the 132% Brown proposes. Such an unrealistic incentive paves the way to the alternatives of coercion and control.

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Brown states that attracting physicians to rural settings is uneconomic and that improvements in rural health care could be achieved by bigger, more effective ambulance systems. Further, he has found that the two large urban districts in Alberta have a relative surplus of physicians. Brown bases these assumptions on the analysis of 1990 census data on the distribution of physicians among Alberta's 19 census divisions.

Unfortunately, if these data are not appropriately corrected for actual physician activity they can be misleading. All nonspecialists are grouped together and assumed to be family physicians or general practitioners. It has been shown that this group also encompasses physicians performing activities such as administration or residency training. Hutchison and Higgins' estimated that over 30% of the nonspecialists in Edmonton were involved in such activities. A national survey by the College of Family Physicians of Canada revealed similar results: an overestimation in the number of family physicians and general practitioners.<sup>2</sup>

Since census data may overestimate the number of practising physicians and since most nonpractising physicians likely work in urban centres, many of the assumptions Brown makes are questionable.

Although financial incentives alone are unsuccessful in attracting physicians to rural settings, there is growing evidence that other types of programs can be successful. Watanabe3 showed that the rate of increase in the physician:population ratio is greatest in small towns and rural districts in Alberta, "indicating preferential movement of family physicians to rural communities over the last five years." In 1991 Alberta developed the Rural Physician Action Plan in an attempt to attract physicians to rural settings. Although it is too early for formal evaluation, this program is based on the philosophy that early exposure of medical students and residents, as well as enhanced technical skills, will attract physicians to rural settings. Other regions have had similar success with properly constructed programs in medical schools.4

Canadians who live in cities reportedly are healthier, live longer and have fewer long-term disabilities than their rural counterparts. The best redress for this situation is not the creation of bigger ambulance systems but, rather, the appropriate training and placement of physicians.

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