SPECIAL REPORT

Perspectives on rural medical care in Ontario

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The difficult challenge of providing quality medical care as close to home as possible for rural populations faces communities, physicians and their organizations, medical schools, and governments all over the world. Statistics Canada designates all communities with a population of fewer than 10 000 residents as rural.[1]

By this definition Ontario, a large province with vast rural areas, has a rural population of 2 284 688 persons (1986 census data),[2] approximately 25% of the total population of Ontario. The Small Hospital Medical Services survey (page 1589) indicates worsening shortages of rural physicians to provide emergency care, obstetrics, anesthesia, and general surgery services in the small hospitals that provide these basic essential services to large parts of Ontario.

Rural medical staffing has been examined from other viewpoints as well. A survey by the Canadian Medical Association received responses from 38 308 Canadian physicians (of 49 125 eligible mailings).[1] In total 10.2% were classified as rural.

At 6.6%, Ontario had the lowest percentage of full-time physicians in full-time rural practice. However, because of Ontario's large size and population, Ontario had 762 rural full-time licensed practising physicians. This number represents 22.2% of the 3439 total rural Canadian full-time licensed practising physicians and is second only to Quebec in terms of total numbers of practising licensed rural physicians (further analysis of Canadian Medical Association data). In Ontario, 12.3% of non-specialists were rural, while 1.9% of certified specialists were rural.

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Specialists

The number of specialists in the 80 hospitals analyzed in the Small Hospital Medical Services survey (page 1589) was low, but specialists' services are very important to the communities they serve. The most common small hospital specialists are general surgeons. Because of their modest total numbers (56), a small reduction in the number of general surgeons will have a great impact on the availability of vital surgical services at small active hospitals. Local general internists are a real asset to the hospitals they serve. It is even more difficult to get local psychiatrist services. In northern Ontario, this problem is very serious. In all of northern Ontario (not just rural areas), there are only 25 psychiatrists (1987 Physician Registry data).[3]

It is reasonable for patients to expect local general specialist services, such as general surgery, internal medicine, and psychiatry, at the larger of the small active hospitals that are not in close proximity to urban centers. Educational, recruitment, and retention factors for these specialists need to be addressed. For example, small active hospitals can encourage local specialists by providing in-hospital funded and staffed office or clinic facilities. There is still a need to train general specialists as well as subspecialty specialists.

All small hospitals can benefit from visiting specialist clinics. These provide patients with a level of expertise otherwise unavailable locally. The small hospitals often compensate the specialist for his or her travel time by providing in-hospital funded and staffed office or clinic facilities. In northern Ontario, where distances and travel times are greater, the government provides some direct reimbursement through the Northern Travel Grant Program. In most cases visiting specialty clinics are more cost efficient and convenient than having many patients travelling great distances to seek specialist care. In some circumstances, it will always be necessary to travel to tertiary care centers to receive the necessary subspecialist care.

Family physicians

Family physicians provide the bulk of medical care in rural Ontario and in the 80 small hospitals analyzed in the Small Hospital Medical Services survey. Each rural family practice setting is unique. While some practise in some communities with no local hospital, most have a local cottage hospital or small active hospital. These family physicians are heavily involved in the hospital care of patients of all kinds. This includes direct management of motor vehicle trauma, myocardial infarctions, and other serious medical problems, pediatrics,

obstetrics, orthopedics, and GP anesthesia. These services are in addition to the office practice of family medicine.

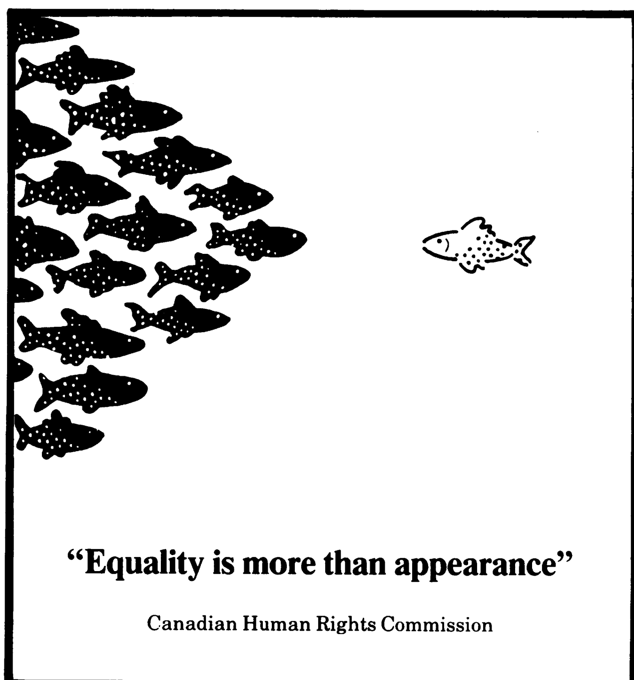
Of the total 826 local active staff family physicians in the Small Hospital Medical Services survey (page 1589), 74.2% do emergency department shifts or on-call rotations; 58.7% do deliveries; 20.5% do GP anesthesia. The survey shows a definite shortage of rural family physicians to provide these basic essential medical services now and predicts a significant worsening in the next 5 years. This pattern of practice is radically different from most urban family physicians. It involves frequent weekend duty and many interrupted nights, along with long hours on call and disrupted office hours.[4]

A great deal of continuing medical education is required to maintain these skills,[5] and it is usually not available locally. This inaccessibility involves considerable expense and time away from practice and family. Fortunately, shared coverage of patients facilitates strong local peer review of medical care by family physicians in small hospitals.

A study by Woodward and Rosser[6] found that the number of rural Ontario family physicians who did obstetrics dropped from 85% in 1983 to only 40% in 1988. Similarly almost half of the family physician respondents who were doing anesthesia have opted to discontinue this aspect of their practice. Most GP anesthetists practise in small rural hospitals. The Small Hospital Medical Services survey results (page 1589) indicate that these trends are likely to continue and that worsening shortages apply to emergency medical services and general surgery as well. These basic essential services are interdependent in small active hospitals. Loss of GP anesthesia, for example, jeopardizes the obstetrical service, eliminates general surgery, and reduces backup for the most difficult emergency cases.

Other perspectives also indicate a shortage of rural family physicians. The number of family physicians per capita is much lower in rural than in urban Ontario. The Ontario Physician Manpower Data Centre has provided data on physicians in Ontario who are active in rural population centers (1987 Physician Registry data).[7] Rural is defined as any center with a population less than 10 000. The data list 1305 rural family physicians (non-specialists).[7] Using 1986 actual census data, 25% of the Ontario population, or 2 284 688 persons, live in rural areas (including communities of up to 10 000 population),[2] giving a rural population to rural family physician ratio of 1751. Two hundred eighty of these physicians are in northern Ontario. The corresponding northern Ontario rural population is 361 351.[2]

By comparison a total of 8237 family physicians (non-specialists, according to Physician Registry data[8]) serve the total Ontario population of 9 101 694 (according to 1986 census data),[2] giving an Ontario population to family physician (non-specialist) ratio of 1105. (Physician Manpower in Ontario lists a total popu-



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lation to family physician ratio of 1124,[9] but used a projected total Ontario population of 9 261 902.[10])

The fact that many rural family physicians devote a large portion of their clinical time to hospital work[4] underlines the shortage. There is a clear need for more rural family physicians to provide office family medicine and especially for those who do emergency rotations, deliver babies, and provide GP anesthesia. Steps need to be taken to encourage interested and adequately trained family physicians not only to practise in rural areas but to practise the riskier, complex, and more lifestyle-disruptive hospital aspects of family medicine.

Not all rural family physicians need to participate in emergency work, obstetrics, or GP anesthesia. Increased numbers of office-based rural family physicians would allow those with more interest in the hospital-based portion of family practice to devote more of their time to emergency work, obstetrics, or GP anesthesia. This would, however, require removal of financial disincentives of doing this higher risk and more disruptive part of practice. Education, recruitment, and retention factors all have to be addressed.[11]

Educational incentives

Educational factors can play a positive role in both training and recruitment of physicians for rural areas. Medical students and residents who experience rural practice during training are more likely to return to rural practice.[11,12] Family medicine programs can be oriented toward rural practice and facilitate better development of such skills as obstetrics and emergency medicine within the 2-year family practice program.[13] Part of the family medicine learning can be done most usefully in rural practices, allowing the residents to experience the joys and challenges of rural practice.[13-15] Many journal articles and books describe the rewards of rural practice.

In Ontario, the change from a 1-year to 2-year prelicence requirement provides an excellent opportunity to proceed toward these goals. The resulting increased number of second-year postgraduate training slots can be used most effectively by devoting a significant portion to integrated but flexible rural family medicine programs.[11]

Almost all Ontario medical schools are expanding their family practice teaching units to include rural practice settings. In addition two new northern rural family practice training programs based in northwest and northeast Ontario are scheduled to begin in July 1991. These are positive steps to address the problems of training for northern and rural practices and will undoubtedly help recruitment and probably retention as well.

Financial incentives

Beyond education, other steps can be taken to increase the continued participation of rural family physicians in providing hospital-based services, such as emergency medicine, obstetrics, and GP anesthesia. For example, in this survey hospital Chiefs of Staff suggested that financial incentives for being on call would be very helpful in staffing the emergency department or facilitating on-call coverage for obstetrics or GP anesthesia. The fees for obstetrics in particular need to be adjusted to compensate for lifestyle and office disruption, as well as time and skill involved. Premiums for the Canadian Medical Protection Association are also considerably more expensive than for office family practice without these hospital activities.

Financial incentives, such as Ontario's Underserviced Area Program[16,17] and community-sponsored medical clinic facilities, we hope will continue to play a role in luring physicians to the smaller and more isolated communities. Some provinces have fee differentials encouraging rural practice location. A form of this encouragement has been part of the Ontario Medical Association's schedule of fees but has not been incorporated into the Ontario Health Insurance Plan's schedule of benefits. It would need to be broader in definition, anyway, to have much effect.

Some provincial governments have limited urban billing numbers and require foreign medical graduates to practise for a time in underserviced areas. At best, this flawed approach marginally increases the number of rural physicians. It is of little value in providing quality rural medical services, as it forces physicians to practise in rural areas by necessity rather than because of interest, training, and ability.

Hospitals

Adequate facilities are required in addition to adequate staff. It is difficult enough to practise obstetrics, anesthesia, and surgery in small hospitals without having to contend with outdated and outmoded equipment. Such services as ultrasound and mammography can be a great benefit to patients if provided locally and can reduce the tremendous amount of travelling by community patients to larger centers for these services. Well-maintained and well-equipped small hospitals are essential for accessible, quality rural health care.

In general, most of the hospitals with more than 40 acute care beds have general anesthesia, general surgery, and cesarean section capabilities all or most of the time. Hospitals that provide 24-hour emergency services, obstetrics, general anesthesia, and general surgery can be classified as small active hospitals.[11,18] The survey results indicate precarious medical staff resources for these basic essential medical services.

Given the realities of geography and population distribution, it is important that steps be taken to strengthen these services in small active hospitals where no close alternative exists.

Regionalization and rationalization of these medical services can be considered for hospitals close to urban centers and other communities of similar size. Smaller cottage hospitals usually do not provide regular obstetrics, anesthesia,

continued on page 1647

continued from page 1584

or general surgery but are important in remote areas, particularly for emergency care and long-term care close to home.

Conclusion

From many perspectives, providing accessible, quality rural medical care is a challenge. In Ontario there are worsening shortages of rural family physicians, particularly those that do emergency work, obstetrics, and GP anesthesia, as well as general surgeons. Small active hospitals, often separated from other facilities by considerable time and distance, will have increasing difficulty providing these basic essential medical services. The problems of recruiting and retaining appropriate physicians is worse in the smaller and more isolated communities, particularly in the North.

Communities, physicians, medical schools, and governments will need to address education, recruitment, and retention issues positively to meet needs for rural medical care. ■

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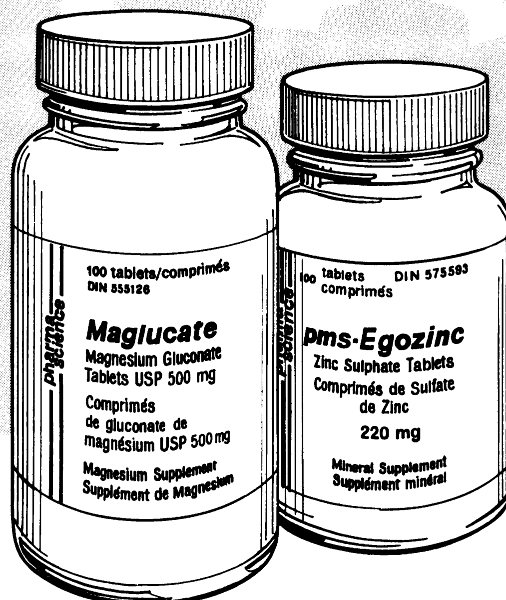

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