STAFFING SHORTFALL PLAGUES RADIATION ONCOLOGY

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In Brief • En bref

Canada's radiation oncologists say a staffing crisis looms within their specialty. A growing number of cancer patients means resources are being stretched, doctors are facing additional stress and waiting lists are becoming longer. "I see no way that we can conceive of meeting our needs by 2000," says Dr. Tom Keane of Toronto's Princess Margaret Hospital. The staffing shortage also extends to the medical physicists who run the radiotherapy machines. Many are being attracted to the US by higher salaries.

Selon les radio-oncologues canadiens, une crise de personnel se dessine dans leur spécialité. En raison du nombre croissant de patients souffrant du cancer, les ressources sont étirées, les médecins font face à un stress supplémentaire, et les listes d'attente deviennent plus longues. «Je ne vois aucun moyen imaginable de répondre à nos besoins d'ici l'an 2000», déclare le Dr Tom Keane, de l'hôpital Princess Margaret de Toronto. Le manque de personnel touche également les médecins physiciens chargés du fonctionnement des machines de radiothérapie. Nombre d'entre eux sont attirés vers les États-Unis par des salaires plus élevés.

Canada's radiation oncologists say staffing problems within the specialty are reaching crisis proportions.

At their root is a growing demand for cancer treatment, which is outstripping the capacity of radiotherapy facilities to meet patient needs. Overwork and stress are common among the country's 202 radiation oncologists as they try to provide therapy to as many patients as possible, often at the expense of other professional activities.

"The main stress is that you cannot do for people what you feel should be done," says Dr. Stewart Jackson, head of radiation oncology at the British Columbia Cancer Agency in Vancouver. Because demand has been outstripping the care that can be supplied by the province's 2 cancer clinics, for the past 2 years BC has been contracting for the treatment of around 400 cancer patients annually at facilities in the northwestern US.

Nonetheless, BC patients often wait 6 to 8 weeks for an initial assessment and up to 10 weeks after that for treatment — significantly longer than the 2-week waiting period recommended by the Canadian Association of Radiation Oncologists (CARO). "It's a serious situation and it's getting worse," Jackson says.

Clinical overload and significant delays are common in other provinces, too. At Quebec's City's L'Hôtel-Dieu, the waiting period for treatment can be as long as 11 weeks after the initial consultation; at New Brunswick's Saint John Regional Hospital, the average wait is 6 to 7 weeks.

Nova Scotia's 6 radiation oncologists see 4000 new cancer patients each year, and treat around 1600 of them; the specialty's professional guidelines stipulate that there should be 1 radiation oncologist per 325 new patients, and 200 treatment cases per specialist is appropriate.

"In essence, there is a major crisis in radiation oncology and radiation therapy across Canada," says Dr. Tom Keane, a radiation oncologist at Toronto's Princess Margaret Hospital. "I don't think any province is exempt."

He expects Ontario's situation to deteriorate further because of an annual 4% increase in the number of cancer cases, which is expected to double the number of patients within this decade. "I see no way that we can conceive of meeting our needs by 2000," he says.

The pressure to meet growing demand for care has adversely affected the quality of work within the specialty, Keane adds. In his own practice, the issue of which patients to accept for treatment has taken priority. "A large part of our day is spent juggling," he says.

"It's just crisis management," adds Dr. William Mackillop of his work as head of radiation oncology at Ontario's Kingston Regional Cancer Centre. "Above all, you have to be a good manager, and issues of extending your limited resources become paramount."

Understaffing also leaves insufficient resources for research, teaching and administrative functions. In 1990, Ontario's Radiation Oncology Commission estimated that 72 additional oncologists would be needed to meet research and education needs by 2001 — a hopelessly utopian goal given that only 87 radiation oncologists are currently practising in the province.

"In Quebec, we are really overloaded and the patient numbers are always growing," says Dr. Abdenour Nabid, president of the Association of Radia-

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tion Oncologists of Quebec. "After that, you can imagine how much time is left for research and management."

Recruitment of Canadian residents to the specialty, which used to be a serious problem, is now less of a dilemma because of the smaller number of training options available to newly graduated physicians. However, observers say a shortage persists because the number of funded positions for residency training and salaried practice is too small. Nova Scotia funds just six radiation oncology positions — two were vacant when this was written — plus a directorship. Dr. Peter Fitzpatrick, physician-in-chief at the Nova Scotia Cancer Centre and chair of radiation oncology at Dalhousie University, says 8 to 10 physicians are needed to properly staff the university's Department of Radiation Oncology and handle patient care.

BC's Jackson says that province needs 43 radiation oncologists, yet only 31 government-approved positions currently exist. Dr. Bernard Cummings, chair of radiation oncology at the University of Toronto, predicts Ontario will need 55 additional radiation oncologists by 2001, but will likely fall short by 25 physicians. He estimates that the province needs 15 new radiation oncologists each year, but 10 or fewer graduates will be produced by each class currently in training.

Observers find today's staffing shortfalls frustrating because although they were predicted a decade ago, funding bodies did not respond adequately. In a 1985 *CMAJ* article (Radiation oncology in Canada: the increasing manpower crisis. 132: 351–357), Dr. Peter Froud said Canada was experiencing a 50% shortfall in the number of full-time radiation oncologists practising at that time.

Other studies and reports abound. British Columbia has undertaken two recent reviews of cancer care. In Ontario, cancer-care agencies commissioned studies in 1975, 1985 and 1990, all of which urged sizeable increases in the number of radiation oncologists and residency-training slots. Health Canada also compiled recommendations for the coordination of programs through a 1992 task force called Cancer 2000. In October, Ontario announced it will spend $100 million to build new treatment centres near Toronto and expand the centre in London, but the press release did not mention additional funding to train radiation oncologists. Almost 46 000 new cancer cases were diagnosed in Ontario in 1993, and that number is expected to reach 60 000 by 2000. The province already spends more than $1 billion a year on cancer care.

Decisions about cancer-related staffing involve piecemeal efforts that are often handled at the local level, complains CARO president Dr. David Payne. "In the various cancer systems, there doesn't seem to be a well-thought-out plan that would monitor and evaluate utilization and recruit and retain oncologists in a forward-looking way."

Payne says coordinated, long-term planning requires a general agreement on standards in radiation oncology. How many radiation oncologists are really needed? What criteria should be used to determine the number? Some sources recommend a certain number of radiation oncologists for a general population of a certain size; others base their estimates on the number of new patients entering the treatment system, or on the number actually being treated with radiotherapy.■

A DELICATE BALANCE

The supply of radiation oncologists is just one factor in the delivery of radiotherapy services, which involves a balance with other medical disciplines and with the supply of specialized equipment. Unfortunately, that balance is often lacking.

In many centres, radiation therapists are faced with overtime, workload-related stress and extended working hours. Nancy Hobbes, chief technician at the Regional Cancer Centre in Kingston, Ont., speaks of having to "squeeze minutes out of the day" to make time for professional development and patient education, both of which suffer as a result.

Radiation oncology physics is understaffed by 15%, according to a 1992 survey by the Canadian Organization of Medical Physicists; at that time, 23 of 151 positions were vacant. The shortfall leaves staffing levels well below the recommended level of 1.5 physicists per linear accelerator, says Jake Van Dyck, senior physicist at the Ontario Cancer Institute/Princess Margaret Hospital. (Medical physicists are responsible for the correct functioning and use of radiotherapy equipment, and are also involved in treatment planning through consultation with the radiation oncologist. Most hold doctorates in physics, medical biophysics or another physics-related specialty.)

"By that rule of thumb, there should be 200-plus positions in Canada, but there are only 152," he says. "In Ontario we have 52 machines, but only 53 medical physicists," and frozen salaries are making the retention of qualified personnel difficult, he adds. "I know of about six people who are going to the US — that is [almost] 10% of the Ontario supply."

Specialized radiotherapy is also in short supply and much of it is used past its recommended lifespan of 8 to 10 years. One machine in British Columbia dates to 1978, while three other machines are 12 years old. An Ontario committee has predicted that 89 "megavoltage" units will be required by 1995–96, and 105 by the year 2000 to adequately meet patient needs; only 52 are in operation today.

Even in Quebec, which is getting several new linear accelerators, the retirement of older machines means that the net increase is small. "Instead of 29 treatment units, we need 39 today," says Dr. Abdenour Nabid, president of the provinces's association of radiation oncologists. By the time that target is reached — probably some time in 1995 — Nabid expects 49 treatment units will be needed.