



shelved by the Ministry of Health. It appears that funds are available for the questionable screening mammography of asymptomatic women 40 to 49 years of age, but not for timely radiation therapy for all of the women with breast cancer who could benefit from it.

The larger question remains: What are the best ways to incorporate recommendations based on new scientific knowledge into medical practice?

**Timothy Johnstone, MB, BS**  
Victoria, BC

### [The authors respond:]

**W**e agree with Dr. Johnstone that randomized trials have shown that breast-conserving surgery (BCS) followed by timely radiation therapy (RT) is equivalent to total mastectomy for most patients with early-stage breast cancer. BCS alone, however, results in higher rates of local recurrence<sup>1-5</sup> and higher rates of distant metastatic cancer.<sup>1-3</sup>

As described in our article and in a more detailed investigation of variation in the use of BCS within British Columbia,<sup>6</sup> access to RT services was one of several factors influencing the rate of BCS. Women living more than a 2-hour drive from an RT facility had lower rates of BCS in both BC and Ontario. In 1991, the period of the study, 30% of patients in BC lived more than a 2-hour drive from an RT facility, whereas only 6% of patients in Ontario lived this far from an RT facility. Only 4% of patients were treated with BCS alone in BC, as compared with 17% in Ontario. This finding reflects the closer compliance with international<sup>7</sup> and provincial cancer treatment guidelines in BC. To improve access to RT in BC, a new cancer centre with 4 machines opened in the Fraser valley in 1991, another is under construction in Kelowna, 2 new machines are

being commissioned in Vancouver and the capacity in Victoria is being doubled.

There was also a strong surgeon effect influencing BCS use in BC. This could not be explained by the surgeon's sex, volume of patients treated, academic affiliation or year of graduation from medical school.<sup>6</sup> Our study could not determine whether women faced with the need to travel for RT were not offered or did not choose BCS.

It has been shown that patients who participate in the choice of treatment, independent of the choice selected, have less long-term anxiety and depression than women directed to either mastectomy or BCS.<sup>8</sup> Women should be informed of the equivalence of BCS plus RT and total mastectomy in a nonjudgemental way, be assisted to obtain additional information about the advantages and disadvantages of each option and given the time and respect to make the decision for themselves.

The issue of resource allocation among treatment, prevention and screening programs is important and must be addressed by society as a whole. Studies such as ours can describe the distribution of resources but cannot answer the question of how to allocate available resources most appropriately. Such questions require evaluation of the efficacy, effectiveness and costs of different interventions and the preferences of individuals and society toward different outcomes.

**Ivo A. Olivetto, MD**  
**T. Gregory Hislop, MD, CM**  
**Andrew Coldman, PhD**  
British Columbia Cancer Agency  
Vancouver, BC  
**Vivek Goel, MD, CM**  
**Carol Sawka, MD**  
University of Toronto  
Toronto, Ont.

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## Introducing students to community health

**I**n the article "Creating community agency placements for undergraduate medical education: a program description" (*Can Med Assoc J* 1997;156:379-83), Drs. Donald Wasylenki and Carole Cohen and Ms. Barbara McRobb describe how it is possible to provide medical students with relevant experience in community agencies by choosing agencies carefully and maintaining good working relationships. We recognize the formidable logistics they overcame in offering 354 students stimulating learning experiences, including allowing students to observe health care in the community, to appreciate the concepts of barriers to health and to