

## Waiting lists for health care: A necessary evil?

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he problem of waiting lists in the Canadian health care system has been the topic of much debate recently, reflecting growing concern on the part of health care professionals and the lay public that long waiting times reflect an inability of our system to deliver highquality care. We are repeatedly told that long waiting lists are necessary to "hold the line" on costs in a publicly funded system. Although familiarity has bred a certain acceptance of this argument, it actually makes no sense. Short waiting lists can improve efficiency by eliminating periods of reduced activity. However, for many services, Canadian patients are being forced to wait much longer than is really necessary to accomplish this. This is well illustrated by data collected on coronary artery bypass grafting (CABG) by the Cardiac Care Network of Ontario for the period April 1, 1996, to March 31, 1997. During this period 1514 patients were on the provincial waiting list at any given time. An average of 784 Ontario patients had bypass surgery each month. The number of new cases placed on the list averaged 834 per month, with a peak of 912 (78 above the average) and a trough of 735 (99 below the average). Assuming there are 22 working days in a month (and an average monthly caseload of 784), these peaks and troughs represent 2.2 and 2.8 days of surgery respectively. Despite these small peaks and troughs of activity, the average length of the waiting list was 1514 patients throughout this period. This could have filled a trough of 42 days in which no new cases were put on the list. Such a long list is clearly not needed for resource levelling.

Since prolonged waiting does not reduce the cost of performing a procedure, long waiting lists will reduce spending only if fewer procedures are ultimately done. Limiting access to care in this way might be appropriate if (1) a significant proportion of patients were being referred for poor indications and (2) these inappropriate referrals were selectively removed by making the waiting lists longer. In the case of cardiac revascularization, neither condition is met. First, available data on bypass surgery for Ontario, BC and Newfoundland have consistently shown extremely high appropriateness ratings.<sup>2-4</sup> Second, while it is possible that longer waiting lists will discourage referrals in general, there is no evidence for a selective effect on inappropriate as opposed to appropriate referrals. The latter consideration raises legitimate concern that long waiting lists deny appropriate treatment to some members of our population.

The potential for inappropriate nonreferral is difficult to

study in the absence of population-based data. However, the Cardiac Care Network of Ontario has noted marked geographic variations in age- and sex-corrected CABG rates; these variations indicate that poor access may be a problem for elderly people and women in some areas. Other studies have shown that appropriateness ratings for patients undergoing CABG in New York State are equivalent to those in Ontario, despite substantially higher population-based rates of surgery (and shorter waiting lists) in New York. The possibility that long waiting lists deny some Canadians appropriate treatment is a serious one.

Rather than being part of the solution to the health care funding crisis, waiting lists contribute to it by making the delivery of care inefficient. In the example cited earlier,<sup>1</sup> only 51% of the bypass surgeries were elective. Most of the remainder were done on patients deemed to be at too much risk to be discharged from hospital. Their average waiting time was 20 days. Since the average hospital stay after elective bypass surgery is only 5 to 6 days, this represents a 3- to 4-fold increase in total length of stay. Many of these patients would likely have been able to wait at home if the waiting times had been reasonable. Those who were truly too sick to go home under any circumstances could have been operated on sooner if the system had not been "jammed" with patients. Long waiting lists waste health care resources. We cannot afford this, particularly when hospital beds are closing.

In addition to their costs to the system, one must consider the costs of waiting lists to patients. Protracted treatment delays increase mortality and morbidity rates. In the Ontario example, 71 patients died while waiting for CABG, 121 were removed from the list permanently because they had become medically unfit for surgery, 211 were taken off the list temporarily (the usual reason for this is medical instability, in which case patients are often reinstated in a higher urgency category), 259 were removed from the list for unspecified reasons and 44 left the province and underwent CABG elsewhere.

Using the results of randomized studies conducted over 20 years ago, Hux and Naylor estimated that 94% of patients who underwent CABG in Ontario in 1992–1993 had characteristics associated with a moderate or high survival benefit.<sup>3</sup> In view of improvements in surgical technique, this estimate is almost certainly conservative. More recent data from randomized trials indicate that cardiac revascularization can produce greater reductions in death, nonfatal



myocardial infarction and hospital admissions than were evident in older studies.<sup>7-8</sup> Furthermore, deaths that occur in patients waiting for surgery may be only part of the problem. Patients whose condition worsened while they were on the waiting list underwent CABG at increased risk, since both recent myocardial infarction and surgical urgency are associated with excess operative and postoperative deaths.<sup>9</sup> These deaths would not be attributed to being on a waiting list. It is important to keep in mind that there are no theoretical benefits to offset any increase in death and morbidity that occurs as a result of delayed care.

Waiting lists also exact a toll on survivors in terms of quality of life. This is clear for patients who can no longer undergo surgery because their condition has worsened. It is also true for those who eventually have their surgery without an intervening cardiac event. Cardiac revascularization in appropriately selected patients is clearly superior to medical therapy in reducing angina and improving functional capacity.<sup>10</sup> The 9604 Ontario patients scheduled for bypass surgery between April 1, 1996, and March 31, 1997, spent a total of 2473 patient-years on the list. For the 51% of these patients whose cases were classified as nonurgent, the average wait was almost half a year. Since the Cardiac Care Network did not consider patients to be on the list until after they had been seen by a cardiac surgeon, actual waiting times were often much longer than the list indicated: patients had already waited to see a cardiologist and undergo coronary angiography. The resulting prolonged disability before coronary revascularization reduces the patient's chances of returning to work,11 thereby adding to the indirect costs of cardiovascular disease. For 1994, these indirect costs were conservatively estimated at \$7.6 billion.<sup>12</sup> Building a health care system that provides needed treatments in a timely fashion can only reduce the total burden of disease on society.

The supply of health care services in a publicly funded system cannot be open ended. The challenge is to regulate supply responsibly. This cannot be accomplished by basing the availability of services on inadequate data and then studying the long waiting lists that result. It is absolutely critical that we develop sources of data that will allow health care providers and policy-makers to discriminate between patients who have good indications for expensive health care services and those who do not. Once this is done, a further subdivision of those with good indications into "more deserving" and "less deserving" to establish their place in the queue should become irrelevant. Either a patient needs a procedure or does not, and ultimately he or she will either have it or not. "Women and children first" would not have been an issue on the Titanic if there had been enough lifeboats.

Long waiting lists are not part of the solution to the crisis in health care. They are part of the problem and exist because too few resources have been directed toward quality control and resource management. A recently released government report on access to health care<sup>13</sup> concluded that a paucity of reliable and consistent information had re-

sulted in a poor understanding of the mechanisms through which patients came to be referred for procedures. Solving this problem will require a concerted and cooperative effort involving all health care sectors. Governments responsible for funding and administration must focus resources on collecting the detailed, patient-specific data needed to establish and quantify the legitimate demand for health care services, and physicians and other health care providers must supply the medical knowledge and expertise needed to translate these data into useful guidelines for the kind and amount of services to provide. Once it is established, the legitimate demand for health care services must be met efficiently, without imposing on patients unnecessary and costly delays in treatment.

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