

# Waiting for medical services in Canada: lots of heat, but little light

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Canadians' long-standing approval of their health care system declined significantly during the 1990s. While 61% of respondents to a 1991 Angus Reid poll rated the system "excellent" or "very good," that figure had fallen to 52% by 1995, and was just 24% in 1999.<sup>1</sup> This erosion of confidence may have been fuelled, in part, by extensive media coverage of claims about increased waiting times for many surgical procedures and investigations. Almost two-thirds of those surveyed in a 1997 CMA poll felt that waiting times for surgery had grown over the previous 12 months, and half felt that access to specialists had become more difficult.<sup>2</sup> These figures were up from 53% and 40% respectively in a similar 1996 poll.<sup>2</sup>

Recent surveys of family physicians,<sup>3,4</sup> specialists<sup>5,6</sup> and health-related nongovernmental organizations<sup>7</sup> suggest that they share the public's perceptions. In contrast, provincial government officials generally appear much less convinced that waiting is a pressing issue.<sup>8</sup> Moreover, empirical studies published by 3 provincial governments between 1996 and 1998 reported no significant increase in waiting times for most surgical procedures.<sup>9-11</sup>

This disagreement is but one example of the disjunction between common understandings and evidence about waiting lists in Canada. In this paper we suggest that confusion over terminology, differences in measurement approaches and a general lack of awareness of the relative effectiveness of different approaches to managing waiting lists and waiting times all hamper real progress in this area. In particular, we focus on the underpinnings of disagreements about (1) the nature and extent of waiting-list issues and (2) effective policy intervention.

## What causes variability in perceptions about waiting lists and waiting times in Canada?

The first major source of variability in perceptions about waiting times is the lack of standards governing whether and when a patient is placed on a waiting list. Episodes of illness involve highly variable diagnosis and treatment trajectories, and a single care episode may involve waits at several different points. Furthermore, although waiting time should theoretically start when the physician and the patient agree that the treatment in question is appropriate, in practice other considerations feature in the decision calculus. For example, in the absence of systematic clinical thresholds and audits, some physicians may feel impelled, in their patients' interests, to add patients' names to long lists in anticipation of future need for a service. The result is considerable variability in when patients are, or are assumed to be, placed on lists. This point may be variously defined as the date of facility notification or booking,<sup>12</sup> the date of the last surgical consultation before surgery,<sup>9,11</sup> the time of angiography (for coronary artery bypass grafting lists)<sup>13</sup> or the date of the first visit to a general practitioner (GP).<sup>14</sup> For example, 58% of organizations responding to a recent survey considered the point when a clinic is notified as the start of waiting time for MRI.<sup>15</sup> Waiting times for knee and hip replacement and cataract surgery were also most likely to be viewed as starting at the point of facility notification.<sup>15</sup> In contrast, waiting times for radiation oncology were more likely to be perceived as starting at the point of treatment decision.<sup>15</sup>

A second source of variability is measurement method.<sup>16-19</sup> The cross-sectional method would be used to answer the question, "How long have patients currently on a list been waiting?" If, instead, one wished to know how long the patients who

*Review*

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*This article has been peer reviewed.*

CMAJ 2000;162(9):1305-10

‡ See related article page 1297

received treatment during December 1999 had waited, the retrospective method would be used. Alternatively, one could use the prospective method to track waiting times from the point at which patients were placed on a list for a treatment (e.g., total waiting time to treatment of all patients put on a list during January 1997). Finally, combinations of these 3 methods might be used to estimate the expected waiting time for patients placed on a list today. Each of these methods is legitimate for answering a certain question, and each provides a different picture of waiting times.<sup>20</sup> There is no single "correct" question; it is thus not surprising to find variability, as different sources choose different measurement methods to meet their particular information needs or objectives.

For example, the BC Surgical Waiting List Registry and the Ontario Cardiac Care Network provide both cross-sectional and retrospective waiting-time data.<sup>10,21</sup> The Fraser Institute's annual reports<sup>6,22-24</sup> are based on questionnaires sent to random samples of physicians who offer opinions about the amount of time a new patient can expect to wait for a range of surgical and diagnostic procedures. This is, according to the taxonomy outlined above, expected waiting time. The British Columbia Medical Association has recently begun to collect information on waiting times for selected procedures. The data are based on responses from specialists asked to report waiting times from GP referral to first surgical consultation and from consultation to surgery.<sup>25</sup> These appear to be retrospective, based on recent personal experiences and practices. Recent studies by the Nova Scotia Department of Health<sup>9</sup> and the University of Manitoba<sup>11</sup> defined waiting times as the time between last surgical consultation and date of surgery, which is also a retrospective approach.

A third source of variability lies in the statistics used for reporting waiting times. Mean and median waiting times, as well as interval measures such as proportions of patients who have waited for more than 60 days, are all common. Because waiting time distributions are almost always highly skewed by small numbers of long waits, mean waiting times can be highly misleading, particularly if they are used as representations of expected waits.

A fourth reason for disagreement about the length of waiting lists in Canada is the way in which such lists are developed and managed. Most lists are created and main-

tained in the offices of individual physicians or hospital surgical or diagnostic departments rather than by a regional authority or other coordinating agency.<sup>26,27</sup> Examples of coordination among physicians are rare, and among institutions or regions, rarer still. This gives rise to 2 sources of uncertainty in reported waiting times or list lengths. First,

there is considerable variability in both list lengths and waiting times among individual physicians, among institutions and among regions. Waiting-time estimates usually assume that the patient will stay on the list on which he or she was originally placed, even if waiting time would be shorter on a different practitioner's list. Second, Canadian lists are not audited. As a result, the validity and reliability of statistics based on those lists are simply not known. Elsewhere (particularly in the United Kingdom), systematic clinical audits, employing a range of methods, have consistently found significant proportions of patients on lists who should not be there. Independent chart reviews and clinical assessments, as well as patient surveys, have revealed proportions of patients inappropriately placed on lists ranging from 15% to 70%, clustering in the 20% to 40% range.<sup>28-37</sup> The reasons for inappropriate inclusion on waiting lists encom-

passed a variety of situations: the procedure had already been done or was no longer required; the patient was not aware of being on a list and requested removal when so informed; the patient had died; the procedure was not appropriate for the patient; an alternative treatment was preferable; and there had been a change in the clinical condition.

## Does evidence inform Canadian policy approaches to reducing waiting times?

Respondents to a series of recent surveys, drawn from provincial ministries of health, hospitals, regional health authorities and nongovernmental health organizations, reported that the 2 most common causes of excessive waiting times were inadequate resources and poor management of existing resources.<sup>7,8</sup> The most frequently offered solution was to increase funding (on a global basis or targeted to relieve perceived bottlenecks such as lack of operating suites) in 1 of 2 ways: "let the private sector in" or allocate additional public funding. Yet here, too, the evidence (in this

### Sources of variability in reported waiting times

#### *Lack of standard definition of when waiting starts*

- First visit to GP about particular problem
- Time of treatment decision
- Time when facility is booked
- Last consultation before surgery

#### *Different measures of waiting time*

- Cross-sectional
- Retrospective
- Prospective

#### *Different statistics reported*

- Mean waiting time
- Median waiting time
- Proportion of patients waiting a given period

#### *Variation in list management*

- Differences among individual physicians, institutions and regions
- Lack of audit

case based on experiences in Canada and other jurisdictions with policies directed at shortening and rationalizing public-sector waiting lists) is at odds with widely held “understandings.”

### ***Is there promise in a two-tier solution?***

The argument that waiting times for publicly funded services can be shortened by introducing or increasing access to private care for those who wish to pay is simple and intuitive, giving it wide popular appeal. Additional private-sector capacity would reduce pressure on the public system — a win-win situation in which those who wish, and can afford, to pay receive care faster, and the rest see the line-up in front of them shrink, which reduces the critical time to procedure.

There are 2 problems with this line of reasoning. First, in a system of roughly fixed per capita human resources (in the short term), where it is increasingly argued that those key resources (e.g., physicians and nurses) are already in short supply, it is difficult to understand how channeling some of that human capacity into private activity would reduce public-sector waits. One might argue that the presence of public-sector waiting lists provides a rationale for increasing training. But whether Canadians at large would embrace the training of additional personnel, largely at public expense, so that a parallel private sector could flourish, is an empirical question, to date unasked.

Second, there is no evidence to support the contention. The presence of a flourishing private option in the United Kingdom does not appear to have provided relief for public-sector waiting lists, despite the fact that this private option is exercised by approximately 13% of the population.<sup>38</sup> The bulk of private surgical work focuses on hips, hernias, hemorrhoids, cataracts and gynecologic problems, which are some of the conditions with the longest waiting times in the public sector. Regions with the longest waiting lists also have the highest rates of private surgery. There is concern that this link reflects the ability of surgeons who maintain long waiting lists to encourage better-off patients to jump the queue and pay for elective surgery privately.<sup>14</sup> Despite regulations that limit the amount of private practice to be done by consultants, this policy is neither adhered to nor enforced.<sup>38-40</sup> Similar evidence emerged recently from Manitoba and Alberta; ophthalmologists who performed cataract surgery in both public and private facilities had considerably longer median public-sector waiting times than did their colleagues who operated only within the public system.<sup>41,42</sup>

In the United Kingdom it has been suggested that the public system could subsidize patients seeking private care up to the current cost of public care.<sup>43,44</sup> It is doubtful that such options would find acceptance from a Canadian public that continues to express strong support for a universal, publicly funded system (although there is no avoiding the fact that they do perceive problems of erosion in that pub-

lic system, as outlined above). For example, when Manitoba cataract patients were surveyed before surgery, only 15% responded that they would be willing to pay for private care or accept increased taxes to guarantee more rapid access to the public system.<sup>45</sup> Similarly, in more than 85% of cases, Canadians in line for knee replacement found waiting times acceptable, even though they were waiting longer than US patients who needed the same procedure.<sup>46,47</sup> There has been limited Canadian experience with selective public purchase of private services in the United States,<sup>48,49</sup> and this practice continues infrequently on an ad hoc basis. In addition, there are periodic claims about Canadians flocking south to purchase care privately, but here as well the evidence is thin.<sup>50,51</sup>

### ***Sticking with one tier: Just add more funds***

Possibly because the relationship is considered self-evident, research examining the correlation between waiting times and changes in available resources is relatively scant. In some cases additional resources have reduced waiting times (at least temporarily). Ontario's successful attack on coronary artery bypass queues initiated in 1989, for example, combined organizational changes with enhanced resources.<sup>52</sup> But here, as elsewhere,<sup>36,53-57</sup> reductions in waiting times appear transient in the absence of regular, periodic infusions of additional resources.

In general, attempts to reduce waiting-list length or waiting times simply by adding resources do not appear to have succeeded over the longer term<sup>58</sup> and may even have had adverse consequences. UK initiatives targeting patients who had endured particularly lengthy waits did, indeed, reduce long waits. Unfortunately, a key effect of these initiatives was to increase waiting times for higher-priority patients who had been on the lists for less than the list-clearing threshold time.<sup>59-61</sup> Nor is this lack of improvement confined to surgery.<sup>62-64</sup>

Additional resources have also been found to *increase* list lengths or waiting times. In Manitoba the volume of cataract procedures increased considerably between 1992/93 and 1996/97; over the same period, median waiting time also increased.<sup>11</sup> A study of several surgical services in the United Kingdom found that as the number of hospital admissions from the list increased, so too did the length of the waiting list.<sup>65</sup> This “feedback” phenomenon reflects a tendency of family physicians to preferentially increase referrals to consultant services that appear to have shrinking waiting lists, thereby offsetting any initial reductions in list length.<sup>66</sup> Adding surgeons to a hospital in the United Kingdom reduced pre-existing lists, but within 2 years new lists had been generated.<sup>67</sup> Hospital-based physicians in the United Kingdom have no real incentives to cut waiting lists;<sup>43</sup> adding resources without explicitly examining the previous threshold at which intervention was deemed appropriate simply encourages individual practitioners' reassessment of what “needs” to be treated, thus lengthening

lists rather than reducing them.<sup>68</sup> A recent Australian commentary noted that hospital managers who received extra resources to deal with long waiting lists had little incentive to reduce lists too much, as long as the prospect of attracting additional resources to deal with long lists remained.<sup>69</sup>

We do not mean to imply that additional resources are never an appropriate response to situations in which waiting times exceed acceptable clinical thresholds. Rather, the evidence speaks to a lack of the instrumentation necessary to determine the validity of waiting lists in Canada, and also suggests rather unequivocally that adding resources in the absence of other initiatives is unlikely to have any long-term positive effect on waiting times.

### If additional resources are not the magic bullet, then what?

It would be misleading to suggest that all Canadian observers hold the view that additional funding, public or private, is necessary to reduce waiting times. Indeed, increasing numbers of observers are becoming aware of the fourth reason noted above for ambiguity about waiting-list lengths and waiting times — lack of coordination and audit — and see considerable potential in addressing those issues head-on, through improved management techniques.

There is considerable experience, in Canada and elsewhere, from which to develop an evidence base for new management approaches. These approaches are of 3 general types, distinguished by whether the focus is on reducing the need for the service in question, prioritizing the patients awaiting the service or reorganizing patterns of care.

#### Reducing “demand”

As we noted above, there would seem to be considerable potential in independent list audits. Furthermore, even systematic self-review can reduce the number of patients on lists.<sup>28</sup> Periodic reassessment of patients can reduce last-minute cancellations and shorten lists by removing patients well in advance.<sup>70</sup>

#### Prioritization

Prioritization approaches modify the order in which patients on a list receive the service in question. We have already noted the UK list-clearing initiatives, which were directed at patients who had been on waiting lists for inordinately long periods of time. These approaches usu-

ally involved minimal extra resources, reconfigured existing resources only temporarily, focused exclusively on patients who had been on surgical lists over a specified length of time, succeeded in reducing the number of patients waiting longer than the specified time and had limited long-term efficacy.<sup>53,59,71</sup>

In both the United Kingdom and Sweden, guaranteed maximum wait programs have been implemented for selected conditions such as coronary bypass grafting and cataract surgery. These programs give particular priority to patients who are approaching the maximum time threshold. They have tended to be accompanied by increased funding, the rationale being that without such additional resources the guarantees would not be met. The Swedish initiative appears to have partially met its goal by increasing productivity and improving waiting-list management.<sup>57</sup>

These 2 approaches target patients who have waited, or are likely to wait, longer than managerially determined thresholds (presumably guided by clinical considerations). Other prioritization strategies address *all* patients

on a list in an effort to match a patient's place in the queue with clinically determined “urgency” and to ensure that patients receive services in order of clinical urgency and within times defined as appropriate on the basis of clinical evidence.<sup>72,73</sup> The generally positive Ontario experience since 1991 in operating a province-wide, priority-based registry of patients awaiting coronary artery bypass grafting illustrates the local potential of such efforts.<sup>13</sup>

Waiting can also be managed by altering the way in which lists are constructed and maintained. In the absence of coordinated lists, there may be significant variation in the severity of need of the patients who receive a service and in the length of the lists maintained for the same service or procedure by different physicians. In contrast, centralized waiting lists covering the patients of all physicians in a particular region and for a particular specialty (usually surgical) are more efficient and responsive to relative priority.<sup>74-76</sup> In Canada such centralized, coordinated management is rare outside the specialties of oncology and cardiac surgery in a few provinces.

#### Other management techniques

In the United Kingdom patients who do not keep appointments are a significant problem for those attempting to manage waiting lists.<sup>77</sup> One study reported that prior notification by patients of their intent to miss an outpatient

#### New approaches to managing waiting lists

##### *Reduce demand for the service*

- List audits
- Reassessment of patients on lists

##### *Prioritize patients awaiting the service*

- Match place in queue with clinical urgency
- List coordination

##### *Reorganize patterns of care*

- Methods to reduce missed appointments
- Redirection of referrals to clinicians with shorter lists
- Reduction of specialist physician follow-up visits

appointment would have reduced waiting time from 6 months to 1 week.<sup>78</sup> Some surgeons have replaced waiting lists with prearranged admission dates, which has had the effect of reducing the number of patients who did not attend for admission or who were admitted through emergency departments.<sup>79</sup>

Finally, a number of approaches to managing how and how quickly patients get onto waiting lists have shown promise in the United Kingdom. When given information on waiting times for outpatient consultation and inpatient treatment, general practitioners demonstrated a willingness to redirect referrals to the clinicians with the shorter waits.<sup>80</sup> Moreover, to make time for seeing more new outpatients, consultants have adopted various strategies to reduce follow-up visits for previously assessed patients. For example, a UK study suggested using telephone contact to a greater extent, devolving management back to general practitioners and using nurse clinicians for selected aspects of follow-up.<sup>81</sup>

## Conclusions

The Canadian debate about access to care, and waiting lists in particular, is characterized by disturbing chasms between widely held views and research evidence. This disjunction appears to be the product of a number of factors, including lack of standard approaches to measurement and reporting of waiting-list lengths and waiting times and a general ignorance (or disregard) of the effects of competing approaches to managing waiting lists in Canada and abroad. It points strongly to the need for a better infrastructure for information about waiting lists in Canada. Without this, discussions about access to care will almost certainly continue to generate more heat than light.

This research was made possible through a contract with Health Canada. The full report, *Waiting lists and waiting times for health care in Canada: More management!! More money??*, which was completed in 1998, is available from Health Canada or from the authors.

Competing interests: This article is based on research undertaken under contract with Health Canada in 1997–98.

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