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# Preface

This *Critical Issues Bulletin* is the Institute's eleventh attempt to document the extent to which queues for visits to specialists and for diagnostic and surgical procedures are being used to control health care expenses. When we began producing waiting-list measures in 1988, there was anecdotal evidence that hospital waiting times were becoming significant. However, there were no systematic measurements of the extent of waiting.

At that time, partial waiting-list measurements made by hospitals and government departments were viewed as politically sensitive and were not made generally available. While these official waiting lists are now more readily accessible, they are still incomplete, meaning that there are no comprehensive measures other than those produced by The Fraser Institute by which to measure the length of waiting lists in Canada.

The contents of the survey have been evaluated to the extent possible by comparing the survey results to

other sources of information. In particular, copies of the preliminary drafts of the study were sent to all of the provincial ministers of health for their comments, as well as to provincial cardiac and cancer agencies.

Measurement is crucial to understanding how any system works; where a system contains problems, it is the key to finding solutions. Largely as a result of the intense public interest in our past publications, waiting lists are now a component of any serious debate on the health care system in Canada. We hope that this interest in waiting lists continues and that Canadian policymakers begin to consider seriously the implications of queuing as they design alternatives to our present health care arrangements.

While this study and its widespread distribution has been enthusiastically supported by The Fraser Institute, the work has been independently conducted and the views expressed may or may not conform to those of the members and trustees of The Fraser Institute.

# Executive Summary

The Fraser Institute's 11th annual waiting list survey found that waiting time for surgical and other therapeutic treatments grew significantly in 2000-01. Total waiting time between referral from a general practitioner and treatment, averaged across all 12 specialties and 10 provinces surveyed, rose from 13.1<sup>1</sup> weeks in 1999 to 16.2 weeks in 2000-01. This nationwide deterioration reflects waiting-time increases in eight provinces, while concealing decreases in waiting time in Saskatchewan and Newfoundland.

Among the provinces, Ontario achieved the shortest total wait in 2000-01, 13.9 weeks, with Newfoundland (14.6 weeks) and Prince Edward Island (15 weeks) next shortest. Despite a very significant improvement, Saskatchewan exhibited the longest total wait, 28.9 weeks; the next longest waits were found in New Brunswick (25.8 weeks) and British Columbia (18.9 weeks).

## **The first segment of waiting: Between referral by general practitioner and visit to a specialist for consultation**

The rise in waiting time between 1999 and 2000-01 is principally a result of an increase in the first wait, the wait between visiting a general practitioner and attending a consultation with a specialist. This waiting time grew from 4.9<sup>1</sup> weeks in 1999 to 7.2 weeks in 2000-01. The shortest waits for specialist consultations were experienced in Prince Edward Island (6.3 weeks), Saskatchewan (6.3 weeks), and British Columbia (6.5 weeks). The longest waits for specialist consultations occurred in New Brunswick (16.2 weeks), Nova Scotia (8.8 weeks), and Alberta (7.9 weeks).

## **The second segment of waiting: Between the decision by the specialist that treatment is required and treatment**

Significant decreases in Saskatchewan, Newfoundland and Prince Edward Island disguise increases in the other seven provinces. Waiting time between specialist consultation and treatment—the second stage of waiting—increased for Canada as a whole between 1999 and 2000-01, rising from 8.2<sup>1</sup> to 9 weeks. The shortest specialist-to-treatment waits were found in Ontario (7 weeks), Nova Scotia (7.8 weeks), and Newfoundland (8 weeks), while the longest such waits existed in Saskatchewan (22.6 weeks), British Columbia (12.3 weeks), and New Brunswick (9.6 weeks).

## **Waiting by specialty**

Among the various specialties, the shortest total waits (i.e., between referral by a general practitioner (GP) and treatment) existed for medical oncology (5 weeks), radiation oncology (8.9 weeks), and general surgery (9.2 weeks). Conversely, patients waited longest between a GP visit and ophthalmology (27.9 weeks), orthopaedic surgery (26.5 weeks), and plastic surgery (24.3 weeks) treatment. There was a striking increase between 1999 and 2000-01 in the wait for ophthalmology (+8.9 weeks), and neurosurgery (+4.5 weeks). These increases mask improvements for patients receiving treatment in otolaryngology (-4.2 weeks), urology (-1.1 weeks), gynaecology (-0.8 weeks), orthopaedic surgery (-0.6 weeks), and radiation oncology (-0.1 weeks). The wait for general surgery remained the same.

Breaking waiting time down into its two components, there is also variation among specialties. With regard to GP-to-specialist waiting, the shortest waits are found in medical oncology (3 weeks), radiation oncology (3.1 weeks), and general surgery (3.6 weeks), while

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<sup>1</sup> Provincial and national weighted medians reported in Tables 2, 28a, 31, and 44 of *Waiting Your Turn*, 10th edition, reporting the results of the 1999 National Hospital Waiting List survey have been restated for ease of comparison with both previous and subsequent years.

the longest waits are for neurosurgery (13.8 weeks), ophthalmology (11.6 weeks), and orthopaedic surgery (11.4 weeks). For specialist-to-treatment waiting, patients wait the shortest intervals for medical oncology (2 weeks), urgent cardiovascular surgery (2.8 weeks), and urology (4.7 weeks), and wait longest for ophthalmology (16.3 weeks), orthopaedic surgery (15 weeks), and plastic surgery (13.7 weeks).

## Comparison between clinically “reasonable” and actual waiting times

In addition to actual waiting times for care, specialists are also surveyed as to what they regard as clinically “reasonable” waiting times. While these values by themselves do not reflect the state of actual waiting time, they can usefully be compared with actual waits. The comparison made is between reasonable and actual specialist-to-treatment waiting times for all 10 provinces and 13 specialties (both urgent and elective cardiovascular surgery are included); it reveals that out of the 121 categories (some comparisons were precluded by missing data), actual waiting time exceeded reasonable waiting time in 86 percent of them. Averaged across all specialties, Nova Scotia and New Brunswick came closest to meeting the standard of “reasonable” in that their actual specialist-to-treatment waits only exceeded the corresponding “reasonable” values by 49 and 64 percent, respectively, smaller gaps than in the other provinces. This partially reflects higher standards as to what is “reasonable” in a number of other provinces, such as Ontario, and Quebec. Among the specialties, “reasonable” was most often met or bettered for medical oncology and urgent cardiovascular surgery.

## Waiting for diagnostic and therapeutic technology

The growing waits to see a specialist and to receive treatment were not the only delays facing patients in 2000-01. Patients also experienced significant waiting times for various diagnostic technologies across Canada: computed tomography (CT), magnetic resonance imaging (MRI), and ultrasound scans, although the median waits for all three technologies remained the

same as in the Institute’s 1999 survey. The median wait for a CT scan across Canada was 5 weeks. The shortest wait for computed tomography was in Nova Scotia (3.5 weeks), while the longest wait occurred in Prince Edward Island (10.3 weeks). The median wait for an MRI across Canada was 12 weeks. Patients in Manitoba experienced the shortest wait for an MRI (8 weeks), while Newfoundland residents waited longest (23 weeks). Finally, the median wait for ultrasound was 2.5 weeks across Canada. Saskatchewan displayed the shortest wait for ultrasound (2 weeks), while Manitoba exhibited the longest ultrasound waiting time, 8 weeks.

## Numbers of people waiting

The numbers of people waiting for each procedure, and therefore each specialty, were also calculated. In 2000-01, a significant improvement in our methodology allows us to more accurately estimate the number of patients waiting for treatment. Throughout Canada, the total number of people estimated to be waiting for treatment was 878,088 in 2000-01, an increase of 3 percent between 1999 and 2000-01. The number of people waiting rose in New Brunswick, Alberta, British Columbia, Manitoba, and Ontario. As a percentage of the population, 2.82 percent of Canadians were waiting for treatment in 2000-01, which varied from a low of 1.84 percent in Prince Edward Island to a high of 7.21 percent in Saskatchewan.

## Verification of the data

To attempt to corroborate the findings of this and previous surveys, current waiting time data were solicited from provincial governments, and past waiting time data were drawn from peer-reviewed journals. Provincial governments collect data that neither directly nor easily compares with that collected by our survey. Nonetheless, even evidence from British Columbia, the jurisdiction where the wait times collected by government most startlingly clash with those published in this study, add credibility to the Institute’s estimates. The evidence from comparison with academic research strongly suggests that the Institute’s measurements may be biased downward, understating actual waiting times.

## **Summary: The magnitude of the problem and the importance of reform**

Canada-wide total waiting time increased significantly in 2000-01—and its level is high, both historically and internationally. Compared to 1993, waiting time in 2000-01 is 69 percent higher. Moreover, academic studies of waiting time have found that Canadians wait longer than Americans, Germans, and Swedes (sometimes) for cardiac care, although not as long as New Zealanders or the British.

Waiting time has been found in medical research to entail adverse consequences for cardiac outcomes. Furthermore, economists attempting to quantify the cost of this waiting time have estimated it to amount to \$1,100 to \$5,600 annually per patient.

The extent of Canada's health system dysfunction was documented in a 2000 Fraser Institute study examining the impact of increases in government health spending. This analysis revealed that provinces spending more on health care per person had neither shorter (nor longer) total waiting times than those spending

less. In addition, those provinces spending more had no higher rates of surgical specialist services (consultations plus procedures) and had lower rates of procedures and major surgeries.

Finally, the promise of the Canadian health care system is not being realized. On the contrary, a profusion of recent research reveals that cardiovascular surgery queues are routinely jumped by the famous and politically-connected, that suburban and rural residents confront barriers to access not encountered by their urban counterparts, and that low-income Canadians have less access to specialists, particularly cardiovascular ones, and have lower cardiovascular and cancer survival rates than their higher-income neighbours.

This grim portrait is the legacy of a medical system offering low expectations cloaked in lofty rhetoric. Indeed, under the current regime—first-dollar coverage with use limited by waiting, and crucial medical resources priced and allocated by governments—prospects for improvement are dim. Only substantial reform of that regime is likely to alleviate the medical system's most curable disease—longer and longer waiting times for medical treatment.

# Waiting Your Turn

With rare exceptions, waiting lists in Canada, as in most countries, are non-standardized, capriciously organized, poorly monitored, and (according to most informed observers) in grave need of retooling. As such, most of those currently in use are at best misleading sources of data on access to care, and at worst instruments of misinformation, propaganda, and general mischief.

—McDonald, Shortt, Sanmartin, Barer, Lewis, and Sheps (1998)

The measurement of medical waiting times is a frequent target of criticism. Yet, despite the vigorous disclaimers expressed in government-contracted reports such as the National Health Research and Development Program study quoted above, Canadian health care consumers are desperately concerned with waiting time and the general state of the health care system. Consequently, consumers, as well as health providers and policymakers, rely on available data regarding waiting time. Among these data, The Fraser Institute's annual study is the only comprehensive study of waiting across provinces and medical specialties. Therefore, *Waiting Your Turn* may be particularly subject to attack because of its very prominence in discussions of waiting time in particular, and of health care reform in general. In this light, critiques by the federal and provincial governments are not surprising, in that the existence of lengthy waiting times is a potential indictment of government intervention in, or management of, the medical system.

Indeed, governmental criticisms of *Waiting Your Turn* are common and fierce. At the time of this eleventh edition, the authors can feel some satisfaction in the fact that the survey is much imitated by its critics. Provincial health ministries are now more likely to monitor and collect waiting time data than ever before. A much-heralded example of this was the decision by British Columbia's Ministry of Health to disseminate on-line waiting-time information. The significance of waiting lists to the health policy debate has been further emphasized by recent federal government insistence on accountability in the form of annual report cards. Such governmental concern about waiting times is not only ironic because of previous criticisms but

also because the existence of waiting lists for medical procedures and treatments is one manifestation of the governmental rationing of health sector resources that occurs in Canada. To the extent that there is rationing of hospital capacity by means other than price, monetary and non-monetary costs are nevertheless borne by Canadians, even though these costs are not explicitly recognized. These unrecognized costs may include, for example, lost work time, decreased productivity associated with physical impairment and anxiety, and physical and psychological pain and suffering.

A working person incapacitated by an illness bears the costs of the loss of work. These costs are not included among those associated with running the health care system. Cancer patients who must drive long distances to regional health centres or to the United States for radiation therapy bear costs in terms of lost time that are neither included in health costs nor in any way compensated for by the health care system. A woman with a lump in her breast, who is told she must wait four weeks for a biopsy to determine whether the lump is cancerous, finds little comfort in the advice from her physician that epidemiological research shows that it does not matter to the outcome if the biopsy is delayed that long. The woman's anxiety and tangible psychological pain are not included in the costs of operating the health care system.

All of these are characteristics of the Canadian health care experience and, in each case, the savings to the government's budget are real but must be compared with the real though uncounted costs to Canadian health care consumers. While it is difficult to measure these costs, it is possible to measure the extent of queuing or the length of waiting lists in order to approximate the extent to which these costs may be mounting.

As noted, a number of health sector administrators are sceptical about the meaning and usefulness of waiting lists. They are sceptical both of the relevance of waiting lists as an indicator of the performance of the health care sector, and of the reliability of such data as a measure of the extent of rationing of health care services (Amoko, Modrow, and Tan, 1992). An earlier Fraser Institute publication evaluated various theoretical



issues related to hospital waiting lists, including their relevance as measures of “excess demand” (Globerman, 1990). This discussion defended the proposition that waiting lists are a potentially important barometer of performance in the health care sector. It also provided estimates of waiting lists for a set of hospital procedures in British Columbia. That study was followed in 1991 by a 5-province analysis similar to the initial study. Since 1992, all 10 provinces in Canada have been surveyed.

This report builds upon the Institute’s earlier studies by updating waiting list estimates for all provinces. In the next section, the relevant theoretical issues underlying these estimates are briefly reviewed.

## Waiting lists as measures of excess demand

One interpretation of hospital waiting lists is that they reflect excess demand for medical treatments performed in hospitals and that they therefore represent the substitution of “non-price” rationing of scarce resources for rationing by price. The rationing, in this case, takes place through enforced waiting for a given treatment or procedure. That such involuntary waiting is a form of rationing and not simply the postponement of a service can be seen from the fact that there are costs involved for those who are forced to wait. Data published in 1991 by Statistics Canada indicate that 45 percent of those who are waiting for health care in Canada describe themselves as being “in pain” (Statistics Canada, 1991). While not all of this pain would be alleviated by a visit to the doctor or by the surgical procedure for which the patient is waiting, some of it undoubtedly is the direct result of waiting. More recent Statistics Canada data show that over one million Canadians felt that they needed care but did not receive it in 1994, and that approximately 30 percent of these people were in moderate or severe pain (Statistics Canada, 1994/95).

A 1993 study by the Institute for Clinical Evaluative Studies at the University of Toronto categorized all patients waiting for hip replacements according to their pain levels (Williams and Naylor, 1993). The study found that in Ontario, 40 percent of those who were experiencing severe disability as well as 40 percent of those who suffered severe pain were waiting 13

months or more for hip surgery. A further 40 percent of those who were in severe pain waited 7 to 12 months, while only 14 percent of those in severe pain waited less than 4 months. While some of these patients might have been postponing surgery for their own reasons, the fact that they were experiencing severe pain probably means that most were being denied prompt access to treatment.

Moreover, adverse consequences from prolonged waiting are increasingly being identified and quantified in the medical and economics literatures. Beanlands et al. (1998) assessed the impact of waiting time for cardiac revascularization on mortality, cardiac events (e.g., heart attacks), and heart functioning. Patients who were revascularized earlier had significantly lower pre-operative mortality than those who were revascularized later. As well, those treated earlier had a lower rate of subsequent cardiac events (a difference which approached statistical significance), and significant improvement in heart function (unlike the patients receiving later treatment).

Similarly, Morgan, Sykora, and Naylor (1998) examined the effect of waiting time on death rates among patients waiting for heart surgery. In their analysis, those who waited longer for surgery, both in absolute terms and relative to the maximum wait recommended, had a higher probability of death while waiting. In a related inquiry, Rosanio et al. (1999) found that those who waited longer for coronary angiography were more likely to suffer the adverse consequences of cardiac hospitalization, heart attack, and cardiac-related death.

To express more concretely the cost of these effects on morbidity and mortality, economists have attempted to infer the monetary costs associated with waiting for treatment. Because paying for private care is the alternative to waiting for publicly-provided care in the UK, Cullis and Jones (1986) deduce that the cost of waiting for treatment in terms of reduced morbidity and mortality is, at a maximum, the cost of private care. Taking the actual costs of private care for a variety of important and common treatments, Cullis and Jones estimate that the cost of waiting in the UK in 1981 was about \$5,600 per patient. Alternatively, Globerman (1991) treats waiting time as a period during which productive activity (either for pay or in the household) is potentially precluded. Thus, the cost of a day of wait-

ing is the wage or salary forgone, for which Globberman uses the Canadian average wage. Only those who report experiencing “significant difficulties in carrying out their daily activities,” about 41 percent of those waiting, are counted as bearing the cost of lost wages, meaning that the cost per patient was about \$2,900 in Canada in 1989. Finally, Propper (1990) estimates the cost of waiting by an experiment in which subjects were asked to choose between immediate treatment (at a varying range of out-of-pocket costs), and delayed treatment (at a varying range of time intervals) at no out-of-pocket cost. From this, she determined that cost per patient was approximately \$1,100 in the UK in 1987.

The idea that waiting can impose costs can be considered via the analogy of wartime rationing of (essentially imposed waiting for) refrigerators or automobiles. Those who wanted refrigerators in 1940 but did not get them until 1946 were not denied the refrigerators; they only had to wait. Clearly, the issue of time is important in goods provision; delay of availability undoubtedly made those waiting worse off. This same logic also applies, sometimes vitally, in the provision of medical services.

## **Non-price rationing and methods of adapting**

Economists generally believe that non-price rationing of scarce resources is inefficient compared to rationing through the price system. In particular, prices are efficient mechanisms for signalling the relative scarcity and value of any good or service, thereby encouraging both producers and consumers to modify their behaviour accordingly. A rise in price occasioned by an increase in the demand for a particular medical procedure thus restrains some health care users, and effectively rations the existing supply. The price rise also sends out the signal that not enough health care is being supplied. Assuming that the price rise makes additional profits possible, there will be an increase in the supply of health care as suppliers change their behaviour to take advantage of the new possibility for profit. This supply response does not necessarily occur, however, if government-imposed waiting is the system of rationing employed.

Non-price rationing is also inefficient because it obscures differences in intensities of demand across

different sets of consumers. To the extent that some consumers desire a given product more than other consumers, strict non-price rationing might result in those consumers who desire the product less actually obtaining it. Efficiency, however, is promoted when those consumers who most value a product obtain it. For example, while a non-working spouse and his wife with the same medical condition might be equally restricted by a system of waiting lists, the working wife would probably be willing to pay a little more to be able to get back to work. The reason is that, in addition to the similar pain they both suffer, she also bears the additional cost of lost wages. In other words, with identical illnesses, the wife and husband do not have the same illness cost, including forgone wages, and thus place different values on the medical service that they are both denied by waiting.

At least two prominent qualifications can be raised about the social inefficiencies of rationing by waiting. One is the claim that, without rationing by waiting, many procedures and treatments are performed for which the social costs outweigh the social benefits. Thus, making patients wait is efficient, the argument goes, so that they are prevented from using services for which social costs outweigh social benefits. In these cases, however, it would be more desirable to discourage the consumption of a given amount of medical services by price rationing rather than by non-price rationing. In other words, let the working wife pay the increased costs of earlier treatment so that she can get back to work, and let her husband wait for an opening on the “elective” surgical waiting list. That is the appropriate approach unless one is prepared to argue that patients will pay any price to receive specific treatments (a view only supportable with regard to a few life-saving treatments) and that government bureaucrats are better able than consumers are to determine whether treatment is warranted.

A second qualification is that non-price rationing of a vital product such as medical services is fair and is perceived to be fair by society. To the extent that fairness is an objective, one might argue that non-price rationing provides collective benefits that outweigh the inefficiencies identified above. However, depending upon how the non-price rationing occurs, the resulting distribution of benefits may not be any improvement upon the price-rationing outcome. In fact, many inequities have been discovered in the current system.



Preferential access to cardiovascular surgery on the basis of “nonclinical factors” such as personal prominence or political connections is common (see Alter, Basinski, and Naylor, 1998). As well, residents of suburban Toronto and Vancouver have longer waiting times than do their urban counterparts (Ramsay, 1997) and residents of northern Ontario receive substantially lower travel reimbursement from the provincial government than do southern Ontarians when travelling for radiation treatment (Priest, 2000; and Ombudsman Ontario, 2001). Finally, low-income Canadians are less likely to visit medical specialists (Dunlop, Coyte, and McIsaac, 2000), including cardiac specialists, and have lower cardiac and cancer survival rates (Alter, et al. 1999; Mackillop, 1997) than higher-income Canadians. This evidence indicates that rationing by waiting is often a facade for a system of personal privilege, and perhaps even greater inequality than rationing by price. Moreover, perceived inequity in the distribution of medical services due to perceived inequity in income distribution can better be rectified by lump-sum income transfers, or subsidies for the purchase of health insurance by the poor, than by non-price rationing.

To be sure, there are many arguments that have been made both for and against private medical insurance systems (Blomqvist, 1979; McArthur, Ramsay, and Walker, 1996). For the purposes of this report, it is accepted that public provision of, and payment for, health care services is an institutionalized feature of Canadian society for the foreseeable future, and that extensive use of market pricing mechanisms to ration scarce capacity is unlikely. Under these circumstances, the extent of any excess demand and how that excess demand is rationed are relevant public policy issues, since the social costs associated with non-price rationing should be compared to whatever benefits are perceived to be associated with it.

There are several ways in which non-price rationing can take place under the current health care system, and many ways in which individuals adapt to rationing. One form of non-price rationing is a system of triage, the three-way classification system developed by Florence Nightingale for sorting the wounded on the battlefield in wartime. Under such a system, the physician sorts the patients into three groups: those who are beyond help, those who will benefit greatly from

immediate care (and suffer greatly or die without it), and those who can wait for care.

In peacetime, of course, there still are limited resources, requiring physicians to employ the triage system to make choices about the order in which people should be treated. In this setting, physicians effectively ration access by implicitly or explicitly rejecting candidates for medical treatment. In the absence of well-defined criteria, doctors might be expected to reject those candidates least likely to suffer morbid and mortal consequences from non-treatment and those whose life expectancy would be least improved by treatment. The British experience suggests that some doctors use a forgone-present-value-of-earnings criterion for selecting patients for early treatment, thereby giving lower priority to older or incurable critically ill patients (see Aaron and Schwartz, 1984). The experience of Canada’s largest cancer treatment centre suggests that doctors give priority for radiation treatment to people whose cancers may be curable rather than using radiation machines to provide palliative care or limited extensions to life expectancy (*Globe and Mail*, 1989, p. A1).

Canadians may be adapting to non-price rationing by substituting private services for unavailable public services and, specifically, by purchasing medical services outside the country. Provincial health care plans, in fact, cover emergency medical services as well as other services only available outside Canada. Possibly as a reflection of the increasing prevalence of waiting in the health care system, there are companies in Ontario and British Columbia that facilitate diagnostic testing and treatment in the United States (Taube, 1999), and American medical centres advertise in Canadian newspapers. This year’s survey of specialists (reported later in this study) found that 1.7 percent of patients received treatment in another country during 2000-01.

## Measuring rationing by waiting

Observers who argue that hospital waiting lists are not a particularly important social issue believe that such lists tend to be inaccurate estimates of rationing or that there is little social cost associated with enforced waiting. One frequently expressed concern is that doctors encourage a greater demand for medical care than is socially optimal. As a result, the critics argue, while

waiting lists exist for specific treatments, there are no significant social costs associated with rationing since many (perhaps most) individuals on waiting lists are not in legitimate need of medical treatment. In a related version of this argument, doctors are suspected of placing a substantial number of patients on hospital waiting lists simply to exacerbate the public's perception of a health care crisis so as to increase public funding of the medical system.

The available evidence on the magnitude of the demand induced by the suppliers for medical services is, at best, ambiguous (see Frech, 1996). The view that this is a modest problem is supported by the fundamental economic argument that competition among physicians will promote a concordance between the physician's interests and those of the patient. Effectively, general practitioners usually act as agents for patients in need of specialists, while specialists carry out the bulk of hospital procedures. Thus, general practitioners who mitigate medical problems while sparing patients the pain and discomfort of hospital treatments will enhance their reputations compared to those who unnecessarily encourage short-term or long-term hospitalization as a cure. This suggests that general practitioners have an incentive to direct patients to specialists who will not over-prescribe painful and time-consuming hospital treatments.

As well, specialists who place excessive numbers of patients on hospital waiting lists may bear direct costs. For example, those specialists may be perceived by hospital administrators to use a disproportionate share of hospital resources. This may make it more difficult for them to provide quick access to those resources for patients who, in their own view and those of their general practitioners, are in more obvious need of hospital treatment. Similarly, patients facing the prospect of a relatively long waiting list may seek treatment from other specialists with shorter waiting times.

An additional reason to be sceptical of claims that demand is induced by physicians is that it is implausible for an individual physician to believe that the length of his or her waiting list will significantly affect overall waiting time at the provincial or national level, thus leading to additional funding. Because this provides a clear incentive to "free-ride" on the potential wait-list-inflating responses of other physicians, there

is no reason for any individual physician to inflate waiting times.

Finally, an additional concern in measuring waiting is that hospital waiting lists are biased upward because reporting authorities double-count or fail to remove patients who have either already received the treatment or who, for some reason, are no longer likely to require treatment. The survey results, however, indicate that doctors generally do not believe that their patients have been double-counted.

In summary, while there are hypothetical reasons to suspect that hospital waiting list figures might overstate true excess demand for hospital treatments, the magnitude of any resulting bias is unclear and probably relatively small. Moreover, empirical verification of the Institute's survey numbers (to be discussed in the two "Verification..." sections) yields no evidence of upward bias.

## National hospital waiting list survey

In order to develop a more detailed understanding of the magnitude and nature of hospital waiting lists in Canada, the authors of this study conducted a survey of specialist physicians. Specialists rather than hospital administrators were surveyed because a substantial number of hospitals either do not collect waiting list data in a systematic manner, or do not make such data publicly available (Amoko, Modrow, and Tan, 1992). In those instances where data from institutions are available, they have been used to corroborate the evidence from the survey data.

The survey was conducted in all 10 Canadian provinces. Mailing lists for the specialists polled were provided by Cornerstone List Fulfillment. The specialists on these lists are drawn from the Canadian Medical Association's membership rolls. Specialists were offered a chance to win a \$2,000 prize (to be randomly awarded) as an inducement to respond. Specialists rather than general practitioners were surveyed because specialists have primary responsibility for health care management of surgical candidates. Survey questionnaires were sent to practitioners of 12 different medical specialties: plastic surgery, gynaecology, ophthalmology, otolaryngology, general surgery, neu-

rosurgery, orthopaedic surgery, cardiac and vascular surgery, urology, internal medicine, radiation oncology, and medical oncology. The original survey (1990) was pretested on a sample of individual specialists serving on the relevant specialty committees of the British Columbia Medical Association. In each subsequent edition of the survey, suggestions for improvement made by responding physicians have been incorporated into the questionnaires, and in 1994, radiation oncology and medical oncology were added to the 10 specialties originally surveyed.

The questionnaire used for general surgery is found in Appendix 1. The questionnaires for all of the specialties follow this format (with slight variations for medical and radiation oncology and cardiac and vascular surgery); only the procedures surveyed differ across the various specialty questionnaires. Medical specialists who indicate that their language of preference is French are sent French-language surveys. The data for this issue of *Waiting Your Turn* were collected between December 2000 and February 2001.

For the most part, the survey was sent to all specialists in a category. In the case of internal medicine in Ontario, approximately 500 names were randomly selected. The response rate in the five provinces initially surveyed in 1990 (British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia) was 20 percent. This year, the response rate was 27 percent overall, which is quite high for a mailed survey, and an increase from the 25 percent response rate of last year's survey.

## Methodology

The treatments identified in all of the specialist tables represent a cross-section of common procedures carried out in each specialty (definitions of procedures are found in Appendix 2). Specialty boards of the British Columbia Medical Association suggested the original list of procedures in 1990, and procedures have been added since then at the recommendation of survey participants.

At the suggestion of the Canadian Hospital Association, waiting time, since 1995, has been calculated as

the median of physician responses rather than the mean or average, as it had been prior to 1995 (Canadian Hospital Association, 1994). The disadvantage of using average waiting times is the presence of outliers (that is, extremely long waiting times reported by a few specialists), which pull the average upwards. Changes in extreme outlier responses can have dramatic effects on the mean value even if the vast majority of the responses still cluster around the same median value. Using the median avoids this problem. The median is calculated by ranking specialists' responses in either ascending or descending order, and determining the middle value. For example, if five neurosurgeons in New Brunswick respond, the median value is the third highest (or third lowest) value among the five.<sup>2</sup> This means that if the median wait reported is 5 weeks for a procedure, half of the specialists reported waits of more than 5 weeks, while half of the specialists reported waits of less than 5 weeks.

The major findings from the survey responses are summarized in tables 2 through 16. Table 2 reports the total median time a patient waits for treatment from referral by a general practitioner. To obtain the provincial medians—found in the last row of table 2 (and of tables 3, 4, and 13), and national median—found in the last column of table 2 (and of tables 3, 4, and 13), the 12 specialty medians are each weighted by a ratio: the number of procedures done in that specialty in the province divided by the total number of procedures done by specialists of all types in the province.

Tables 3 and 4 present median waiting time compared among specialties and provinces. Table 3 summarizes the first stage of waiting, that between the referral by a general practitioner and consultation with a specialist. Table 4 summarizes the second stage of waiting: that between the decision by a specialist that treatment is required and the treatment being received.

Tables 5a through 5l report the time a patient must wait for treatment, where the waiting time per patient is the median of the survey responses. The provincial weighted medians reported in the last line of each table are calculated by multiplying the median wait for each procedure (e.g., mammoplasty, neurolysis, etc., for plastic surgery) by a weight—the fraction of all sur-

2 For an even-numbered group of respondents, say, 4 physicians, the median is the average of the two middle values—in this example, the average of the second and third highest values.

geries within that specialty constituted by that procedure, with the sum of these multiplied terms forming the weighted median for that province and specialty.

Table 6 provides the percentage change in median waits to receive treatment after the first appointment with a specialist between the years 1999 and 2000-01. Table 7 provides frequency distribution data indicating the proportion of waiting times that fall within various lengths of time among provinces.

Table 8 presents the estimated number of patients waiting, compared among specialties and provinces. Because the questionnaires omit some procedures that are less commonly performed, the sum of the numbers of people waiting for each specialty in table 28b is, of course, an underestimate of the total number waiting.

The number of people waiting for non-emergency surgeries that were not included in the survey was also calculated, and is listed in table 8 as the “residual” number of patients waiting. To estimate the residual number of people waiting, the number of non-emergency operations not contained in the survey that are done in each province annually must be used. This residual number of operations (compiled from the CIHI data) is then divided by 52 (weeks) and multiplied by each province’s weighted average waiting time.

Tables 9a through 9l report the estimated number of patients waiting for surgery. To allow for interprovincial comparisons, these tables also report the number of people waiting for surgery per 100,000 population.

To estimate the number of individuals waiting for a particular surgery, the total annual number of procedures is divided by 52 (weeks per year) and then multiplied by the average weeks waited. This means that a waiting period of, say, one month, implies that, on average, patients are waiting one-twelfth of a year for surgery. Therefore, the next person added to the list would find one-twelfth of a year’s patients ahead of him or her in the queue. The main assumption underlying this estimate is that the number of surgeries performed will neither increase nor decrease within the year in response to waiting lists.

In an effort to provide a more accurate product, we have made a significant improvement this year to the data used to estimate the numbers of patients waiting. Each year, more and more procedures are done on a same-day surgery basis. This year the Institute purchased discharge abstract data from the Canadian Institute for Health Information (CIHI) for 1999-2000, rather than morbidity data as in past years. This report provides a count of the number of acute inpatient and same-day surgery discharges annually in each province.

Health departments in Manitoba and Quebec do not provide CIHI with discharge data. Alberta Health does not provide CIHI with discharge data for same day surgeries. CIHI assembles Manitoba data (see table 12) based on data submitted directly to CIHI by Salvation Army Grace Hospital, St. Boniface General Hospital, Victoria General Hospital, Seven Oaks General Hospital, Health Sciences Centre, and, Winnipeg Children’s Hospital. Other facilities, performing a significant number of surgeries in Manitoba, are excluded.<sup>3</sup> A pro-rated estimate of these procedures in Alberta, Manitoba and Quebec was made using the 1998-1999 number of separations from morbidity data published by CIHI.

There are a number of minor problems in matching CIHI’s categories of operations to those reported in the survey. In a few instances, an operation such as rhinoplasty is listed under more than one specialty. In these cases, the number of patients annually undergoing this type of operation is divided among specialties according to the proportion of specialists in each of the overlapping specialties; e.g., if plastic surgeons constitute 75 percent of the group of specialists performing rhinoplasties, then the number of rhinoplasties counted under plastic surgery is the total multiplied by .75. A second problem is that, in some cases, an operation listed in the questionnaire has no direct match in the CIHI tabulation. An example is ophthalmological surgery for glaucoma, which is not categorized separately in the discharge abstract data. In these cases, no estimate is made of the number of patients waiting for these operations.

3 As an example, the Misericordia Eye Centre of Excellence performs over 90 percent of cataract surgeries in Manitoba. Source: Bellan *et al.* (2001).



**Chart 1: Waiting Times in British Columbia, Time to Exhaust List of Patients Waiting Reported by Ministry**

Specialty	Median Wait <sup>1</sup>	Patients Waiting <sup>2</sup>	Procedures <sup>3</sup>	Procedures/Week	Expected Wait <sup>4</sup>
Plastic Surgery	5.0	4,076	7,149	183	22.2
Gynaecology	3.1	5,216	20,840	534	9.8
Ophthalmology	10.4	14,320	22,794	584	24.5
Otolaryngology	6.0	4,729	10,999	282	16.8
General Surgery	3.1	9,676	31,978	820	11.8
Neurosurgery	2.4	1,017	2,835	73	14.0
Orthopaedic Surgery	6.9	12,983	21,973	563	23.0
Urology	4.2	5,461	18,315	470	11.6

Source: BC Ministry of Health, Surgical Wait List web site.

<sup>1</sup>Retrospective median wait at December 31, 2000.

<sup>2</sup>Patients waiting at December 31, 2000.

<sup>3</sup>Procedures performed April 1 to December 31, 2000.

<sup>4</sup>Number of weeks to exhaust the list of patients waiting (patients waiting ÷ procedures/week).

The estimates of patients waiting are more consistent with those produced by other sources as a result of using discharge abstract data. We expect, in coming years, to produce further improvement in our estimates for the provinces of Manitoba, Alberta and Quebec. We also anticipate being able to improve upon our estimates for ophthalmological surgery, where a significant number of the surgeries occur in private facilities and, as a result, are not included within the discharge data submitted to, or reported by, CIHI.

Table 10 summarizes the estimated number of patients waiting per 100,000 population among specialties and provinces. Table 11 provides a comparison of the estimated number of patients waiting for the years 1999 and 2000-01. Table 12a provides a summary of the number of acute inpatient discharges by procedure while table 12b summarizes the number of same day surgery discharges by procedure.

Table 13 summarizes clinically “reasonable” waiting times among provinces and specialties.

Tables 14a through 14l report the median values for the number of weeks estimated by specialists to be clinically reasonable lengths of time to wait for treatment after an appointment with a specialist. The methodology used to construct these tables is analogous to that used in tables 5a through 5l.

Table 15 summarizes the actual versus clinically “reasonable” waiting times among provinces and specialties. Table 16 summarizes the percentage of patients reported as receiving treatment outside Canada among provinces and specialties.

## Verification of current data with governments

In April 2001, preliminary data were sent across Canada to provincial ministries of health, and provincial cancer and cardiac agencies. As of July 2001, substantive replies were received from provincial health ministries in Alberta and Saskatchewan, and from cancer agencies in British Columbia, Alberta, Ontario, and Newfoundland. The BC Ministry of Health and the Cardiac Care Network of Ontario publish data on their web sites providing median waiting time and the numbers of patients waiting.

Many provinces measure the waiting time as the time between date on which a treatment is scheduled (or booked) and the date of the treatment. The Fraser Institute intends to assist those seeking treatment, and those evaluating waiting times, by providing comprehensive data on the entire wait a person seeking treatment may expect. Accordingly, the Institute measures the time between the decision of the specialist



**Chart 2: Comparison of Reported Waiting Times in British Columbia, Specialist to Treatment**

Specialty	BC Health Median Wait <sup>1</sup>	BC Health Expected Wait <sup>2</sup>	Fraser Institute Median Wait <sup>3</sup>
Plastic Surgery	5.0	22.2	20.2
Gynaecology	3.1	9.8	8.4
Ophthalmology	10.4	24.5	19.5
Otolaryngology	6.0	16.8	11.6
General Surgery	3.1	11.8	8.6
Neurosurgery	2.4	14.0	6.6
Orthopaedic Surgery	6.9	23.0	19.3
Urology	4.2	11.6	8.8

Sources: BC Ministry of Health, Surgical Wait List web site and Fraser Institute national hospital waiting list survey.

<sup>1</sup>Retrospective median wait at December 31, 2000.

<sup>2</sup>Number of weeks to exhaust the list of patients waiting (patients waiting ÷ procedures/week).

<sup>3</sup>Prospective median wait, National hospital waiting list survey, 2001.

that treatment is required and treatment being received.

## British Columbia

In British Columbia, the Ministry of Health defines waiting time in a manner that, by necessity, makes its estimates smaller than those in this survey. Specifically, the Ministry defines a wait as the interval between the time the procedure is formally scheduled and the time it is actually carried out. Not only does this definition omit waiting time between GP and specialist (which the Institute's survey includes in the total), but it understates the patient's actual waiting time between seeing a specialist and actually receiving treatment. Nevertheless, the Ministry suggests that the degree of understatement is small: "We believe that in most cases surgeons forward ... booking forms without delay once a decision to perform the procedure is taken, and that hospitals receive them within a day or two" (Kelly, 1999). However, because most hospitals only book a few months ahead, this method of measuring waiting lists undoubtedly omits a substantial fraction of patients with waits beyond the booking period (see Ramsay, 1998).

Examination of the data reported on the BC Ministry of Health's web site on surgical waiting times reveals that wait times appear very low given the number of people reported as waiting for treatment and the reported

number of procedures. This is summarized in charts 1 and 2.

For example, the Ministry reports that 4,076 patients were waiting for plastic surgery on December 31, 2000, and that there were 7,149 plastic surgeries performed between April 1 and December 31, 2000 (a rate of 183 procedures per week). Assuming that all patients on the list end up having the surgery (most, but not all, will), and that they have one procedure each, it would take 22.2 weeks (the "expected" wait) to empty the plastic surgery waiting list of those patients waiting at December 31, 2000. The government reported a wait of only 5.0 weeks. This simply cannot be correct.

Either there are fewer people waiting, a lot more surgeries being completed, or the government's number of a 5-week wait for plastic surgery is flat wrong! Specialty-by-specialty, month-in and month-out, the median wait figures reported by the Ministry remain consistently, and surprisingly, lower than expected given the number of patients waiting and the number of procedures performed per week.

At December 31, 2000, the government's reported median wait averaged 30 percent of the "expected" wait—ranging from 17 percent (for neurosurgery) to 42 percent (for ophthalmological surgery). The Institute median wait data, meanwhile, averages 76 percent of the "expected" wait.

The comparison between government median wait and "expected" wait data would suggest that as many as half of patients give up the wait or go elsewhere for treatment—or it suggests that the government's numbers are not consistent.

It is interesting to note, however, that the waiting times that are "expected" from the government's own calculation of the number of people waiting and the number of procedures performed is broadly consistent with The Fraser Institute's survey estimates of waiting times. While it was not their intention to do so, the government of British Columbia has actually provided

independent verification of The Fraser Institute waiting list survey.

## Saskatchewan

Saskatchewan Health (Donnelly, 2001) reports median waits (in weeks) for Saskatchewan that are significantly lower than those obtained from the national hospital waiting list survey. The department reports average waits that are generally closer, but most often still lower, than those reported by the Institute. The differences are particularly apparent for gynaecology, otolaryngology, and orthopaedic surgery. The Institute (30.9 weeks) and the department (median 29.0 weeks and average 31.4 weeks) are in accord on the wait time for ophthalmological surgery. The department reports a retrospective wait for procedures requiring the use of an operating theatre for the Saskatoon and Regina health districts. Procedures occurring in other locations in the hospital are not tracked through their process. As well, definitive comparisons are difficult to make given that the Saskatchewan Health data is urban-based, and thus not potentially representative of longer waiting times which may exist outside of urban centres (see Ramsay, 1997 for a related finding), although Saskatchewan Health offers the disclaimer that,

[s]eventy-two per cent of all surgery in Saskatchewan is performed in these two tertiary centres, including all cardiac surgery, neurosurgery and plastic surgery. It is also worth noting that these two tertiary hospital centres provide over half of all the surgery provided to residents of other health districts. The smaller centres where the remaining 28 percent of the province's surgery are performed do not yet routinely report waiting list information to the Department. However, it is our understanding based on our work with them and information they have provided to us on an occasional basis that waits for surgery there are generally shorter than in Saskatoon and Regina, but waits also vary by specialist. (Donnelly, 2001)

## Verification and comparison of earlier data with independent sources

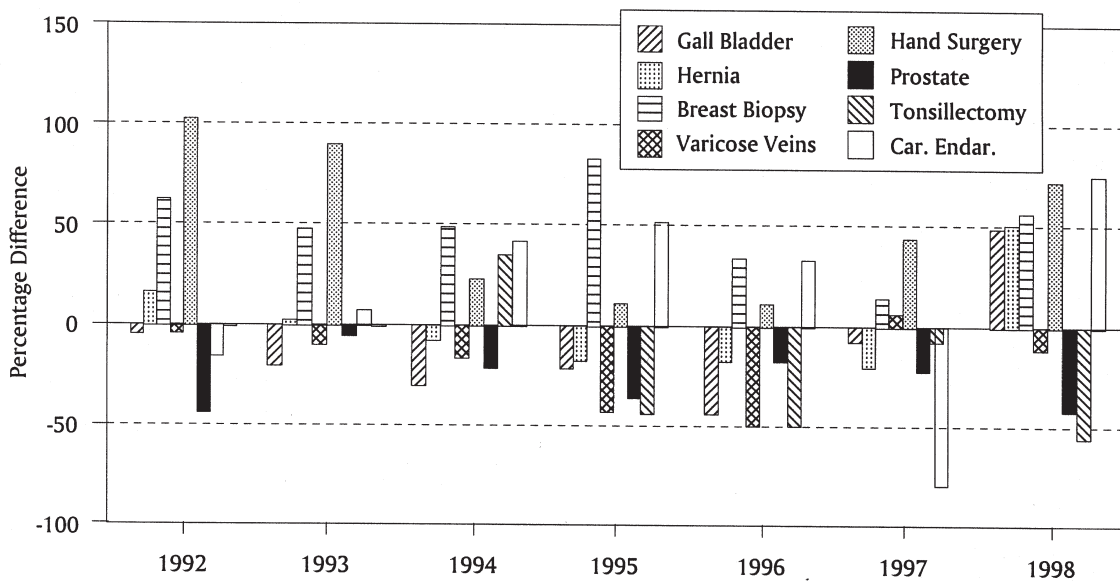
The waiting list data can also be verified by comparison with independently-computed estimates, primarily found in academic journals. Six studies predate the Institute's data series, and thus offer informal basis for comparison. A brief survey of Ontario hospitals undertaken in October 1990 for the General Accounting Office of the United States Government (1991) indicates that patients experienced waits (after seeing a specialist and before receiving treatment) for elective orthopaedic surgery ranging from 8.5 weeks to 51 weeks, for elective cardiovascular surgery ranging from 1 to 25 weeks, and for elective ophthalmology surgery ranging from 4.3 to 51 weeks. The new survey data presented here (in table 4) finds typical Ontario patients waiting 10.2 weeks for orthopaedic surgery, 5.9 weeks for elective cardiovascular surgery, and 16.9 weeks for ophthalmology procedures in 2000-01.

A study of waiting times for radiotherapy in Ontario between 1982 and 1991 (Mackillop et al., 1994) found that the median waiting times between diagnosis by a general practitioner and initiation of radiotherapy for carcinoma of the larynx, carcinoma of the cervix, and non-small-cell lung cancer were 30.3 days, 27.2 days, and 27.3 days, respectively. In Ontario in 2000-01, the wait for radiotherapy was 49 days for each of these three cancer types (see tables 3 and 5k). However, the 2000-01 estimate that the median wait for prostate cancer treatment was 74 days is much lower than Mackillop's estimate of 93.3 days.

A study of knee replacement surgery in Ontario found that in the late 1980s, the median wait for an initial appointment with an orthopaedic specialist was 4 weeks, while the median waiting time to receive a knee operation was 8 weeks (Coyte et al., 1994). By comparison, the Institute's survey finds that in Ontario in 2000-01, the wait to see an orthopaedic specialist was 10.3 weeks (see table 3) and the wait to receive hip or knee surgery was 16 weeks (see table 5g).

Examination of waiting times for particular cardiovascular treatments in 1990 by Collins-Nakai et al. (1992) focused on three important procedures. They estimated median Canadian waiting times of 11 weeks for

**Chart 3: Fluctuation in Waiting Times: Difference between Manitoba Centre for Health Policy Evaluation and The Fraser Institute**



Source: DeCoster *et al.* (1998 and 2000); and The Fraser Institute national hospital waiting list surveys.

angioplasty and 5.5 months for cardiac bypass surgery. In comparison, 2000-01 median waiting times for “angiography/angioplasty” ranged from 5 weeks in Prince Edward Island to 12 weeks in Manitoba (see table 5j), and for elective cardiac bypass ranged from 4 weeks in Nova Scotia to 52 weeks in Newfoundland (see table 5h).

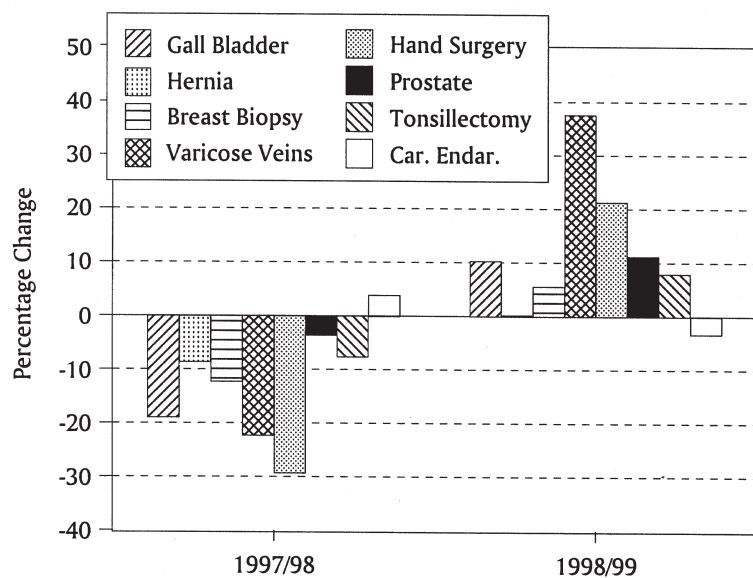
A study of waiting times for selected cardiovascular procedures in 1992 found that in Canada, 13.3 percent of waiting times for elective coronary bypass surgery fell in the 2-to-6-week range, with 40 percent in the 6-to-12-week range, 40 percent in the 12-to-24-week range, and 6.7 percent in the over-36-weeks range (Carroll *et al.*, 1995). Again, the 2000-01 data indicated that the provincial waiting time for elective bypass surgery (between specialist consultation and treatment) ranged from 4 weeks in Nova Scotia to 52 weeks in Newfoundland (see table 5h).

Regarding waiting time for coronary artery bypass in Ontario in the early 1990s, Morgan *et al.* (1998) discovered that the median and mean waits were 18 and 38 days, respectively. By comparison, the 2000-01 Ontario survey data reveal waiting times for emergent, urgent, and elective bypass surgery of 0.2, 1, and 7 weeks, respectively (see table 5h).

Three more recent studies permit direct comparison of Fraser Institute waiting times and independently-derived estimates. DeCoster *et al.* (1998 and 2000) obtained median waiting times for 8 common surgical procedures in Manitoba. Seven of those 8 procedures—cholecystectomy, hernia repair, excision of breast lesions, varicose veins stripping and ligation, transurethral resection of the prostate, tonsillectomy, and carotid endarterectomy—are also contained in The Fraser Institute’s annual survey. For 5 of these 7, Fraser Institute estimates of waiting time in Manitoba for 1995 (see Ramsay and Walker, 1996) were lower than the values found by DeCoster *et al.* In only one case—carotid endarterectomy—was the Institute measure higher, and for cholecystectomy the two estimates were equal. Again, in 1999, 5 of 7 Fraser Institute estimates of waiting time in Manitoba (see Zelder with Wilson, 2000; and chart 3) were lower than the values found by DeCoster *et al.* The Institute measures were higher for surgery for varicose veins (10.0 versus 8.4 weeks) and tonsillectomies (10.0 versus 7.9 weeks).

The data gathered by the Manitoba Centre for Health Policy Evaluation provide further valuable insights about the reliability of The Fraser Institute waiting list survey. One of the concerns of the Institute researchers over the years has been the apparent variability of the

**Chart 4: Fluctuation in Waiting Times: Manitoba Centre for Health Policy Evaluation Wait Times, 1997/98 and 1998/99**



Source: DeCoster *et al.* (1998 and 2000).

waiting time estimates. The normal presumption in measuring process fluctuations is that they will be modest in comparison to the size of the process being measured. This would predict swings in waiting times of, say, 10 or 15 percent from year to year. When numbers larger than this are encountered it raises questions about whether the measurement method is subject to “noise.”

Since for nearly a decade The Fraser Institute’s waiting list measurements have been the only systematic ones available, the Institute has had no way to discern whether the sometimes dramatic swings in the measurements were real or induced by the sampling procedure. The measurements by the Manitoba Centre that are based on individual patient experience cast some welcomed light on the matter.

As chart 4 shows, the data from DeCoster *et al.* (2000) for two adjacent measurement periods—1997/98 and 1998/99—reveal very wide swings in the ex post waiting time experienced by patients. Hand surgery wait times fell by 30 percent in 1997/98 only to rebound by 20 percent in 1998/99, a total swing of 50 percent. Varicose vein surgery waits swung by nearly 60 percent in the same period and gall bladder surgery waits by nearly 30 percent. Since these ex post surgery waiting

times do not include the pre-booking wait times that specialists record in The Fraser Institute survey data, it is likely that the swings estimated by the Manitoba data under-estimate the extent of the actual fluctuation.

Looking at the Manitoba data over the whole period from 1992/93 to 1999/99 as we did in chart 3, and regarding each procedure and each year as a separate comparison, we find that overall, the Manitoba estimates are greater than or equal to Fraser Institute estimates in 55 percent of cases and less than Fraser Institute estimates in 45 percent of cases. In conjunction with the information about volatility provided by the Manitoba data, and the timing differences between the estimates, it would seem that the two methods produce estimates of waiting times which are more or less consistent.

Bellan *et al.* (2001) reported on the Manitoba Cataract Waiting List Program recording a median wait of 28.9 weeks for cataract surgery in November 1999. They report that estimates of waiting time for cataract surgery by both The Fraser Institute and the Manitoba Centre for Health Policy and Evaluation have been too low.

Mayo *et al.* (2001) studied the waiting time between initial diagnosis and first surgery for breast cancer (mastectomies and lumpectomies) in Quebec between 1992 and 1998. Their finding was that there was a significant increase in waiting time during that period. As initial diagnosis is not necessarily at the time of referral by the general practitioner, the time segment is not necessarily comparable to the Institute’s measurement of the total wait time between the general practitioner and treatment. Nonetheless, Mayo *et al.* found the wait time in 1992 to be longer than the Institute’s estimate, and in 1998, they found the wait time to be considerably longer (10.3 versus 5.0 weeks).

Bell *et al.* (1998) surveyed the two largest hospitals in every Canadian city of 500,000 or more<sup>4</sup> in 1996-97 to learn their waiting times for 7 procedures, many of which were diagnostic. Among these, 3 were also collected by the Institute—magnetic resonance imaging,



colonoscopy, and knee replacement. In all three cases, the median waiting times found by Bell et al. exceeded the Institute's Canada-wide waiting times (for these, see Ramsay and Walker, 1997).

Liu and Trope (1999) assessed the length of wait for selected ophthalmological surgeries in Ontario in late 1997. Three of these procedures are also tracked in the Institute's survey—cataract extraction, corneal transplant, and pterygium excision. In all three cases, the Institute figures (see Ramsay and Walker, 1998) were lower than the values independently derived by Liu and Trope.

In summary, 23 independent waiting time estimates exist for comparison with recent Institute figures. In 19 of 23 cases, the Institute figures lie below the comparison values, with only one instance in which the Institute value exceeds the comparison value, and one case in which they are identical. This evidence strongly suggests that the Institute's measurements are not biased upward, but, if anything, may be biased downward, understating actual waiting times.

Further confirmation of the magnitude of Canadian waiting times can be derived from 5 international comparative studies (the first 4 of which are noted above). Coyte et al. (1994) found that in the late 1980s, Canadians waited longer than Americans for orthopaedic consultation (5.4 versus 3.2 weeks) and for surgery post-consultation (13.5 versus 4.5 weeks). Collins-Nakai et al. (1992) discovered that in 1990, Canadians waited longer than Germans and Americans, respectively, for cardiac catheterization (2.2 months, versus 1.7 months, versus 0 months), angioplasty (11 weeks, versus 7 weeks, versus 0 weeks), and bypass surgery (5.5 months, versus 4.4 months, versus 0 months). Another study of cardiac procedures, by Carroll et al. (1995), revealed that in 1992 Canadians generally waited longer for both elective and urgent coronary artery bypass than did Americans (whether in private or public Veterans' Administration hospitals) and Swedes, and longer than Americans (in either hospital type) for either elective or urgent angiography. At the same time, Canadians had shorter waits than the British for elective and urgent bypasses and angiographies, and shorter waits than Swedes for both

types of angiographies. Finally, Jackson, Doogue, and Elliott (1998) compared waiting time for coronary artery bypass between New Zealand in 1994-95 and Ontario in the same period, using data from Naylor et al. (1995). They found that the New Zealand mean and median waiting times (232 and 106 days, respectively) were longer than the Canadian mean and median (34 and 17 days, respectively).

## Analysis of cardiovascular surgery

Cardiovascular disease is a degenerative process and the decline in the condition of a candidate for cardiac surgery is gradual. Under the Canadian system of non-price-rationed supply, some cardiac surgery candidates are replaced by patients with non-cardiac conditions that require immediate care. This is not a direct displacement but rather a reflection of the fact that hospital budgets are separated into sub-budgets for "conventional illness" and for other high-cost interventions such as cardiac bypass. Only a certain number of the latter are included in a hospital's overall annual budget. Complicating matters is the ongoing debate about whether cardiac bypass surgery actually extends life. If it only improves the quality of life, it may be harder to justify increased funding.

The result has been lengthy waiting lists, often as long as a year or more, followed by public outcry, which in turn has prompted short-term funding. Across Canada, many governments have had to provide additional funding for heart surgery in their provinces. In the past, American hospitals have also provided a convenient short-term safety valve for burgeoning waiting lists for cardiac operations. The government of British Columbia contracted Washington State hospitals to perform some 200 operations in 1989 following public dismay over the 6-month waiting list for cardiac bypass surgery in the province.

Wealthy individuals, furthermore, may avoid waiting by having heart surgery performed in the United States. A California heart-surgery centre has even advertised its services in a Vancouver newspaper. Throughout Canada in 2000-01, 3.9 percent of cardiac

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4 Although not identified by name, this list was presumably comprised by Montreal, Toronto, Winnipeg, Calgary, Edmonton, and Vancouver.



patients inquired about receiving treatment in another province, while 3.1 percent asked about treatment in another country. From these inquiries, 2.1 percent received treatment in another province and 1.2 percent received treatment in another country.

Excess demand and limited supply have led to the development of a fairly stringent system for setting priorities in some hospitals. In some provinces, patients scheduled for cardiovascular surgery are classified by the urgency of their medical conditions. In these cases, the amount of time they wait for surgery will depend upon their classifications. Priorities are usually set based on the amount of pain (angina pectoris) that patients are experiencing, the amount of blood flow through their arteries (usually determined by an angiogram test), and the general condition of their hearts.

Since 1993, the cardiovascular surgery questionnaire, following the traditional classification by which patients are prioritized, has distinguished among emergent, urgent, and elective patients. However, in discussing the situation with physicians and hospital administrators, it became clear that these classifications are not standardized across provinces. British Columbia and Ontario use a 9-level prioritization system developed in Ontario. Other provinces have a 4-level system, with two urgent classifications. Decisions as to how to group patients were thus left to responding physicians and heart centres. Direct comparisons among provinces using these categories should, therefore, be made tentatively, while recognizing that this survey provides the only comprehensive comparative data available on the topic.

As noted earlier in the text, efforts were made again this year to verify the cardiovascular surgery survey results using data from provincial health ministries and from provincial cardiac agencies. These data are noted in the tables.

The survey estimates of the numbers of people waiting for heart surgery were derived in the same manner as those for the other specialties, using average waiting time for urgent, rather than elective, patients. The average waiting time for urgent patients was used instead of the emergent or elective averages because it is the intermediate of the three measures.

In 1991, an Ontario panel of 16 cardiovascular surgeons attempted to outline explicit criteria for prioritizing patients (Naylor et al., 1991). The panel also suggested intervals that were safe waiting times for coronary surgery candidates. This process generated 9 categories of treatment priority. For comparative purposes, it was necessary to collapse their 9 priority categories down to the 3 used in this study. Once this was done, their findings suggested that emergent patients should be operated on within 3 days (0.43 weeks). Four of the 9 provincial median emergent wait times for coronary artery bypass in this year's survey fall outside of this range (see table 5h). However, physicians in these provinces may define "emergent" to include patients that might be considered "urgent" in other provinces. According to the Ontario panel, urgent surgeries should be performed within 6 weeks. By comparison, the median waits for urgent cardiac surgery in British Columbia and Alberta fall outside of this range. Finally, the Ontario panel suggests that elective surgeries be performed within a period of 6 months. Newfoundland currently falls outside of this time frame.

Prior to 1998, this Ontario panel's waiting-time estimates were used as the measure of the clinically reasonable wait for patients requiring cardiovascular surgery. Since 1998, cardiovascular surgeons were asked to indicate their impression of the clinically reasonable length of time for their patients to wait. This year's survey found specialists to be much less tolerant of long waits than the Ontario panel. This year's respondents felt that urgent patients should only wait 1.3 weeks for surgery (instead of 6 weeks), and that patients requiring elective cardiovascular surgery should only wait 5.3 weeks (instead of 6 months; see table 13).

## **Survey results: estimated waiting in Canada**

The total waiting time for surgery is composed of two segments: waiting after seeing a general practitioner before consultation with a specialist, and subsequently, waiting to receive treatment after the first consultation visit with a specialist. The results of the most recent survey from 2000-01 provide details, by province, of total waiting and of each segment.

### Waiting time between general practitioner referral and specialist appointment

Table 3 indicates the median number of weeks that patients wait for initial appointments with specialists after referral from their general practitioners or from other specialists. For Canada as a whole, the waiting time to see a specialist, 7.2 weeks in 2000-01, has increased by 2.3 weeks, or 47 percent, since 1999, and by 95 percent since 1993, when it was 3.7 weeks (see graphs 1 and 2). The weighted medians, depicted in chart 5 and graph 1, reveal that Saskatchewan and Prince Edward Island have the shortest waits in the country for appointments with specialists (6.3 weeks), while New Brunswick has the longest (16.2 weeks). In all ten provinces, the waiting time to see a specialist has increased since 1999. Looking at particular specialties, most waits for specialists' appointments are less than two months in duration (see table 3). However, there are a number of waiting times of 12 weeks or longer: to see a plastic surgeon in British Columbia, Alberta, Saskatchewan, Manitoba, New Brunswick, Nova Scotia, Prince Edward Island, or Newfoundland; to see an ophthalmologist in Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, or Newfoundland; to see a neurosurgeon in Saskatchewan, Manitoba, Ontario, Quebec, or New Brunswick; to see an orthopaedic surgeon in British Columbia, Alberta, Saskatchewan, New Brunswick, or Newfoundland; and to see an internist in Prince Edward Island.

This survey coincided with closures of doctor's offices in New Brunswick in a dispute between doctors and the provincial government over compensation.

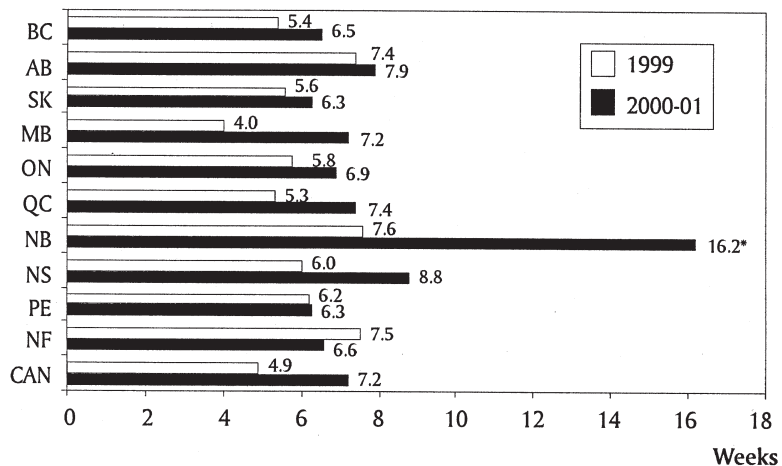
### Waiting time between specialist consultation and treatment

Tables 5a through 5l contain data on waiting time between specialist consultation and treatment for each of the 12 special-

ties surveyed, including subspecialty breakdowns for the different procedures contained under each specialty heading. These tables indicate that residents of all provinces surveyed wait significant periods of time for most forms of hospital treatment. While some treatments require short waits, most procedures require waits of at least a month. The data in tables 5a through 5l are summarized in table 4 and chart 6 as weighted medians for each specialty for each province and for Canada. For Canada as a whole, the wait for treatment after having seen a specialist rose from 8.2 weeks in 1999 to 9 weeks in 2000-01. This portion of waiting has increased by 61 percent since 1993, when the wait for treatment after having seen a specialist was 5.6 weeks (see graphs 3 and 4). Ranking the provinces according to the 2000-01 weighted medians indicates that the longest median wait for surgery after visiting a specialist occurs in Saskatchewan (22.6 weeks) and the shortest is found in Ontario (7 weeks). The median waits for treatment by province are illustrated in chart 6. Among the specialties, the longest Canada-wide waits are found in ophthalmology (16.3 weeks), orthopaedic surgery (15 weeks), and plastic surgery (13.7 weeks), while the shortest waits exist for medical oncology (2.0 weeks), urgent cardiovascular surgery (2.8 weeks), and urology (4.7 weeks); see table 4.

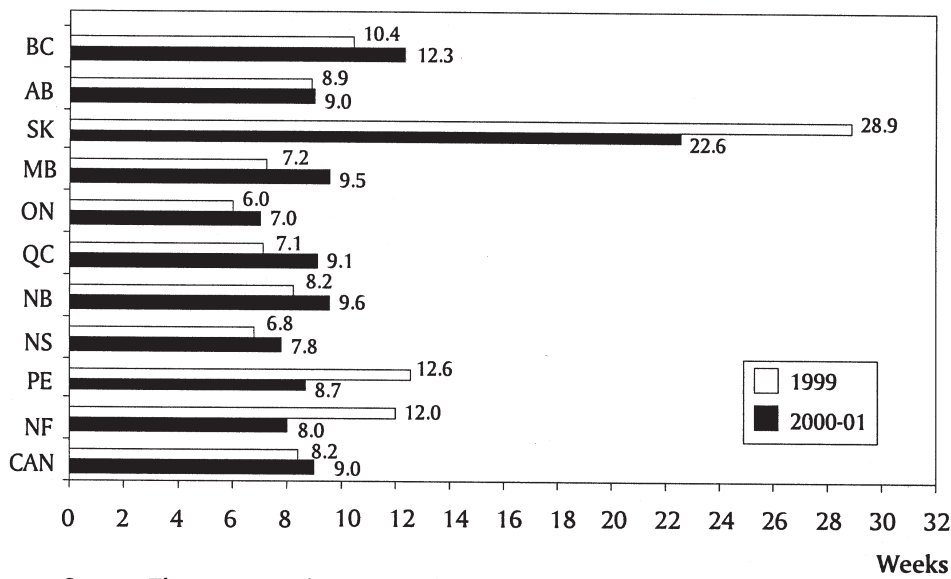
Table 7 presents a frequency distribution of the median waits for surgery by province and by region. In all prov-

**Chart 5: Waiting by Province in 1999 and 2000-01: Weeks Waited from Referral by GP to Appointment with Specialist**



\*Note: Survey was taken during doctor office closures which were due to a compensation dispute.  
Source: The Fraser Institute, annual waiting list survey, 2000 and 2001.

**Chart 6: Waiting by Province in 1999 and 2000-01:  
Weeks Waited from Appointment with Specialist to Treatment**



Source: The Fraser Institute, annual waiting list survey, 2001.

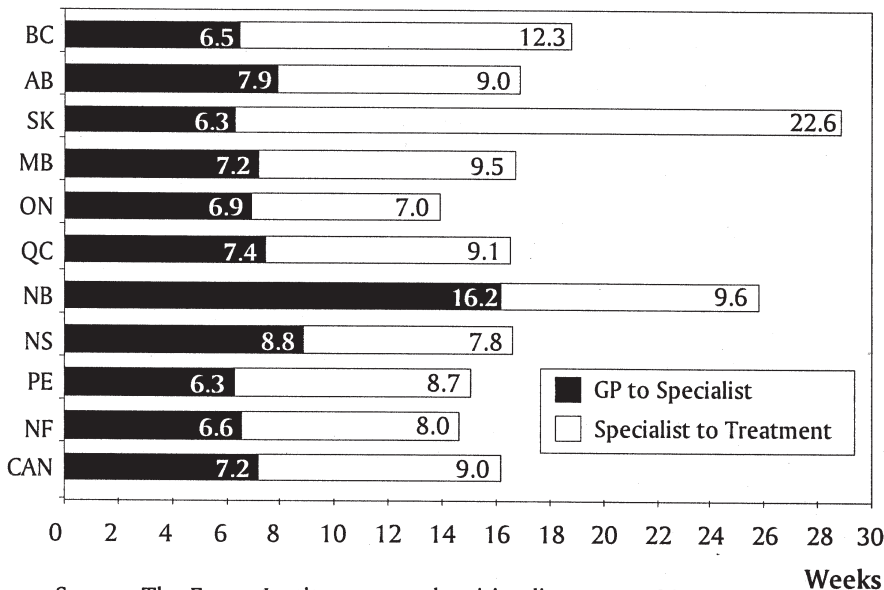
toba (5.5 percent), and waits of 1 year or more are least frequent in Manitoba and Prince Edward Island (0.8 percent) and most frequent in Saskatchewan (28.1 percent).

Comparisons of the 1999 and 2000-01 waiting times for treatment are located in table 6. This year's study indicates an overall increase in the waiting time between consultation with a specialist and treatment in seven provinces, and decreases in Newfoundland (33%), Prince Edward Island

inches, the majority of operations have waiting lists of less than 13 weeks. Ontario performs the highest proportions of surgeries within 13 weeks (85.6 percent) and Newfoundland within 8 weeks (63.1 percent). Waits of 26 weeks or more are least frequent in Mani-

(31%), and Saskatchewan (22%) (table 6; chart 6). At the same time, between 1999 and 2000-01 the median wait increased by 32 percent in Manitoba, 28 percent in Quebec, 19 percent in British Columbia, and 17 percent in New Brunswick and Ontario.

**Chart 7: Median Wait by Province in 2000-01:  
Weeks Waited from Referral by GP to Treatment**

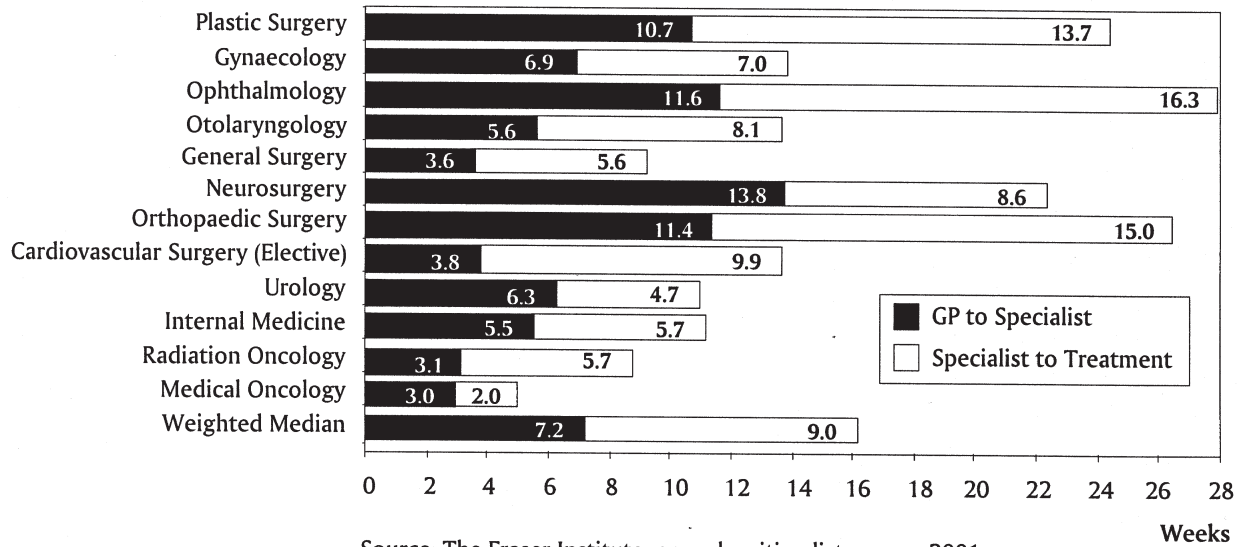


Source: The Fraser Institute, annual waiting list survey, 2001.

**Total waiting time between general practitioner referral and treatment**

While the data on these two segments of waiting time convey only partial impressions about the extent of health care rationing, a fuller picture is provided by information on the sum of those two segments, the total waiting time. This overall wait records the time between the referral by a general practitioner and the time that the required surgery is performed. Table 2 and chart 7 present these total wait times for each province in 2000-01. For Canada as a whole, total waiting time rose to 16.2 weeks in

**Chart 8: Median Wait by Specialty in 2000-01: Weeks Waited from Referral by GP to Treatment**



2000-01 from its previous value of 13.1 weeks in 1999. Among the provinces, total waiting time fell in two of them (Saskatchewan and Newfoundland) between 1999 and 2000-01, but rose in the other 8. The shortest waiting times in 2000-01 were recorded in Ontario (13.9 weeks), Newfoundland (14.6 weeks), and Prince Edward Island (15 weeks). The longest total waits were found in Saskatchewan (28.9 weeks), New Brunswick (25.8 weeks), and British Columbia (18.9 weeks).

For Canada as a whole, the longest waits for treatment are in ophthalmology, orthopaedic surgery, plastic surgery, and neurosurgery. The median waits for these specialties (table 2, chart 8) are 5 months or longer: 27.9 weeks for ophthalmology, 26.5 weeks for orthopaedic surgery, 24.3 weeks for plastic surgery, and 22.5 weeks for neurosurgery. The shortest wait in Canada is for cancer patients being treated with chemotherapy. These patients wait approximately 5 weeks to receive treatment.

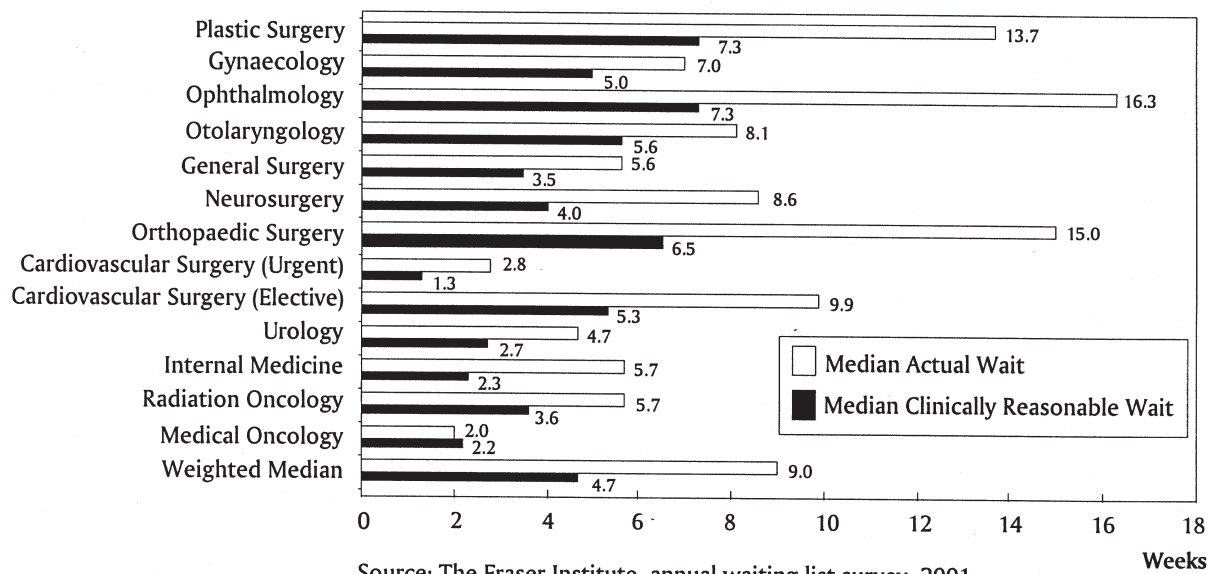
### Number of people waiting for treatment

Numbers of people waiting for the various specific procedures comprising each of the 12 specialties are estimated in tables 9a through 9l. Because provincial populations vary greatly, it is hard to gauge the differences in the lengths of waiting lists solely on the basis of the sheer numbers of people waiting. Consequently, in each of tables 9a through 9l, numbers waiting are presented not just as a total for each specialty but also on a population-adjusted basis (per 100,000). This allows illustration of population-adjusted differences not apparent from the raw totals. For example, in Ontario, there are 7,867 people waiting for plastic surgery, while there are only 2,432 waiting in Alberta (see table 9a). However, when the calculation is adjusted for population, a higher frequency of the population is waiting in Alberta: 81 people per 100,000 there versus 67 people per 100,000 in Ontario. Tables 8 and 10 provide summaries of estimated numbers of patients waiting for treatment.

Table 11 compares the numbers of people waiting in 1999<sup>5</sup> with those in 2000-01. Five provinces experi-

5 1999 figures have been restated to include same-day surgery discharges to provide the reader ease of comparison with 2000-01 figures.

**Chart 9: Median Actual Wait Versus Median Clinically Reasonable Wait by Specialty for Canada: Weeks Waited from Appointment with Specialist to Treatment in 2000-01**



enced a decrease between 1999 and 2000-01 in the number of people waiting. The estimated number of people waiting for treatment in Canada rose from 840,358 in 1999 to 878,088 in 2000-01, an increase of 3 percent. As a percentage of the population, 2.86 percent of Canadians were waiting for treatment in 2000-01, varying from a low of 1.84 percent in Prince Edward Island to a high of 7.21 percent in Saskatchewan.

### Clinically reasonable waiting times

When asked to indicate a clinically reasonable waiting time for the various procedures, specialists generally indicated a period of time substantially shorter than the median number of weeks patients were actually waiting for treatment (see tables 14a through 14l). Table 13 summarizes the weighted median reasonable waiting times for all specialties surveyed. These weighted medians were calculated in the same manner as those in table 4. Eighty-six percent of the actual weighted median waiting times (in table 4) are greater than the clinically reasonable weighted median waiting times (in table 13). For example, the median wait for orthopaedic surgery in British Columbia is 19.3 weeks. A clinically reasonable length of time to wait, according to specialists in British Columbia, is 6.4 weeks. In Nova Scotia, the actual time to wait for a

gynaecology procedure is 6.2 weeks, whereas a wait of 3.8 weeks is considered to be clinically reasonable. The differences between the median reasonable and median actual wait for the specialties are summarized in table 15.

Chart 9 compares the actual median number of weeks patients are waiting for treatment in Canada after having seen a specialist with the reasonable median number of weeks specialists feel patients should be waiting. The largest difference between these two values is in ophthalmology, where the actual waiting time is 9 weeks longer than what is considered to be reasonable by specialists.

### Health expenditures and waiting times

Given the variation in waiting time across the provinces, a natural question is whether those provinces with shorter waiting times achieve this result by engaging in more government spending on health care. To evaluate this hypothesis, provincial weighted medians (i.e., the last line in table 2) for the years from 1993 through 1998 were taken from those editions of *Waiting Your Turn*. The statistical technique of regression analysis was used to assess whether provinces that spent more on health care (controlling for other



differences across provinces such as the percentage of elderly, per capita disposable income, the party in power, and the frequency of health sector strikes) had shorter waiting times. The measure of spending used was real (i.e., adjusted for differences in health costs over time and across provinces) per-capita total government spending on health care.

The analysis revealed that provinces that spent more on health care per person had neither shorter nor longer weighted median waiting times than provinces that spent less. In addition, provinces that spent more had no higher rates of surgical specialist services (consultations plus procedures) and lower rates of procedures and major surgeries (for the complete results of this analysis, see Zelder, 2000b).

This finding, that additional spending has no effect on waiting or service provision, must imply that spending increases are entirely being absorbed by wage increases or by administrative expenses. This result, while surprising at first, becomes more understandable when one considers the environment in which Canadian health care is provided. Canadian health care is an enterprise highly dominated by government. Indeed, in 2000, the fraction of total Canadian health spending attributable to governments was 71 percent (OECD, 2001). A substantial body of economic research demonstrates that governments are almost always less effective providers of goods and services than private firms. Borchering *et al.*'s (1982) comprehensive analysis of 50 studies comparing government and private provision of a variety of goods and services discovered that government provision was superior to private provision (in terms of higher productivity and lower costs) in only two out of those 50 cases. This pattern was replicated in the context of hospital care, where Zelder (2000a) found that the majority of studies comparing for-profit and government-run hospitals indicated that for-profits had lower costs. Consequently, the revelation that higher spending appears to produce no improvement in waiting time is entirely consistent

**Chart 10: Canadian Medical Technology and Health Spending Relative to the OECD, 1999<sup>1</sup>**

Technology	Canadian Value <sup>2</sup>	OECD Average <sup>2</sup>	Canadian Rank	Sample Size
CT Scanners	7.3	14.5	22	30
Radiation Equipment	7.0	5.3	7	27
Lithotriptors	0.5	1.8	21	27
MRI Scanners	2.5	4.9	20	30
National Health Expenditure	9.3% of GDP	8.2% of GDP	6	29

<sup>1</sup>Not all countries reported 1999 figures for all categories.  
<sup>2</sup>Number per million population, except where noted (last row of table).  
 Source: OECD Health Data 2001. Paris: OECD, 2001.

with this literature. This implies that, given the health system's current configuration, increases in spending should not be expected to shorten waiting times.

**A note on technology**

The wait to see a specialist and the wait to receive treatment are not the only waits that patients face. Within hospitals, limited budgets force specialists to work with scarce resources. Chart 10 gives an indication of the difficulties that Canadian patients have in gaining access to modern medical technologies compared to their counterparts in the rest of the Organisation for Economic Cooperation and Development (OECD). Despite the fact that Canada was the sixth-highest spender on health care (as a percentage of GDP) in the OECD in 1999, the availability of medical technology (per million people) in Canada typically ranks in the bottom third of OECD nations. Specifically, Canada exhibits low availability of computed tomography (CT) scanners, lithotriptors (which break up kidney stones), and magnetic resonance imagers (MRIs), with only radiation equipment in relative abundance (Harriman, McArthur, and Zelder, 1999).

There are, of course, differences in access to technology among the provinces.

This year's study examined the wait for various diagnostic technologies across Canada. Chart 11 displays the median number of weeks patients must wait for access to a CT, MRI, or ultrasound scanner. The median waits for all three diagnostic scans were the same length in 2000-01 when compared with the results of

**Chart 11: Waiting for Technology: Weeks Waited to Receive Selected Diagnostic Tests in 1999 and 2000-01**

Province	Computed Tomography		Magnetic Resonance Imaging		Ultrasound	
	2000-01	1999	2000-01	1999	2000-01	1999
British Columbia	6.0	6.0	14.0	16.0	2.5	2.0
Alberta	6.0	7.0	12.0	18.0	2.5	3.0
Saskatchewan	8.0	7.0	16.0	13.5	2.0	1.5
Manitoba	5.0	5.3	8.0	8.0	8.0	7.0
Ontario	5.0	4.0	12.0	12.0	2.0	2.0
Quebec	4.0	4.0	12.0	12.0	4.0	4.0
New Brunswick	4.0	3.0	10.0	9.0	4.0	4.0
Nova Scotia	3.5	3.5	13.0	10.0	3.0	2.5
Prince Edward Island	10.3	8.0	12.0	14.0	6.0	4.8
Newfoundland	6.0	6.0	23.0	17.0	5.5	5.5
Canada	5.0	5.0	12.0	12.0	2.5	2.5

Source: The Fraser Institute, annual waiting list survey, 2000 and 2001.

our 1999 survey. The median wait for a CT scan across Canada was 5 weeks. The shortest wait for computed tomography was found in Nova Scotia (3.5 weeks), while the longest wait occurred in Prince Edward Island (10.3 weeks). The median wait for an MRI across Canada was 12 weeks. Manitoba patients experienced the shortest wait for an MRI (8 weeks), while Newfoundland residents waited longest (23 weeks). Finally, the median wait for ultrasound was 2.5 weeks across Canada. Saskatchewan and Ontario displayed the shortest wait for ultrasound (2 weeks) while Manitoba (8 weeks) experienced the longest ultrasound waiting times.

## Conclusion

The 2000-01 *Waiting Your Turn* survey indicates that waiting times for medical treatment in Canada are growing significantly longer. Even if one debates the reliability of waiting-list data, this survey reveals that specialists feel their patients are waiting too long to receive treatment. Furthermore, a 1996 national survey conducted by the College of Family Physicians of Canada showed that general practitioners were also concerned about the effects of waiting on the health of their patients (College of Family Physicians of Canada, 1996). Almost 70 percent of family physicians felt that the waiting times their patients were experiencing were not acceptable.

Patients would also prefer earlier treatment, according to this year's survey data. On average, in all specialties, only 7.9 percent of patients are on waiting lists because they requested a delay or postponement of their treatment. The responses range from a low of 3.9 percent of internal medicine and medical oncology patients requesting a delay of treatment, to a high of 12.1 percent of gynaecology patients requesting a delay of treatment. Conversely, the percentage of patients who would have their surgeries within the week if there were an operating room available is greater than 50 percent in all specialties except gynaecology and plastic surgery. Internal medicine and radiation oncology patients are the most anxious to receive treatment.

Yet the disturbing trend of growing waiting lists in most provinces, documented here, implies that patients seeking treatment are increasingly likely to be disappointed. Even more discouraging is the evidence presented here that provinces that spend more on health care are not rewarded with shorter waiting lists. This means that under the current regime—first-dollar coverage with use limited by waiting, and crucial medical resources priced and allocated by governments—prospects for improvement are dim. Only substantial reform of that regime is likely to alleviate the medical system's most curable disease—longer and longer waiting times for medical treatment.

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# Selected Graphs and Tables

Graphs 1–6: Median Actual Waiting Times, 1993 and 2000-01

Graphs 7–8: Median Reasonable Waiting Times, 1994 and 2000-01

Graphs 9–19: Actual versus Reasonable Waiting Times, 1994 through 2000-01, by Province

Tables 1a–1c: Summary of Responses

Table 2: Median Total Expected Waiting Time from Referral by GP to Treatment, by Specialty

Table 3: Median Patient Wait to See a Specialist after Referral from a GP, by Specialty

Table 4: Median Patient Wait for Treatment after Appointment with Specialist, by Specialty (Summary)

Tables 5a–5l: Median Patient Wait for Treatment after Appointment with Specialist, by Specialty

Table 6: Comparison of Median Weeks Waited to Receive Treatment after Appointment with Specialist, by Selected Specialties, 1999 and 2000-01

Table 7: Frequency Distribution of Waiting Times (Specialist to Treatment) by Province

Table 8: Estimated Number of Patients Waiting to Receive Treatment after Appointment with Specialist, by Specialty (Summary)

Tables 9a–9l: Estimated Number of Patients Waiting for Treatment

Table 10: Estimated Number of Patients Waiting for Treatment after Appointment with Specialist, Patients Waiting Per 100,000 Population

Table 11: Comparison of Estimated Number of Patients Waiting for Treatment after Appointment with Specialist, by Specialty

Table 12a: Acute Inpatient Procedures

Table 12b: Same Day Procedures

Table 13: Median Reasonable Wait to Receive Treatment after Appointment with Specialist, by Specialty (Summary)

Tables 14a–14l: Median Reasonable Patient Wait for Treatment after Appointment with Specialist

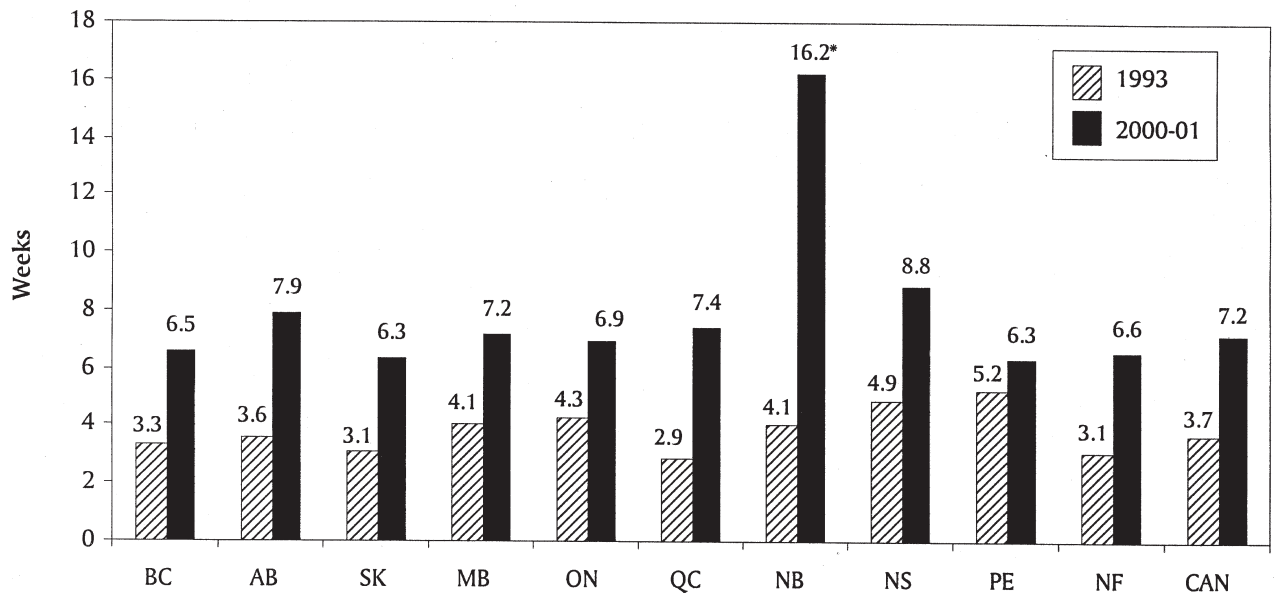
Table 15: Comparison between the Median Actual Number of Weeks Waited and the Median Reasonable Number of Weeks to Wait for Treatment after Appointment with Specialist

Table 16: Average Percentage of Patients Receiving Treatment Outside of Canada

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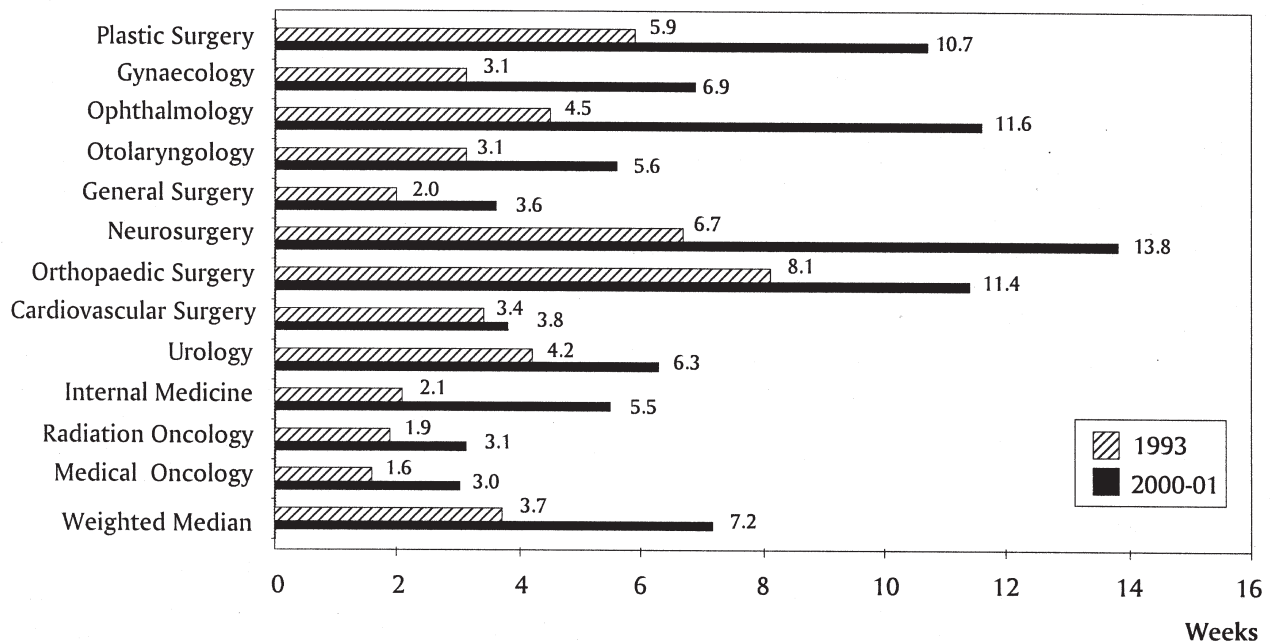


**Graph 1: Median Wait between Referral by GP and Appointment with Specialist, by Province, 1993 and 2000-01**



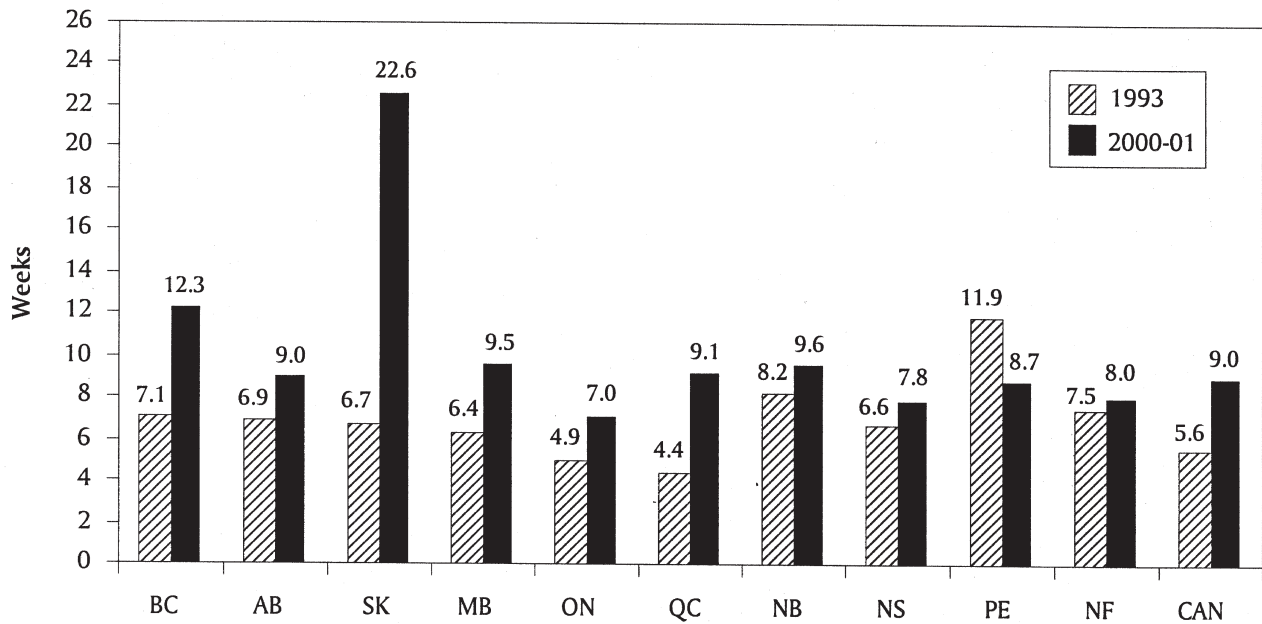
\*Note: Survey conducted during physician service withdrawal in New Brunswick.  
 Source: The Fraser Institute, annual waiting list survey, 1994 and 2001.

**Graph 2: Median Wait between Referral by GP and Appointment with Specialist, by Specialty, 1993 and 2000-01**



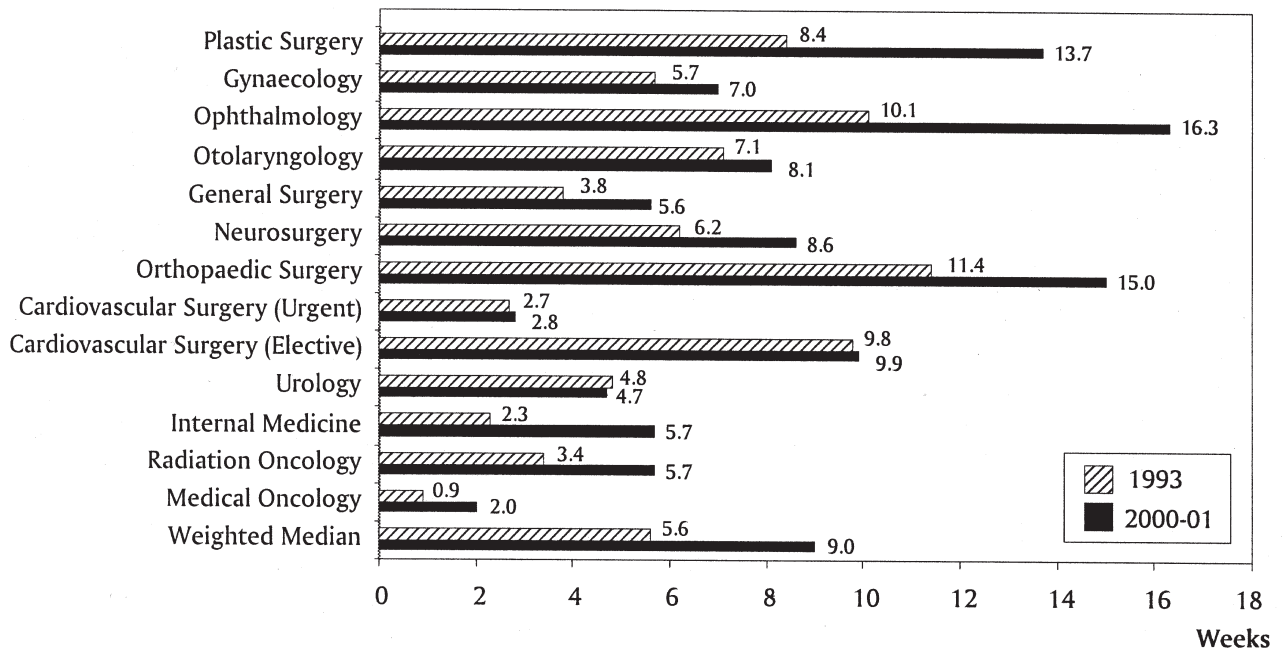
Source: The Fraser Institute, annual waiting list survey, 1994 and 2001.

**Graph 3: Median Wait between Appointment with Specialist and Treatment, by Province, 1993 and 2000-01**



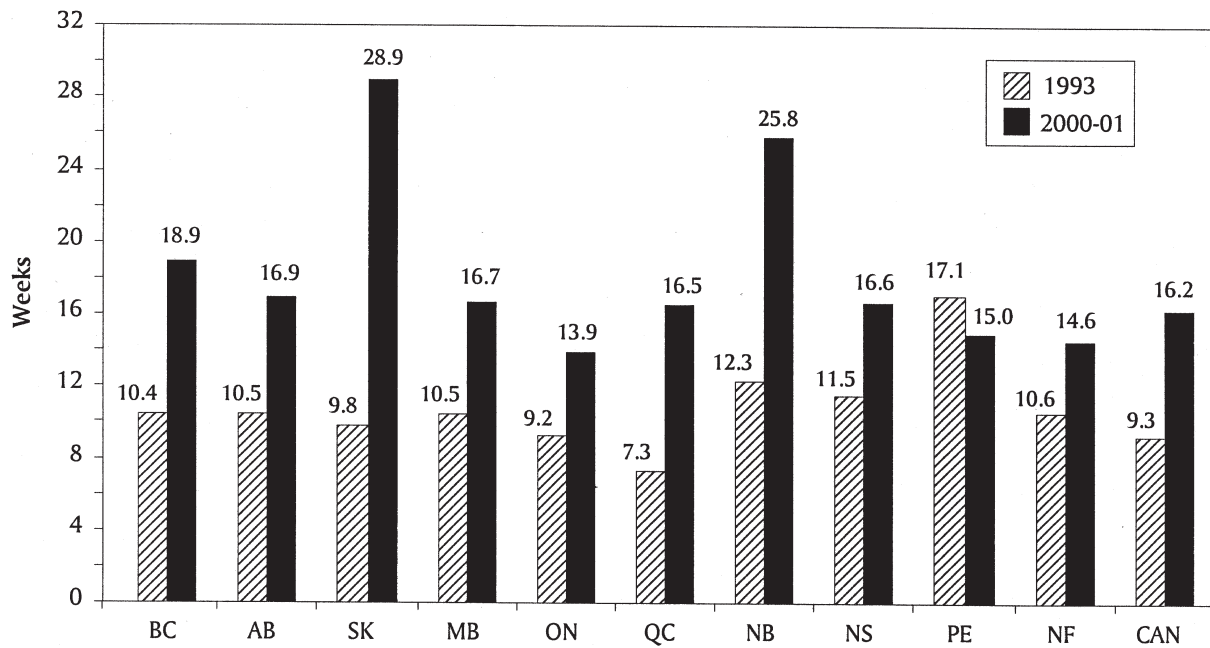
Source: The Fraser Institute, annual waiting list survey, 1994 and 2001.

**Graph 4: Median Wait between Appointment with Specialist and Treatment, by Specialty, 1993 and 2000-01**



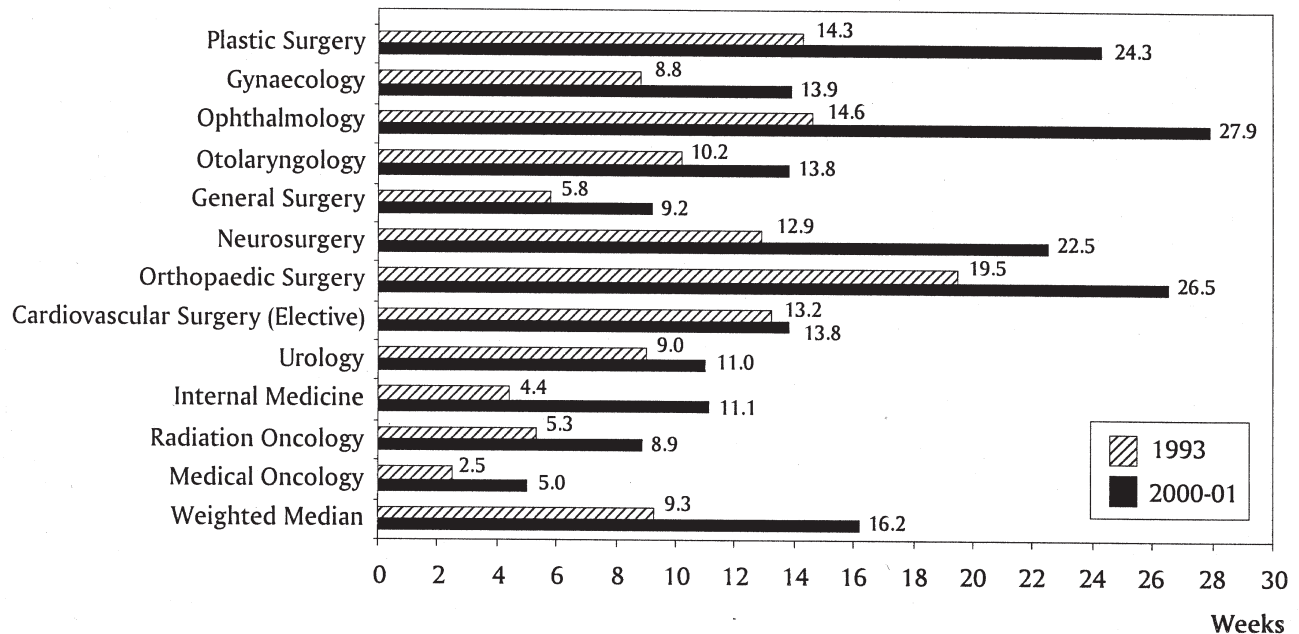
Source: The Fraser Institute, annual waiting list survey, 1994 and 2001.

**Graph 5: Median Wait between Referral by GP and Treatment, by Province, 1993 and 2000-01**



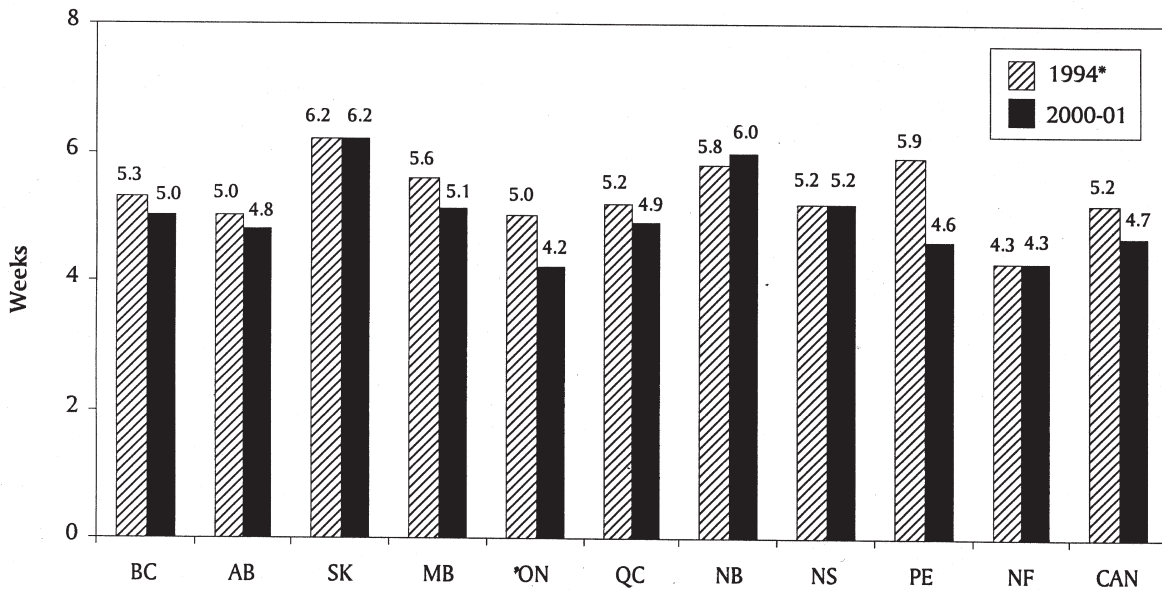
Source: The Fraser Institute, annual waiting list survey, 1994 and 2001.

**Graph 6: Median Wait between Referral by GP and Treatment, by Specialty, 1993 and 2000-01**



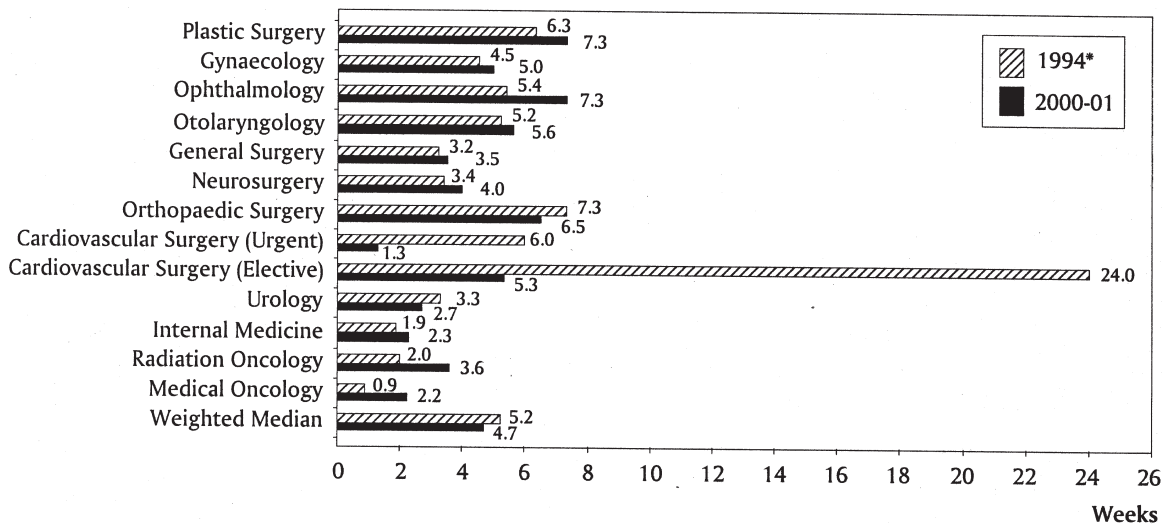
Source: The Fraser Institute, annual waiting list survey, 1994 and 2001.

**Graph 7: Median Reasonable Wait between Appointment with Specialist and Treatment, by Province, 1994 and 2000-01**



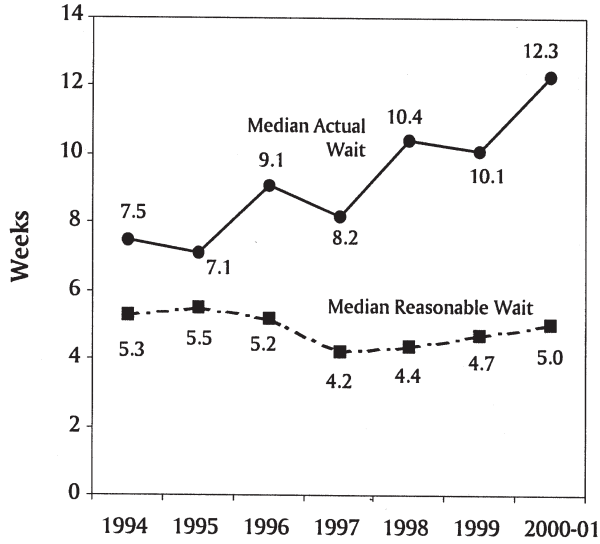
\*Note: The "reasonable wait" question was first included in the survey in 1994.  
 Source: The Fraser Institute, annual waiting list survey, 1995 and 2001.

**Graph 8: Median Reasonable Wait between Appointment with Specialist and Treatment, by Specialty, 1994 and 2000-01**



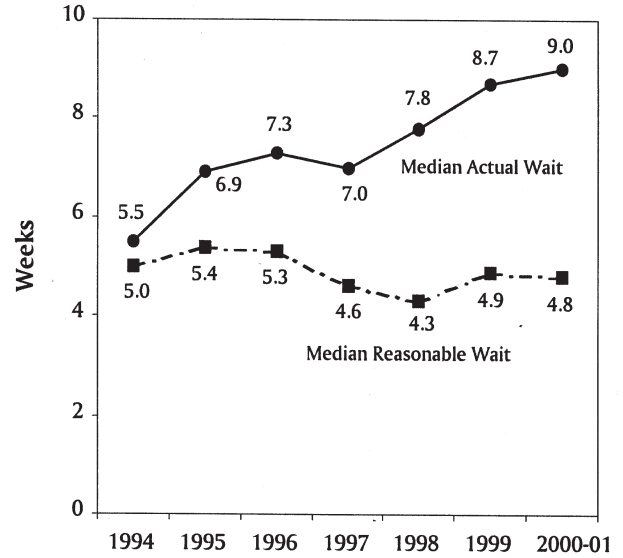
\*Note: The "reasonable wait" question was first included in the survey in 1994.  
 Source: The Fraser Institute, annual waiting list survey, 1995 and 2000-01. Note that the data for cardiovascular surgery for 1994 are from the Ontario panel of specialists while the 2000-01 data are from our national specialist survey. See the "Analysis of cardiovascular surgery" section for more information.

**Graph 9: British Columbia—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2000-01**



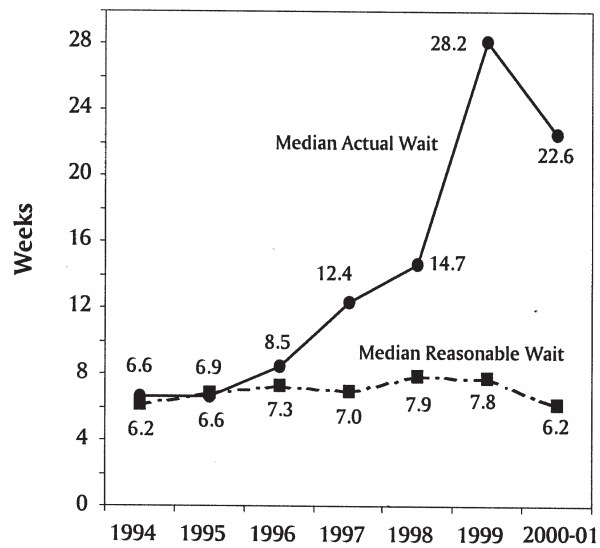
Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

**Graph 10: Alberta—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2000-01**



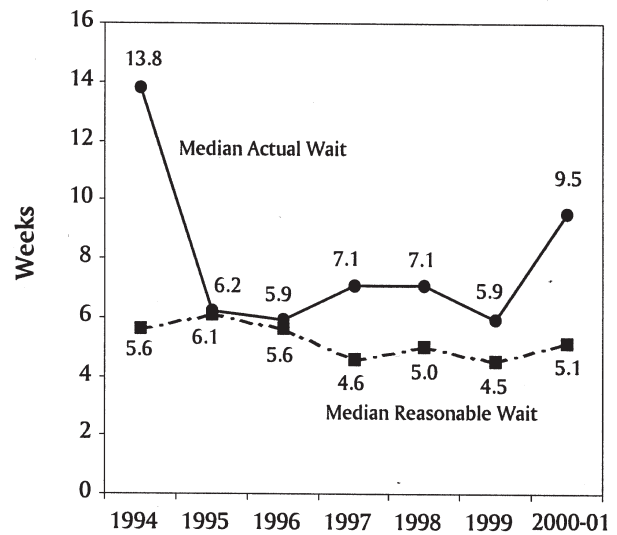
Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

**Graph 11: Saskatchewan—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2000-01**



Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

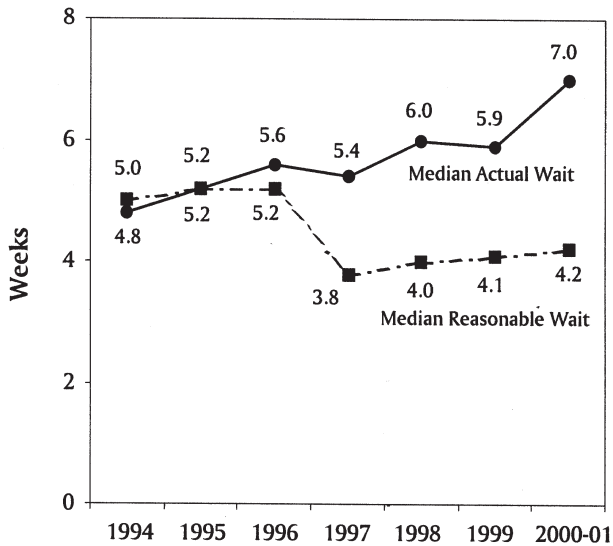
**Graph 12: Manitoba—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2000-01**



Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

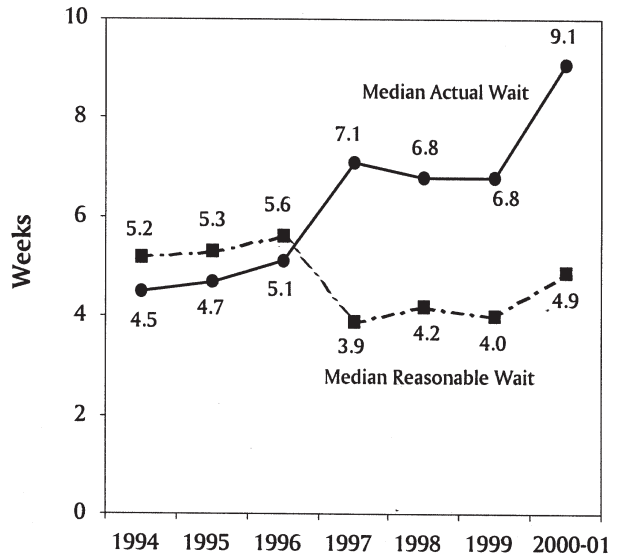


**Graph 13: Ontario—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994**



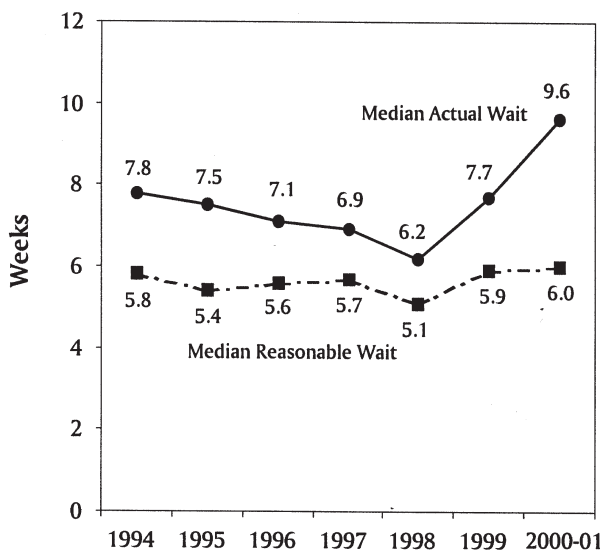
Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

**Graph 14: Quebec—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994**



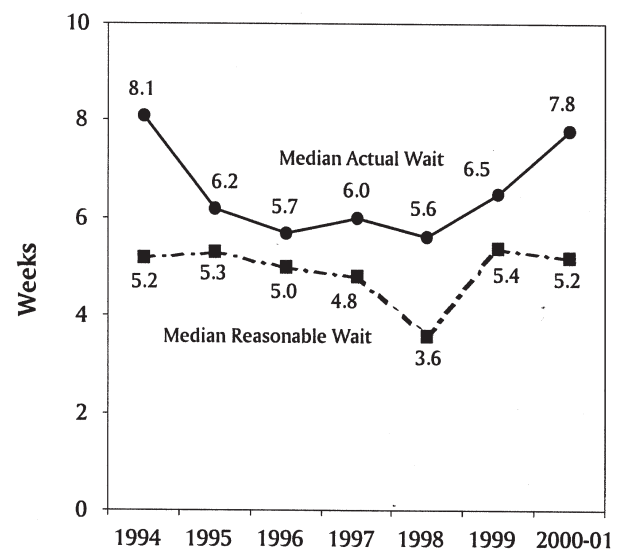
Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

**Graph 15: New Brunswick—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2000-01**



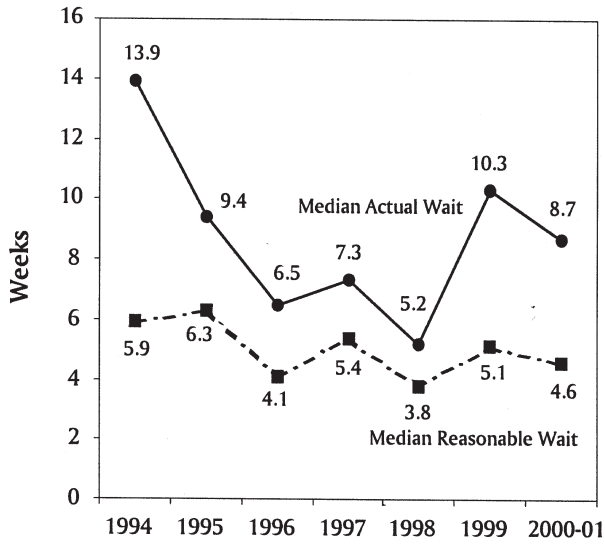
Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

**Graph 16: Nova Scotia—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2000-01**



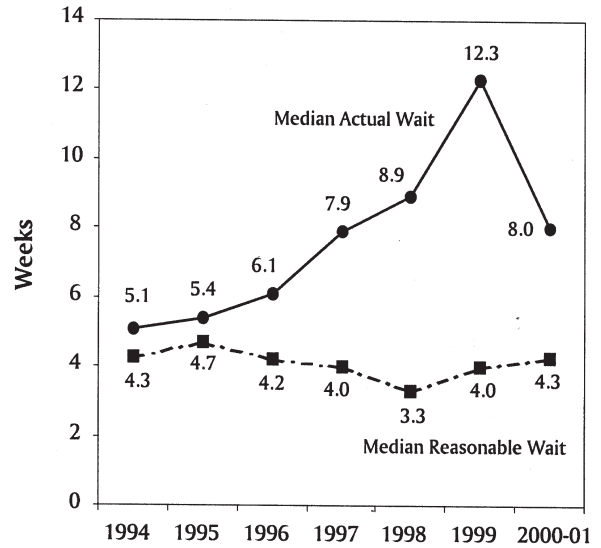
Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

**Graph 17: Prince Edward Island—Actual versus Reasonable Waits between Appointment with Specialist and Treatment,**



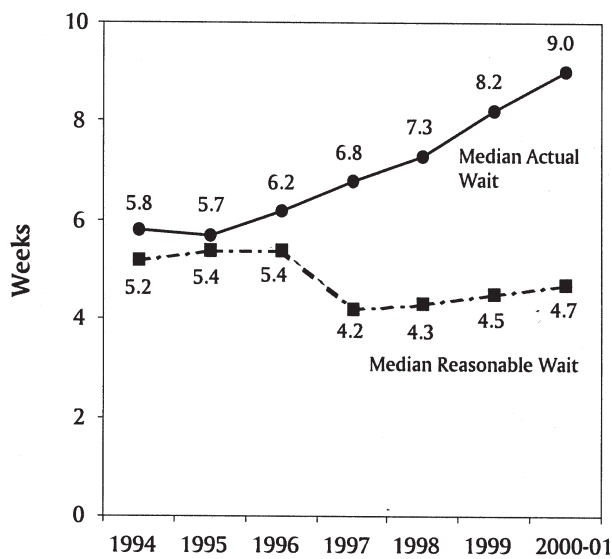
Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

**Graph 18: Newfoundland—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2000-01**



Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

**Graph 19: Canada—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2000-01**



Source: The Fraser Institute, annual waiting list survey, 1995 through 2001.

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF	Can
Plastic Surgery	40%	33%	36%	20%	28%	24%	25%	38%	100%	50%	30%
Gynaecology	28%	31%	29%	39%	22%	22%	25%	25%	63%	25%	25%
Ophthalmology	27%	33%	30%	38%	25%	26%	30%	31%	33%	30%	27%
Otolaryngology	26%	33%	29%	28%	25%	28%	50%	40%	50%	29%	28%
General Surgery	26%	24%	35%	29%	25%	22%	26%	28%	71%	26%	25%
Neurosurgery	43%	29%	40%	33%	26%	21%	33%	29%	—	0%	28%
Orthopaedic Surgery	30%	40%	48%	29%	32%	30%	26%	29%	33%	36%	32%
Cardiovascular Surgery	27%	26%	25%	31%	27%	28%	27%	21%	0%	25%	27%
Urology	31%	30%	33%	35%	30%	24%	29%	29%	33%	67%	29%
Internal Medicine	27%	25%	24%	22%	26%	22%	30%	24%	44%	30%	25%
Radiation Oncology	6%	21%	33%	0%	22%	22%	33%	22%	0%	75%	20%
Medical Oncology	36%	37%	50%	0%	22%	20%	50%	38%	50%	50%	25%
Total	28%	30%	32%	28%	26%	24%	29%	28%	50%	32%	27%

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF	Can
Plastic Surgery	23	12	5	2	45	28	3	5	1	1	125
Gynaecology	50	37	12	21	136	84	7	12	5	5	369
Ophthalmology	45	26	7	11	96	74	7	13	1	3	283
Otolaryngology	19	11	4	5	52	52	6	6	1	2	158
General Surgery	44	27	15	17	136	104	9	14	5	6	377
Neurosurgery	13	5	2	1	19	12	2	2	—	0	56
Orthopaedic Surgery	46	38	13	10	123	83	7	9	1	5	335
Cardiovascular Surgery	14	6	3	4	37	26	3	3	0	1	97
Urology	21	11	5	6	62	33	5	6	1	4	154
Internal Medicine	73	51	15	25	135	93	10	22	4	9	437
Radiation Oncology	3	6	2	0	27	13	2	2	0	3	58
Medical Oncology	13	7	1	0	18	23	1	3	1	2	69
Total	364	237	84	102	886	625	62	97	20	41	2,518

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF	Can
Plastic Surgery	57	36	14	10	161	115	12	13	1	2	421
Gynaecology	177	119	41	54	613	377	28	48	8	20	1,485
Ophthalmology	165	80	23	29	382	281	23	42	3	10	1,038
Otolaryngology	72	33	14	18	207	189	12	15	2	7	569
General Surgery	168	113	43	59	548	464	34	50	7	23	1,509
Neurosurgery	30	17	5	3	73	56	6	7	0	3	200
Orthopaedic Surgery	153	95	27	34	390	276	27	31	3	14	1,050
Cardiovascular Surgery	51	23	12	13	136	93	11	14	1	4	358
Urology	67	37	15	17	208	140	17	21	3	6	531
Internal Medicine	273	201	62	114	525	417	33	90	9	30	1,754
Radiation Oncology	48	28	6	5	125	60	6	9	1	4	292
Medical Oncology	36	19	2	3	83	113	2	8	2	4	272
Total	1,297	801	264	359	3,451	2,581	211	348	40	127	9,479

**Table 2: Median Total Expected Waiting Time from Referral by GP to Treatment, by Specialty, 2000-01 (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF	CAN
Plastic Surgery	34.2	33.6	39.8	31.9	16.9	16.6	65.2	44.6	55.5	81.6	24.3
Gynaecology	14.4	16.3	27.4	14.9	11.6	14.7	16.2	16.2	12.6	11.6	13.9
Ophthalmology	27.5	14.5	44.6	28.0	28.9	27.3	34.1	34.8	40.1	30.9	27.9
Otolaryngology	17.6	16.9	34.2	14.7	13.1	11.0	15.4	9.8	8.9	17.5	13.8
General Surgery	12.6	9.8	20.1	8.9	7.9	8.7	7.2	9.4	7.5	6.3	9.2
Neurosurgery	18.1	17.2	25.9	66.0	25.7	20.0	28.8	13.5	—	—	22.5
Orthopaedic Surgery	32.3	33.5	67.4	19.6	20.4	22.5	70.8	21.5	14.9	25.4	26.5
Cardiovascular Surgery (Elective)	16.8	16.4	11.8	19.5	8.9	16.8	15.6	11.9	—	40.7	13.8
Urology	12.8	13.5	8.6	13.5	9.3	11.4	15.7	11.9	7.8	9.1	11.0
Internal Medicine	11.5	15.8	10.9	9.2	10.4	10.3	13.7	9.1	19.3	8.3	11.1
Radiation Oncology	6.0	9.9	9.8	—	9.2	10.2	11.5	4.2	—	10.8	8.9
Medical Oncology	5.0	7.0	10.0	—	5.2	4.0	3.5	7.0	5.0	12.6	5.0
Weighted Median	18.9	16.9	28.9	16.7	13.9	16.5	25.8	16.6	15.0	14.6	16.2

**Table 3: Median Patient Wait to See a Specialist after Referral from a GP, by Specialty, 2000-01 (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF	CAN
Plastic Surgery	14.0	16.0	12.0	14.5	8.0	6.0	42.5	20.0	16.0	18.0	10.7
Gynaecology	6.0	8.0	7.0	8.0	6.0	8.0	7.0	10.0	6.0	6.0	6.9
Ophthalmology	8.0	6.0	9.0	8.0	12.0	12.0	23.5	24.0	20.0	24.0	11.6
Otolaryngology	6.0	6.0	6.0	7.0	6.0	5.0	6.0	3.8	3.5	7.0	5.6
General Surgery	4.0	4.0	4.0	4.0	3.8	3.0	3.0	6.0	2.0	3.3	3.6
Neurosurgery	11.5	10.0	14.0	52.0	16.0	12.0	14.0	8.5	—	—	13.8
Orthopaedic Surgery	13.0	16.0	12.0	6.0	10.3	8.0	52.0	6.0	6.0	12.0	11.4
Cardiovascular Surgery	4.0	5.0	5.0	2.8	3.0	4.0	6.0	7.0	—	2.0	3.8
Urology	4.0	10.0	2.0	9.5	6.0	7.0	9.0	5.0	2.0	4.0	6.3
Internal Medicine	4.0	6.0	4.0	4.0	6.0	6.0	7.5	5.0	12.0	4.0	5.5
Radiation Oncology	3.5 <sup>1</sup>	3.5 <sup>2</sup>	3.3	—	4.0 <sup>3</sup>	1.3	3.0	1.5	—	2.0 <sup>4</sup>	3.1
Medical Oncology	3.0	3.0 <sup>2</sup>	5.0	—	3.0 <sup>3</sup>	3.0	2.0	3.0	3.0	3.0 <sup>4</sup>	3.0
Weighted Median	6.5	7.9	6.3	7.2	6.9	7.4	16.2	8.8	6.3	6.6	7.2

<sup>1</sup>British Columbia Cancer Agency reports an 11 day wait for consultation by a radiation oncologist.

<sup>2</sup>Alberta Cancer Board reports a 3.5 week median wait for appointment with a radiation oncology specialist and a 3.0 week median wait for appointment with a medical oncologist.

<sup>3</sup>Cancer Care Ontario reports that the 50th percentile of cases waited 2.7 weeks for consultation with a radiation oncologist and 2.4 weeks for consultation by a medical oncologist in December 2000.

<sup>4</sup>Newfoundland Cancer Treatment and Research Foundation reports a 2.5 week average wait for consultation with an oncologist.

**Table 4: Median Patient Wait for Treatment after Appointment with Specialist, by Specialty, 2000-01 (in Weeks)**

	BC <sup>1</sup>	AB	SK	MB	ON	QC	NB	NS	PE	NF	CAN
Plastic Surgery	20.2	17.6	27.8	17.4	8.9	10.6	22.7	24.6	39.5	63.6	13.7
Gynaecology	8.4	8.3	20.4	6.9	5.6	6.7	9.2	6.2	6.6	5.6	7.0
Ophthalmology	19.5	8.5	35.6	20.0	16.9	15.3	10.6	10.8	20.1	6.9	16.3
Otolaryngology	11.6	10.9	28.2	7.7	7.1	6.0	9.4	6.1	5.4	10.5	8.1
General Surgery	8.6	5.8	16.1	4.9	4.2	5.7	4.2	3.4	5.5	3.0	5.6
Neurosurgery	6.6	7.2	11.9	14.0	9.7	8.0	14.8	5.0	—	—	8.6
Orthopaedic Surgery	19.3	17.5	55.4	13.6	10.2	14.5	18.8	15.5	8.9	13.4	15.0
Cardiovascular Surgery (Urgent)	9.2	8.4	1.9	2.7	1.1	1.2	0.7	1.6	—	1.0	2.8
Cardiovascular Surgery (Elective)	12.8	11.4	6.8	16.8	5.9	12.8	9.6	4.9	—	38.7	9.9
Urology	8.8	3.5	6.6	4.0	3.3	4.4	6.7	6.9	5.8	5.1	4.7
Internal Medicine	7.5	9.8	6.9	5.2	4.4	4.3	6.2	4.1	7.3	4.3	5.7
Radiation Oncology	2.5 <sup>2</sup>	6.4 <sup>3</sup>	6.5	—	5.2 <sup>4</sup>	8.9	8.5	2.7	—	8.8 <sup>5</sup>	5.7
Medical Oncology	2.0	4.0	5.0	—	2.2 <sup>4</sup>	1.0	1.5	4.0	2.0	9.6 <sup>5</sup>	2.0
Weighted Median	12.3	9.0	22.6	9.5	7.0	9.1	9.6	7.8	8.7	8.0	9.0

<sup>1</sup>British Columbia Ministry of Health reports median wait times on a web site. Please refer to Tables 5a to 5l and to “Verification of current data with governments—British Columbia” for an extensive explanation.

<sup>2</sup>British Columbia Cancer Agency reports a 9 day wait for treatment from “ready-to-treat” status.

<sup>3</sup>Alberta Cancer Board reports a 2.0 week median wait for radiation oncology treatment.

<sup>4</sup>Cancer Care Ontario reports that the 50th percentile of cases waited 2.9 weeks for radiation therapy treatment and 1.4 weeks for schematic therapy treatment in December 2000.

<sup>5</sup>Newfoundland Cancer Treatment and Research Foundation reports 3.0 week average wait for medical oncology treatment and 6.0 week average wait for radiation oncology treatment.

**Table 5a: Plastic Surgery (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Mammoplasty	30.0	24.0	52.0	10.5	12.0	12.0	25.0	52.0	72.0	130.0
Neurolysis	12.0	12.0	8.0	15.3	8.0	10.0	6.0	6.0	32.0	39.0
Blepharoplasty	15.0	12.0	8.0	16.0	8.0	5.0	35.0	12.0	32.0	78.0
Rhinoplasty	16.0	14.5	52.0	16.0	6.0	8.0	25.0	12.0	32.0	78.0
Scar Revision	18.0	21.0	9.0	21.5	9.5	12.5	35.0	38.0	32.0	65.0
Hand Surgery	19.0	14.0	28.0	15.0	7.3	12.0	6.0	4.0	32.0	19.5
Craniofacial Procedures	22.0	24.0	30.5	17.0	8.0	26.0	1.5	26.0	32.0	52.0
Skin Cancer and Other Tumors	6.0	4.0	6.0	6.5	4.0	4.0	4.0	4.0	12.0	4.0
Weighted Median <sup>1</sup>	20.2 <sup>2</sup>	17.6	27.8	17.4	8.9	10.6	22.7	24.6	39.5	63.6

<sup>1</sup>Weighted median does not include craniofacial procedures or skins cancer and other tumors.

<sup>2</sup>BC Ministry of Health web site reported a retrospective 5.0 week median wait time from the time the procedure was booked to treatment as of December 31, 2000. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”



**Table 5b: Gynaecology (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Dilation and Curettage	6.0	6.0	4.0	4.5	4.0	4.0	5.0	4.0	6.0	4.0
Tubal Ligation	9.0	10.0	12.0	8.0	6.0	8.0	10.0	6.0	8.0	6.0
Hysterectomy (Vaginal/Abdominal)	12.0	11.5	52.0	8.0	6.0	8.0	10.0	8.0	7.0	8.0
Vaginal Repair	12.0	12.0	52.0	8.0	7.0	8.0	12.0	8.0	7.0	12.0
Tuboplasty	10.5	13.0	52.0	10.0	8.0	10.0	16.0	8.0	4.0	12.5
Laparoscopic Procedures	7.5	8.0	14.5	6.0	6.0	8.0	10.0	5.0	6.5	4.0
Hysteroscopic Procedures	7.0	8.0	12.0	6.0	6.0	7.0	7.5	6.0	5.0	5.0
Weighted Median	8.4 <sup>1</sup>	8.3	20.4	6.9	5.6	6.7	9.2	6.2	6.6	5.6

<sup>1</sup>BC Ministry of Health web site reported a retrospective 3.1 week median wait time from the time the procedure was booked to treatment as of December 31, 2000. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

**Table 5c: Ophthalmology (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Cataract Removal	24.0 <sup>2</sup>	16.0 <sup>3</sup>	39.3	22.0	22.0	16.0	11.0	16.0	20.0	7.0
Cornea Transplant	52.0 <sup>2</sup>	26.0	55.0	26.0	26.0	32.0	41.0	50.0	—	3.5
Cornea—Pterygium	8.0	7.0	30.0	8.5	14.5	12.0	12.0	6.0	20.0	5.0
Iris, Ciliary Body, Sclera, Anterior Chamber	16.0	8.0	36.0	12.0	12.0	11.0	10.0	4.3	—	3.0
Retina, Choroid, Vitreous	6.0	1.0	26.8	—	5.0	3.0	0.8	1.5	—	5.0
Lacrimal Duct	16.0	8.0	26.0	16.0	12.0	12.0	10.0	24.0	—	13.5
Strabismus	12.0	12.0	30.0	30.0	20.0	14.5	11.0	6.0	24.0	13.5
Operations on Eyelids	8.0	6.0	24.0	8.5	9.0	12.0	8.0	7.0	20.0	8.5
Glaucoma	8.0	4.0	9.0	14.0	10.0	7.5	8.0	4.5	20.0	3.5
Weighted Median <sup>1</sup>	19.5 <sup>2</sup>	8.5	35.6	20.0	16.9	15.3	10.6	10.8	20.1	6.9

<sup>1</sup>Weighted median does not include treatment for glaucoma.

<sup>2</sup>BC Ministry of Health web site reported a retrospective 11.9 week median wait time for Cataract Surgery, 6.3 month median wait for Corneal Transplant Surgery, and 10.4 week median wait for all Ophthalmological Surgery, from the time the procedure was booked to treatment as of December 31, 2000. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

<sup>3</sup>Alberta Health and Wellness reports a 10.0 week median wait between April 1, 1999 and March 31, 2000, while The Fraser Institute reported 12.0 weeks at December 31, 1999.

**Table 5d: Otolaryngology (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Myringotomy	6.0	6.0	6.0	7.0	6.0	5.0	6.0	3.8	3.5	7.0
Tympanoplasty	12.0	12.0	60.0	8.0	8.0	8.0	14.0	8.5	7.0	16.0
Thyroid, Parathyroid, and Other Endocrine Glands	12.0	12.0	6.0	12.0	7.5	6.0	5.0	4.8	—	12.0
Tonsillectomy and/or Adenoidectomy	14.0	17.0	65.0	8.0	8.0	8.0	12.0	9.5	7.0	10.0
Rhinoplasty and/or Septal Surgery	12.0	12.0	60.0	7.0	8.0	8.0	15.0	7.0	7.0	18.0
Operations on Nasal Sinuses	16.0	12.0	56.0	8.0	8.0	8.0	12.0	10.0	7.0	14.0
Weighted Median	11.6 <sup>1</sup>	10.9	28.2	7.7	7.1	6.0	9.4	6.1	5.4	10.5

<sup>1</sup>BC Ministry of Health web site reported a retrospective 6.0 week median wait time for Ear, Nose, and Throat Surgery from the time the procedure was booked to treatment as of December 31, 2000. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

**Table 5e: General Surgery (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Hernia/Hydrocele	14.0	8.0	39.0	5.5	5.0	8.0	4.0	4.0	8.0	4.0
Cholecystectomy	12.0	8.0	40.0	5.5	5.0	6.0	4.0	4.0	8.0	3.5
Colonoscopy	10.0	6.0	6.0	5.0	5.0	6.0	8.0	3.5	6.0	3.0
Intestinal Operations	4.0	3.8	5.0	4.0	3.0	4.0	2.5	3.0	4.0	2.0
Haemorrhoidectomy	15.5	9.5	11.0	7.0	6.0	11.0	4.0	6.0	8.0	4.0
Breast Biopsy	3.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Mastectomy	2.0	2.0	3.0	3.0	2.0	2.0	2.0	1.8	2.0	1.8
Bronchus and Lung	5.0	8.0	3.0	6.5	3.0	3.0	—	2.5	—	8.0
Aneurysm Surgery	8.0	12.0	3.0	4.0	4.0	6.5	2.0	—	6.0	12.0
Varicose Veins	15.5	8.0	39.0	8.0	5.0	12.0	6.0	3.0	10.0	6.0
Weighted Median	8.6 <sup>1</sup>	5.8	16.1	4.9	4.2	5.7	4.2	3.4	5.5	3.0

<sup>1</sup>BC Ministry of Health web site reported a retrospective 3.1 week median wait time from the time the procedure was booked to treatment as of December 31, 2000. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

**Table 5f: Neurosurgery (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Peripheral Nerve	6.0	9.0	3.5	—	12.0	9.0	14.0	6.5	—	—
Disc Surgery/ Laminectomy	12.0	7.0	14.0	26.0	12.0	12.5	21.0	6.0	—	—
Elective Cranial Bone Flap	4.0	7.0	12.5	8.0	7.5	4.0	11.0	4.0	—	—
Aneurysm Surgery	4.0	24.0	12.5	—	7.0	3.8	19.0	7.0	—	—
Carotid Endarterectomy	8.0	0.0	4.5	—	5.0	3.0	15.0	5.3	—	—
Weighted Median	6.6 <sup>1</sup>	7.2	11.9	14.0	9.7	8.0	14.8	5.0	—	—

<sup>1</sup>BC Ministry of Health web site reported a retrospective 2.4 week median wait time from the time the procedure was booked to treatment as of December 31, 2000. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

**Table 5g: Orthopaedic Surgery (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Meniscectomy/Arthroscopy	12.0	12.0	45.0	13.0	8.0	12.0	12.0	12.0	6.0	11.0
Removal of Pins	12.0	12.0	37.0	12.0	8.0	15.5	16.0	15.0	6.0	11.0
Arthroplasty (Hip, Knee, Ankle, Shoulder)	32.0 <sup>1</sup>	25.0 <sup>2</sup>	78.0	16.0	16.0	21.0	24.0	16.0	20.0	13.0
Arthroplasty (Interphalageal, Metatarsophalangeal)	15.5	17.0 <sup>2</sup>	72.0	16.0	8.0	12.0	31.0	20.0	10.0	9.0
Hallux Valgus/Hammer Toe	15.0	15.0	52.0	18.0	8.0	14.5	20.0	15.0	8.0	17.5
Digit Neuroma	13.5	14.0	52.0	8.0	8.0	12.0	31.0	15.5	6.0	15.0
Rotator Cuff Repair	19.0	20.0	23.5	15.0	8.0	12.0	24.0	12.0	10.0	18.0
Ostectomy (All Types)	15.0	20.0	53.5	11.5	8.5	12.0	24.0	20.0	10.0	17.0
Routine Spinal Instability	40.0	20.0	78.0	17.0	8.0	16.0	27.5	20.0	—	9.0
Weighted Median	19.3 <sup>1</sup>	17.5	55.4	13.6	10.2	14.5	18.8	15.5	8.9	13.4

<sup>1</sup>BC Ministry of Health web site reported a retrospective 17.6 week median wait time for Hip Replacement Surgery, 21.1 week median wait for Knee Replacement Surgery, and 6.9 week median wait for all Orthopaedic Surgery, from the time the procedure was booked to treatment as of December 31, 2000. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

<sup>2</sup>Alberta Health and Wellness report that 6 of 7 regional health authorities report a average waiting times for Arthroplasty of between 9 and 25 weeks.

**Table 5h: Cardiovascular Surgery (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

		BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
<b>EMERGENT</b>	Coronary Artery Bypass	1.0	1.5	0.0	0.3	0.2	0.2	0.5	0.0	—	1.0
	Valves & Septa of the Heart	1.0	0.8	0.0	0.3	0.2	0.3	0.5	0.0	—	1.0
	Aneurysm Surgery	0.0	0.0	0.0	0.3	0.0	0.0	0.5	0.0	—	1.0
	Carotid Endarterectomy	0.0	0.0	0.2	0.0	0.0	0.0	0.0	—	—	0.0
	Pacemaker Operations	0.6	0.3	0.0	0.0	0.2	0.0	0.5	0.6	—	—
<b>URGENT</b>	Coronary Artery Bypass	17.0	12.0 <sup>1</sup>	1.5	2.3	1.0	1.5	0.8	2.0	—	1.0
	Valves & Septa of the Heart	10.5	16.0 <sup>1</sup>	2.0	3.0	1.5	2.8	0.8	2.0	—	1.0
	Aneurysm Surgery	3.5	5.0	2.0	2.8	1.0	1.0	0.8	1.5	—	1.0
	Carotid Endarterectomy	2.0	1.0	5.3	4.8	1.3	1.0	0.5	2.0	—	1.0
	Pacemaker Operations	3.0	1.3	2.0	—	1.0	0.2	0.8	1.0	—	—
<b>ELECTIVE</b>	Coronary Artery Bypass	24.0	16.0 <sup>2</sup>	9.0	19.0	7.0 <sup>3</sup>	16.0	12.0	4.0	—	52.0
	Valves & Septa of the Heart	15.0	20.0 <sup>2</sup>	10.0	16.5	7.0	16.0	12.0	4.0	—	52.0
	Aneurysm Surgery	11.0	8.0	10.0	11.0	6.0	12.0	6.0	8.0	—	7.0
	Carotid Endarterectomy	4.0	4.0	7.0	6.3	4.5	10.0	7.0	8.0	—	9.0
	Pacemaker Operations	3.5	2.5	4.0	—	4.0	5.0	7.0	6.0	—	—

<sup>1</sup>Alberta Health and Wellness reports median waits for urgent outpatient heart surgery in the 14 to 18 week range, and urgent inpatient heart surgery in the 1 to 1.5 week range.

<sup>2</sup>Alberta Health and Wellness reports median waits for elective outpatient heart surgery in the 13 to 21 week range.

<sup>3</sup>Cardiac Care Network of Ontario reports median waits for bypass surgery of 34 days (4.9 weeks) as of April 30, 2001.

**Table 5i: Urology (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Non-radical Prostatectomy	12.0	6.0	12.0	5.0	4.5	8.3	5.0	9.0	6.0	9.0
Radical Prostatectomy	6.0	7.0	4.5	5.0	5.8	4.0	3.0	6.0	4.0	3.5
Transurethral Resection—Bladder	5.0	3.0	5.0	4.0	3.5	3.5	3.0	4.0	3.0	3.8
Radical Cystectomy	5.5	5.3	6.0	3.8	5.0	4.0	7.5	4.0	4.0	3.5
Cystoscopy	8.0	3.0	3.5	3.5	3.0	4.0	7.0	7.0	6.0	5.0
Hernia/Hydrocele	16.0	5.5	40.0	7.0	5.0	12.0	10.0	10.0	6.0	6.0
Bladder Fulguration	8.0	4.0	4.0	4.0	3.0	4.0	5.0	4.0	6.0	4.0
Ureteral Reimplantation for Reflux	12.0	7.0	36.0	3.5	6.0	5.5	23.0	10.0	6.0	6.0
Weighted Median	8.8 <sup>1</sup>	3.5	6.6	4.0	3.3	4.4	6.7	6.9	5.8	5.1

<sup>1</sup>BC Ministry of Health web site reported a retrospective 4.2 week median wait time from the time the procedure was booked to treatment as of December 31, 2000. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

**Table 5j: Internal Medicine (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Colonoscopy	6.0	12.0	6.0	4.0	4.0	4.5	5.0	4.0	9.5	3.5
Angiography/ Angioplasty	10.0	8.0	9.0	12.0	6.3	6.0	8.0	5.3	5.0	8.0
Bronchoscopy	4.0	4.0	4.0	3.0	3.0	3.0	4.0	2.0	2.0	1.8
Gastrosocopy	4.0	7.5	5.5	4.0	3.5	4.0	5.0	3.0	3.0	3.0
Weighted Median	7.5	9.8	6.9	5.2	4.4	4.3	6.2	4.1	7.3	4.3

**Table 5k: Radiation Oncology (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Cancer of the Larynx	—	2.0	4.8	—	3.0	3.0	7.0	2.5	—	4.0
Cancer of the Cervix	1.8	3.5	4.8	—	3.0	4.0	7.0	2.3	—	4.0
Lung Cancer	—	3.5	5.8	—	3.0	4.0	5.0	2.5	—	4.0
Prostate Cancer	2.5	15.0 <sup>3</sup>	7.0	—	6.5	17.5	12.0	3.0	—	12.0
Breast Cancer	—	3.8 <sup>3</sup>	7.0	—	6.5	10.0	9.0	2.8	—	10.0
Early Side Effects from Treatment	0.5	2.5	1.0	—	1.0	0.0	1.0	0.5	—	1.0
Late Side Effects from Treatment	3.0	2.5	3.5	—	1.5	1.0	1.0	1.0	—	1.0
Weighted Median <sup>1</sup>	2.5 <sup>2</sup>	6.4 <sup>3</sup>	6.5	—	5.2 <sup>4</sup>	8.9	8.5	2.7	—	8.8 <sup>5</sup>

<sup>1</sup>Weighted median does not include early or late side effects from treatment.

<sup>2</sup>British Columbia Cancer Agency reports a 9 day wait for treatment from “ready-to-treat” status.

<sup>3</sup>Alberta Cancer Board reports a 2.0 week median wait for treatment by a radiation oncology specialist. Alberta Health and Wellness reports average waiting times of 2 to 3 weeks for breast and prostate cancer radiation.

<sup>4</sup>Cancer Care Ontario reports that the 50th percentile of cases waited 2.9 weeks for radiation therapy treatment.

<sup>5</sup>Newfoundland Cancer Treatment and Research Foundation reports a 6.0 week average wait time for radiation therapy.

**Table 5l: Medical Oncology (2000-01)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Cancer of the Larynx	2.0	3.0	—	—	2.0	1.5	1.5	—	2.0	8.5
Cancer of the Cervix	2.0	4.5	—	—	2.0	1.0	1.5	4.0	2.0	—
Lung Cancer	2.0	4.0	—	—	2.0	1.0	1.5	4.0	2.0	9.0
Breast Cancer	2.0	4.0	5.0	—	2.5	1.0	1.5	4.0	2.0	10.0
Side Effects from Treatment	0.0	1.0	0.0	—	0.2	0.0	1.0	0.0	0.1	1.0
Weighted Median <sup>1</sup>	2.0	4.0 <sup>2</sup>	5.0	—	2.2 <sup>3</sup>	1.0	1.5	4.0	2.0	9.64

<sup>1</sup>Weighted median does not include side effects for treatment

<sup>2</sup>Alberta Cancer Board reports a 1.0 week median wait for treatment.

<sup>3</sup>Cancer Care Ontario reports that the 50th percentile of cases waited 1.4 weeks for schematic therapy treatment in December 2000.

<sup>4</sup>Newfoundland Cancer Treatment and Research Foundation reports a 3 week average wait for treatment.



**Table 6: Comparison of Median Weeks Waited to Receive Treatment after Appointment with Specialist, by Selected Specialties, 1999 and 2000-01**

	British Columbia			Alberta			Saskatchewan			Manitoba			Ontario		
	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg
Plastic Surgery	20.2	17.4	16%	17.6	14.6	21%	27.8	26.7	4%	17.4	23.5	-26%	8.9	8.1	9%
Gynaecology	8.4	12.1	-31%	8.3	9.9	-17%	20.4	37.6	-46%	6.9	5.9	18%	5.6	6.8	-18%
Ophthalmology <sup>1</sup>	19.5	5.6	248%	8.5	3.7	129%	35.6	12.5	185%	20.0	4.6	336%	16.9	7.8	117%
Otolaryngology	11.6	14.4	-19%	10.9	12.7	-14%	28.2	51.6	-45%	7.7	11.7	-34%	7.1	8.0	-11%
General Surgery	8.6	7.8	10%	5.8	5.7	2%	16.1	29.1	-45%	4.9	3.6	35%	4.2	3.5	19%
Neurosurgery <sup>1</sup>	6.6	10.0	-34%	7.2	9.7	-26%	11.9	7.9	51%	14.0	13.8	1%	9.7	6.7	44%
Orthopaedic Surgery	19.3	22.4	-14%	17.5	20.6	-15%	55.4	55.6	0%	13.6	15.7	-13%	10.2	13.4	-24%
Cardiovascular Surgery (Urgent) <sup>1</sup>	9.2	5.5	67%	8.4	0.7	1100%	1.9	1.0	87%	2.7	—	—	1.1	1.3	-18%
Cardiovascular Surgery (Elective) <sup>1</sup>	12.8	8.2	56%	11.4	12.0	-5%	6.8	7.3	-6%	16.8	—	—	5.9	7.6	-22%
Urology	8.8	10.9	-19%	3.5	5.3	-34%	6.6	30.4	-78%	4.0	4.5	-10%	3.3	4.6	-29%
Internal Medicine	7.5	7.0	7%	9.8	6.3	56%	6.9	5.2	33%	5.2	4.7	11%	4.4	4.8	-8%
Radiation Oncology	2.5	6.9	-64%	6.4	6.0	7%	6.5	5.5	19%	—	4.0	—	5.2	4.9	6%
Medical Oncology	2.0	2.0	0%	4.0	5.2	-23%	5.0	1.0	400%	—	5.7	—	2.2	2.3	-3%
Weighted Median	12.3	10.4	19%	9.0	8.9	2%	22.6	28.9	-22%	9.5	7.2	32%	7.0	6.0	17%

Note: Percentage changes are calculated from exact weighted medians. The exact weighted medians have been rounded to one decimal place for inclusion in the table.

<sup>1</sup>Due to improvements in the weighting of procedures adopted in 2000-01, that year's data are not strictly comparable to the 1999 figures.

**Table 6: Comparison of Median Weeks Waited to Receive Treatment after Appointment with Specialist, by Selected Specialties, 1999 and 2000-01**

	Quebec			New Brunswick			Nova Scotia			Prince Edward Island			Newfoundland		
	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg
Plastic Surgery	10.6	5.9	80%	22.7	11.7	94%	24.6	31.5	-22%	39.5	26.5	49%	63.6	92.8	-31%
Gynaecology	6.7	6.2	8%	9.2	10.0	-8%	6.2	7.8	-21%	6.6	6.0	10%	5.6	6.8	-17%
Ophthalmology <sup>1</sup>	15.3	14.5	6%	10.6	11.0	-4%	10.8	3.9	178%	20.1	16.0	26%	6.9	6.9	1%
Otolaryngology	6.0	5.4	11%	9.4	9.0	4%	6.1	11.1	-45%	5.4	—	—	10.5	21.2	-50%
General Surgery	5.7	4.7	20%	4.2	3.0	38%	3.4	2.5	34%	5.5	14.6	-63%	3.0	5.9	-49%
Neurosurgery <sup>1</sup>	8.0	5.5	46%	14.8	12.7	17%	5.0	8.2	-39%	—	—	—	—	2.4	—*
Orthopaedic Surgery	14.5	18.5	-21%	18.8	11.9	58%	15.5	15.9	-3%	8.9	18.7	-52%	13.4	5.9	126%
Cardiovascular Surgery (Urgent) <sup>1</sup>	1.2	0.2	518%	0.7	3.1	-76%	1.6	3.3	-52%	—	—	—	1.0	4.2	-76%
Cardiovascular Surgery (Elective) <sup>1</sup>	12.8	11.4	12%	9.6	27.9	-66%	4.9	9.8	-50%	—	—	—	38.7	52.0	-26%*
Urology	4.4	4.4	1%	6.7	7.5	-11%	6.9	5.6	23%	5.8	8.5	-32%	5.1	4.8	6%
Internal Medicine	4.3	4.1	5%	6.2	3.0	106%	4.1	5.0	-19%	7.3	3.0	143%	4.3	5.7	-25%
Radiation Oncology	8.9	9.5	-6%	8.5	4.6	84%	2.7	3.6	-24%	—	—	—	8.8	7.3	20%
Medical Oncology	1.0	1.1	-8%	1.5	2.2	-32%	4.0	3.5	14%	2.0	2.0	0%	9.6	—	—
Weighted Median	9.1	7.1	28%	9.6	8.2	17%	7.8	6.8	15%	8.7	12.6	-31%	8.0	12.0	-33%

Note: Percentage changes are calculated from exact weighted medians. The exact weighted medians have been rounded to one decimal place for inclusion in the table.

<sup>1</sup>Due to improvements in the weighting of procedures adopted in 2000-01, that year's data are not strictly comparable to the 1999 figures.

**Table 7: Frequency Distribution of Waiting Times (Specialist to Treatment) by Province, 2000-01—Proportion of Median Waiting Times that Fall within Particular Ranges**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
0 – 3.99 weeks	18.6%	17.3%	17.9%	21.6%	30.2%	25.1%	22.9%	33.3%	22.7%	34.1%
4 – 7.99 weeks	21.6%	25.5%	20.1%	32.9%	31.7%	26.3%	25.3%	26.8%	34.5%	29.0%
8 – 12.99 weeks	25.9%	25.0%	15.8%	24.9%	23.7%	25.3%	22.9%	20.2%	26.9%	19.1%
13 – 25.99 weeks	18.8%	22.0%	8.2%	15.1%	8.6%	13.5%	13.3%	10.9%	9.2%	8.7%
26 – 51.99 weeks	10.3%	6.8%	9.9%	4.7%	3.9%	5.9%	12.0%	4.8%	5.9%	3.7%
1 year plus	4.8%	3.3%	28.1%	0.8%	1.9%	4.0%	3.7%	4.0%	0.8%	5.4%

Note: Columns do not necessarily sum to 100 due to rounding.

**Table 8: Estimated Number of Patients Waiting to Receive Treatment after Appointment with Specialist, by Specialty, 2000-01**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Plastic Surgery	4,758	2,432	1,601	1,051	7,867	5,142	1,382	1,363	330	873
Gynaecology	7,622	5,821	5,686	2,525	12,597	8,741	2,608	1,254	142	939
Ophthalmology	15,622	3,062	10,292	3,929	45,228	62,642	1,339	2,505	31	443
Otolaryngology	6,912	3,261	4,517	1,360	13,773	8,343	1,573	1,574	116	871
General Surgery	15,312	6,368	6,822	2,166	21,262	25,108	1,408	1,856	347	1,239
Neurosurgery	688	930	319	296	3,091	2,391	255	110	—	—
Orthopaedic Surgery	16,884	10,876	12,688	3,027	35,278	19,359	4,376	3,428	263	979
Cardiovascular Surgery	1,742	1,214	118	117	924	1,318	31	121	—	23
Urology	8,103	2,986	2,605	1,021	17,490	13,447	2,705	2,214	151	661
Internal Medicine	4,625	4,497	1,800	913	11,581	8,506	766	768	193	651
Radiation Oncology <sup>1</sup>	47	106	39	—	278	311	79	14	—	9
Medical Oncology <sup>1</sup>	125	237	80	—	1,577	467	48	93	3	130
Residual	52,740	34,577	27,267	11,936	104,339	66,561	9,725	10,323	975	5,454
Total	135,179	76,368	73,836	28,341	275,287	222,338	26,295	25,623	2,551	12,270
Proportion of Population	3.33%	2.55%	7.21%	2.47%	2.36%	3.02%	3.48%	2.72%	1.84%	2.28%
Canada:	Total estimated number of patients waiting in 2000						878,088			
	Percentage of population						2.86%			

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>All data regarding oncology refer only to procedures done in hospitals. Most cancer patients are treated in cancer agencies. Therefore, the oncology data must be regarded as incomplete. Data being collected by the Canadian Association of Provincial Cancer Agencies may be useful in providing future estimates of patients waiting for treatment by oncologists. Interested parties should contact the Canadian Association of Provincial Cancer Agencies.

**Table 9a: Plastic Surgery (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Mammoplasty	1,907	941	431	74	2,188	1,651	538	230	112	198
Neurolysis	395	451	177	153	1,519	821	86	99	102	142
Blepharoplasty	103	95	68	38	367	124	44	17	13	108
Rhinoplasty	807	177	495	78	835	569	339	190	32	113
Scar Revision	990	497	174	549	2,089	1,267	327	771	47	286
Hand Surgery	555	272	257	159	870	710	47	56	24	26
Total	4,758 <sup>1</sup>	2,432	1,601	1,051	7,867	5,142	1,382	1,363	330	873
Total/100,000 population	1,171	81	156	92	67	70	183	145	237	162

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>BC Ministry of Health web site reports 4,076 patients waiting as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

**Table 9b: Gynaecology (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Dilation & Curettage	1,373	1,837	458	298	2,351	1,661	198	146	30	247
Tubal Ligation	1,540	774	1,052	1,264	2,572	419	760	216	30	151
Hysterectomy (Vaginal/Abdominal)	1,850	1,091	1,819	367	2,760	2,271	887	426	37	243
Vaginal Repair	578	452	689	84	961	975	220	197	5	74
Tuboplasty	62	33	27	6	44	42	8	7	1	4
Laparoscopic Procedures	1,280	981	1,065	322	2,427	2,211	415	155	24	97
Hysteroscopic Procedures	938	653	576	185	1,483	1,163	120	107	15	123
Total	7,622 <sup>1</sup>	5,821	5,686	2,525	12,597	8,741	2,608	1,254	142	939
Total/100,000 population	1,876	194	555	220	108	119	345	133	102	174

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>BC Ministry of Health web site reports 5,216 patients waiting as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

**Table 9c: Ophthalmology (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist<sup>1</sup>**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Cataract Removal	13,446 <sup>2</sup>	2,299	7,831	3,638 <sup>3</sup>	35,929	57,770	1,206	2,176	—	323
Cornea Transplant	41 <sup>2</sup>	18	—	—	87	50	—	11	—	—
Cornea—Pterygium	51	33	59	26	354	250	10	7	5	9
Iris, Ciliary Body, Sclera, Anterior Chamber	355	168	474	98	2,554	1,012	17	69	—	14
Retina, Choroid, Vitreous	699	135	957	—	2,457	340	2	87	—	34
Lacrimal Duct	325	67	216	—	886	803	23	76	—	32
Strabismus	285	109	166	—	1,481	1,268	—	—	—	—
Operations on Eyelids	420	231	588	167	1,481	1,148	81	80	26	31
Total	15,622 <sup>2</sup>	3,062	10,292	3,929	45,228	62,642	1,339	2,505	31	443
Total/100,000 population	3,844	102	1,005	342	388	850	177	267	22	82

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>The procedure data reported generally includes only those performed in public facilities. A large number of ophthalmological surgeries are performed in private facilities. The distribution of surgeries between public and private facilities varies significantly between provinces. There are also differences between provinces regarding payment or reimbursement for ophthalmological surgery at a private facility.

<sup>2</sup>BC Ministry of Health web site reports 12,917 patients waiting for Cataract Surgery, 493 patients waiting for Corneal Transplant Surgery, and 14,320 total patients waiting for Ophthalmological Surgery, as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

<sup>3</sup>Bellan *et al.* (2001) report in November 1999 there were 5,481 patients waiting for Cataract Surgery at the Misericordia Eye Care Centre alone. Manitoba Health insured 8,600 cataract surgeries in 1999. Accordingly, we have used 8,600 as the number of cataract surgeries in Manitoba. For an extensive explanation, please refer to “Methodology.”

**Table 9d: Otolaryngology (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Myringotomy	806	745	433	415	4,611	4,875	448	439	34	215
Tympanoplasty	314	78	528	18	430	411	112	67	4	100
Thyroid & Other Endocrine Glands	283	257	199	89	834	392	36	44	—	—
Tonsillectomy &/or Adenoidectomy	2,330	1,427	2,105	609	4,759	705	652	607	35	243
Rhinoplasty &/or Septal Surgery	1,086	105	653	86	982	904	141	194	14	92
Operations on Nasal Sinuses	2,093	649	599	141	2,158	1,057	185	223	29	176
Total	6,912 <sup>1</sup>	3,261	4,517	1,360	13,773	8,343	1,573	1,574	116	871
Total/100,000 population	1,701	109	441	118	118	113	208	167	84	162

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>BC Ministry of Health web site reports 4,729 patients waiting for Ear, Nose, and Throat Surgery as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

**Table 9e: General Surgery (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Hernia/Hydrocele	4,505	1,167	1,809	306	3,610	4,037	338	374	65	296
Cholecystectomy	2,800	1,263	2,004	315	3,062	4,203	416	391	71	413
Colonoscopy	2,161	1,624	710	543	7,169	9,562	314	497	90	137
Intestinal Operations	2,591	910	1,072	459	3,935	3,636	161	343	71	105
Haemorrhoidectomy	1,335	578	679	174	1,236	1,638	64	111	20	146
Breast Biopsy	90	53	34	25	180	138	33	46	5	16
Mastectomy	608	229	147	117	1,070	615	53	58	13	55
Bronchus & Lung	139	118	15	53	243	134	—	16	—	20
Aneurysm Surgery	39	37	3	4	67	61	1	—	1	5
Varicose Veins	1,042	389	349	170	689	1,083	27	21	11	45
Total	15,312 <sup>1</sup>	6,368	6,822	2,166	21,262	25,108	1,408	1,856	347	1,239
Total/100,000 population	3,768	212	666	189	182	341	186	197	249	230

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>BC Ministry of Health web site reports 9,676 patients waiting as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

**Table 9f: Neurosurgery (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Peripheral Nerve	90	141	9	—	761	548	44	29	—	—
Disc Surgery/Laminectomy	291	201	121	183	1,161	1,027	106	28	—	—
Elective Cranial Bone Flap	255	579	184	113	1,092	765	84	48	—	—
Aneurysm Surgery	5	9	2	—	15	10	2	1	—	—
Carotid Endarterectomy	48	—	2	—	62	41	18	5	—	—
Total	688 <sup>1</sup>	930	319	296	3,091	2,391	255	110	—	—
Total/100,000 population	169	31	31	26	26	32	34	12	—	—

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>BC Ministry of Health web site reports 1,017 patients waiting as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”



**Table 9g: Orthopaedic Surgery (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Meniscectomy/Arthroscopy	3,301	2,420	3,568	1,030	8,300	4,600	1,295	851	99	242
Removal of Pins	1,167	583	637	138	2,090	1,759	361	208	8	120
Arthroplasty (Hip, Knee, Ankle, Shoulder)	7,245 <sup>1</sup>	4,774 <sup>2</sup>	5,031	1,202	13,983	6,208	992	1,064	98	246
Arthroplasty (Interphalangeal/Metatarsophalangeal)	256	120	97	38	378	277	62	125	4	10
Hallux Valgus/Hammer Toe	661	—	—	—	1,864	422	321	—	—	59
Digit Neuroma	1,048	753	723	169	2,075	1,823	347	452	14	139
Rotator Cuff Repair	483	371	226	55	1,050	610	82	61	—	43
Ostectomy (All Types)	1,808	1,536	1,920	320	4,557	3,142	730	562	41	97
Routine Spinal Instability	914	319	485	77	981	517	186	104	—	22
Total	16,884 <sup>1</sup>	10,876	12,688	3,027	35,278	19,359	4,376	3,428	263	979
Total/100,000 population	4,155	363	1,239	264	302	263	578	365	189	182

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>BC Ministry of Health web site reports 1,721 patients waiting for Hip Replacement Surgery, 2,702 for Knee Replacement Surgery, and 12,983 total for Orthopaedic Surgery as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

<sup>2</sup>Alberta Health and Wellness report 2,116 persons waiting for hip or knee replacement as of December 31, 2000.

**Table 9h: Cardiovascular Surgery (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Coronary Artery Bypass	1,109	882 <sup>2</sup>	37	72	515 <sup>3</sup>	864	14	65	—	21
Valves & Septa of the Heart	382	260 <sup>2</sup>	17	14	158 <sup>3</sup>	137	3	20	—	1
Aneurysm Surgery	6	4	1	1	5	5	—	—	—	—
Carotid Endarterectomy	23	6	7	31	25	22	1	3	—	1
Pacemaker Operations	222	63	57	—	221	291	13	32	—	—
Total	1,742 <sup>1</sup>	1,214	118	117	924	1,318	31	121	—	23
Total/100,000 population	429	41	12	10	8	18	4	13	—	4

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>BC Ministry of Health web site reports 468 patients waiting for Cardiac Surgery and 1,110 for Vascular Surgery, as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

<sup>2</sup>Alberta Health and Wellness report that 419 persons were waiting for open heart procedures as of December 31, 2000.

<sup>3</sup>Cardiac Care Network of Ontario reports that 1,031 persons were waiting for open-heart surgery as of April 30, 2001.

**Table 9i: Urology (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Non-radical Prostatectomy	1,308	207	685	84	1,189	1,000	156	151	19	53
Radical Prostatectomy	88	42	8	14	234	99	11	18	2	6
Transurethral Resection—Bladder	466	137	81	41	946	455	53	81	4	23
Radical Cystectomy	13	5	2	2	35	11	4	3	—	1
Cystoscopy	4,358	1,998	643	429	11,916	9,200	2,120	1,616	87	495
Hernia/Hydrocele	1,361	306	979	331	1,795	1,602	237	193	19	44
Bladder Fulgration	470	277	151	117	1,316	1,039	116	128	21	36
Ureteral Reimplantation for Reflux	38	14	54	2	58	41	8	25	—	3
Total	8,103 <sup>1</sup>	2,986	2,605	1,021	17,490	13,447	2,705	2,214	151	661
Total/100,000 population	1,994	100	254	89	150	182	357	236	109	123

Note: Totals may not match sums of numbers for individual procedures due to rounding.

<sup>1</sup>BC Ministry of Health web site reports 5,461 patients waiting as of December 31, 2000. The Ministry includes only those patients whose procedures have been booked. For an extensive explanation, please refer to “Verification of current data with governments—British Columbia.”

**Table 9j: Internal Medicine (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Colonoscopy	1,754	2,663	808	532	5,780	4,347	247	414	151	215
Angiography/Angioplasty	2,549	1,264	799	265	3,933	1,904	413	248	12	334
Bronchoscopy	140	195	17	32	633	1,326	41	54	6	33
Gastroscopy	182	375	176	85	1,236	930	66	52	23	69
Total	4,625	4,497	1,800	913	11,581	8,506	766	768	193	651
Total/100,000 population	114	150	176	80	99	115	101	82	139	121

Note: Totals may not match sums of numbers for individual procedures due to rounding.

**Table 9k: Radiation Oncology (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist<sup>1</sup>**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Radiotherapy	4722 <sup>2</sup>	106	39	—	278	311	79	14	—	9
Total/100,000 population	12	4	4	—	2	4	10	2	—	2

<sup>1</sup>All data regarding oncology refer only to procedures done in hospitals. Most cancer patients are treated in cancer agencies. Therefore, the oncology data must be regarded as incomplete. Data being collected by the Canadian Association of Provincial Cancer Agencies may be useful in providing future estimates of patients waiting for treatment by oncologists. Interested parties should contact the Canadian Association of Provincial Cancer Agencies.

<sup>2</sup>British Columbia Cancer Agency reports 535 patients waiting for treatment from “ready to treat” status.

**Table 9l: Medical Oncology (2000-01)—Estimated Number of Patients Waiting for Treatment after Appointment with Specialist**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Chemotherapy	125	237	80	—	1,577	467	48	93	3	130
Total/100,000 population	3	8	8	—	14	6	6	10	2	24

**Table 10: Estimated Number of Patients Waiting for Treatment after Appointment with Specialist (2000-01)—Patients Waiting Per 100,000 Population**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Plastic Surgery	1,171	81	156	92	67	70	183	145	237	162
Gynaecology	1,876	194	555	220	108	119	345	133	102	174
Ophthalmology	3,844	102	1,005	342	388	850	177	267	22	82
Otolaryngology	1,701	109	441	118	118	113	208	167	84	162
General Surgery	3,768	212	666	189	182	341	186	197	249	230
Neurosurgery	169	31	31	26	26	32	34	12	—	—
Orthopaedic Surgery	4,155	363	1,239	264	302	263	578	365	189	182
Cardiovascular Surgery	429	41	12	10	8	18	4	13	—	4
Urology	1,994	100	254	89	150	182	357	236	109	123
Internal Medicine	114	150	176	80	99	115	101	82	139	121
Radiation Oncology <sup>1</sup>	12	4	4	—	2	4	10	2	—	2
Medical Oncology <sup>1</sup>	3	8	8	—	14	6	6	10	2	24

<sup>1</sup>All data regarding oncology refer only to procedures done in hospitals. Most cancer patients are treated in cancer agencies. Therefore, the oncology data must be regarded as incomplete. Data being collected by the Canadian Association of Provincial Cancer Agencies may be useful in providing future estimates of patients waiting for treatment by oncologists. Interested parties should contact the Canadian Association of Provincial Cancer Agencies.

**Table 11: Comparison of Estimated Number of Patients Waiting for Treatment after Appointment with Specialist, by Speciality, 1999 and 2000-01**

	British Columbia		Alberta		Saskatchewan		Manitoba		Ontario						
	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg			
Plastic Surgery	4,758	3,842	24%	2,432	1,922	27%	1,601	1,383	16%	1,051	1,072	-2%	7,867	5,384	46%
Gynaecology	7,622	8,035	-5%	5,821	4,487	30%	5,686	4,845	17%	2,525	1,285	97%	12,597	12,870	-2%
Ophthalmology	15,622	14,224	10%	3,062	4,333	-29%	10,292	7,328	40%	3,929	178	2113%	45,228	53,409	-15%
Otolaryngology	6,912	6,563	5%	3,261	4,109	-21%	4,517	4,537	0%	1,360	1,270	7%	13,773	14,117	-2%
General Surgery	15,312	13,188	16%	6,368	6,141	4%	6,822	7,810	-13%	2,166	1,141	90%	21,262	20,182	5%
Neurosurgery	688	103	570%	930	660	41%	319	177	80%	296	195	51%	3,091	2,641	17%
Orthopaedic Surgery	16,884	17,251	-2%	10,876	9,207	18%	12,688	9,096	39%	3,027	2,853	6%	35,278	33,227	6%
Cardiovascular Surgery	1,742	1,247	40%	1,214	812	50%	118	63	88%	117	—	—	924	1,039	-11%
Urology	8,103	9,547	-15%	2,986	2,848	5%	2,605	2,795	-7%	1,021	537	90%	17,490	15,569	12%
Internal Medicine	4,625	5,227	-12%	4,497	3,471	30%	1,800	1,220	48%	913	859	6%	11,581	10,114	15%
Radiation Oncology <sup>1</sup>	47	146	-68%	106	95	11%	39	33	19%	—	20	—	278	291	-4%
Medical Oncology <sup>1</sup>	125	103	21%	237	379	-38%	80	16	400%	—	94	—	1,577	1,577	0%
Residual	52,740	46,092	14%	34,577	31,725	9%	27,267	39,401	-31%	11,936	7,051	69%	104,339	89,433	17%
Total	135,179	125,569	8%	76,368	70,190	9%	73,836	78,707	-6%	28,341	16,556	71%	275,287	259,853	6%

Note: Percentage changes are calculated from exact weighted medians, which have been rounded for inclusion in the table.

<sup>1</sup>All data regarding oncology refer only to procedures done in hospitals. Most cancer patients are treated in cancer agencies. Therefore, the oncology data must be regarded as incomplete. Data being collected by the Canadian Association of Provincial Cancer Agencies may be useful in providing future estimates of patients waiting for treatment by oncologists. Interested parties should contact the Canadian Association of Provincial Cancer Agencies.

**Table 11: Comparison of Estimated Number of Patients Waiting for Treatment after Appointment with Specialist, by Speciality, 1999 and 2000-01**

	Quebec			New Brunswick			Nova Scotia			Prince Edward Island			Newfoundland		
	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg	2000-01	1999	% chg
Plastic Surgery	5,142	2,737	88%	1,382	592	133%	1,363	2,281	-40%	330	275	20%	873	802	9%
Gynaecology	8,741	7,598	15%	2,608	2,033	28%	1,254	1,549	-19%	142	141	1%	939	893	5%
Ophthalmology	62,642	92,866	-33%	1,339	1,908	-30%	2,505	3,563	-30%	31	25	25%	443	698	-36%
Otolaryngology	8,343	4,956	68%	1,573	1,376	14%	1,574	1,954	-19%	116	—	—	871	1,366	-36%
General Surgery	25,108	17,615	43%	1,408	1,726	-18%	1,856	1,345	38%	347	549	-37%	1,239	1,045	19%
Neurosurgery	2,391	1,255	91%	255	232	10%	110	157	-30%	—	—	—	—	37	—
Orthopaedic Surgery	19,359	18,637	4%	4,376	2,458	78%	3,428	2,607	31%	263	244	8%	979	387	153%
Cardiovascular Surgery	1,318	720	83%	31	95	-67%	121	203	-41%	—	—	—	23	98	-76%
Urology	13,447	9,896	36%	2,705	1,991	36%	2,214	2,918	-24%	151	69	120%	661	568	16%
Internal Medicine	8,506	7,719	10%	766	459	67%	768	738	4%	193	15	1189%	651	627	4%
Radiation Oncology <sup>1</sup>	311	296	5%	79	43	85%	14	19	-23%	—	—	—	9	8	11%
Medical Oncology <sup>1</sup>	467	566	-17%	48	71	-32%	93	81	15%	3	3	0%	130	—	—
Residual	66,561	59,073	13%	9,725	8,137	20%	10,323	10,028	3%	975	1,617	-40%	5,454	7,522	-28%
Total	222,338	223,931	-1%	26,295	21,122	24%	25,623	27,443	-7%	2,551	2,937	-13%	12,270	14,050	-13%

Note: Percentage changes are calculated from exact weighted medians, which have been rounded for inclusion in the table.

<sup>1</sup>All data regarding oncology refer only to procedures done in hospitals. Most cancer patients are treated in cancer agencies. Therefore, the oncology data must be regarded as incomplete. Data being collected by the Canadian Association of Provincial Cancer Agencies may be useful in providing future estimates of patients waiting for treatment by oncologists. Interested parties should contact the Canadian Association of Provincial Cancer Agencies.

**Table 12a: Acute Inpatient Procedures, 1999-2000**

Procedure	BC	AB	SK	MB	ON	NB	NS	PE	NF
Mammoplasty	1,825	1,010	307	383	4,130	616	126	45	72
Neurolysis (PL)/Peripheral Nerve (NR)	635	569	180	185	4,426	226	164	19	126
Blepharoplasty	19	17	19	1	84	6	25	0	3
Rhinoplasty (PL)/Rhinoplasty &/or Septal Surgery (OT)	998	308	191	146	1,373	318	537	55	298
Scar Revision	1,343	1,335	394	528	3,573	319	450	48	190
Hand Surgery (PL)/Digit Neuroma (OR)	393	167	95	52	900	104	100	8	65
Dilation and Curettage	833	538	203	72	1,617	140	37	37	170
Tubal Ligation	1,508	1,336	766	502	3,711	582	444	103	310
Hysterectomy (Vaginal/Abdominal)	6,600	4,657	1,904	1,452	18,572	2,358	2,099	312	1,369
Vaginal Repair	1,057	880	369	156	3,779	437	619	26	266
Tuboplasty	124	88	20	5	125	9	9	3	11
Laparoscopic Procedures	2,224	1,023	951	177	4,406	371	223	49	114
Hysteroscopic Procedures	182	175	113	12	493	30	14	10	66
Cataract Removal	405	192	141	6	1,088	270	292	31	50
Cornea Transplant	29	1	0	0	13	0	11	6	5
Cornea—Pterygium	1	1	1	0	4	1	2	0	0
Iris, Ciliary Body, Sclera, Anterior Chamber	397	325	158	8	1,131	33	325	13	72
Retina, Choroid, Vitreous	4,547	3,951	867	17	8,303	73	2,814	3	272
Lacrimal Duct Surgery	113	87	131	6	348	41	96	0	49
Strabismus Surgery	80	17	97	3	106	6	15	2	2
Operations on Eyelids	470	271	110	56	956	90	156	4	30
Myringotomy	542	321	289	150	1,954	529	418	39	260
Tympanoplasty	239	133	39	46	674	160	102	16	140
Thyroid, Parathyroid, and Other Endocrine Glands	1,207	1,232	386	313	4,904	302	392	47	185
Tonsillectomy and/or Adenoidectomy	2,567	1,651	1,271	562	4,354	1,603	1,238	217	1,121
Operations on Nasal Sinuses	1,680	1,228	232	117	2,379	294	333	56	273
Hernia/Hydrocele (GS/UR)	6,068	4,694	2,685	930	22,930	1,751	1,936	301	944
Cholecystectomy	7,196	4,944	2,770	917	14,185	2,461	2,338	428	1,657
Colonoscopy (GS/IM)	2,726	2,240	1,201	535	9,672	1,046	663	186	862
Intestinal Operations	8,225	5,909	2,391	1,854	24,738	2,031	2,510	366	1,386
Haemorrhoidectomy	921	651	336	133	1,743	200	196	21	88

Source: Canadian Institute for Health Information, "Number of Acute Inpatient Procedures by CCP Code, by Province, 1999-2000."

Note: Information is not available in this format for Quebec procedures.

Abbreviations: PL: Plastic Surgery; NR: Neurosurgery; OT: Otolaryngology; OR: Orthopaedic Surgery; GS: General Surgery; UR: Urology; IM: Internal Medicine; CA: Cardiovascular Surgery



**Table 12a: Acute Inpatient Procedures, 1999-2000**

Procedure	BC	AB	SK	MB	ON	NB	NS	PE	NF
Breast Biopsy	208	181	96	78	602	93	80	6	28
Mastectomy	2,937	1,988	869	532	6,516	548	672	131	365
Bronchus and Lung	819	752	257	413	3,216	230	317	36	130
Aneurysm Surgery (GS/NR/CA)	325	209	80	86	931	54	52	11	31
Varicose Veins	359	388	164	19	684	103	74	3	106
Disk Surgery/Laminectomy	1,100	1,097	450	226	4,794	263	239	1	168
Elective Cranial Bone Flap	2,295	2,316	756	682	7,535	399	622	0	371
Carotid Endarterectomy (NR/CA)	834	394	96	412	1,735	181	135	43	96
Meniscectomy/Arthroscopy	881	671	780	185	2,448	387	171	12	63
Removal of Pins	1,110	772	272	184	2,866	185	215	15	103
Arthroplasty (Hip, Knee, Ankle, Shoulder)	9,377	6,728	2,854	2,586	27,550	1,937	2,687	246	717
Arthroplasty (Interphalangeal, Metatarsophalangeal)	335	156	32	47	678	44	86	3	28
Hallux Valgus/Hammer Toe	754	595	394	172	3,554	320	115	20	103
Rotator Cuff Repair	236	191	88	29	659	31	43	2	28
Osteotomy (All Types)	2,222	2,148	845	439	7,712	647	576	19	206
Routine Spinal Instability	1,150	1,165	335	234	3,281	295	217	0	88
Coronary Artery Bypass	4,118	3,270	1,283	1,654	17,310	946	1,697	0	1,082
Valves and Septa of the Heart	1,686	1,032	426	245	4,159	194	516	0	70
Pacemaker Operations	4,112	2,287	1,185	864	8,359	908	1,417	58	221
Non-Radical Prostatectomy	4,203	1,420	1,247	423	8,724	713	870	160	325
Radical Prostatectomy	671	479	88	153	1,850	133	155	25	91
Transurethral Resection—Bladder	1,463	806	513	157	5,041	438	380	49	260
Radical Cystectomy	121	93	18	30	326	30	42	3	12
Cystoscopy	3,682	1,778	1,682	752	12,887	2,269	1,983	288	936
Bladder Fulguration	1,498	1,317	1,325	292	7,600	648	732	150	309
Ureteral Reimplantation for Reflux	128	175	76	51	289	18	139	3	23
Angiography/Angioplasty	8,471	4,833	1,915	1,351	18,998	1,888	1,980	41	994
Bronchoscopy	1,009	1,361	167	309	5,191	268	499	29	431
Gastroscopy	660	991	367	119	3,280	470	222	69	358
Radiotherapy	773	703	302	209	2,500	485	274	48	55
Chemotherapy	2,755	1,791	649	436	8,912	1,647	1,189	61	324
Residual	104,889	79,084	30,849	22,117	298,710	24,260	34,082	2,594	15,387
Total	220,335	161,122	69,077	44,810	625,568	57,439	71,162	6,577	33,965

Source: Canadian Institute for Health Information, "Number of Acute Inpatient Procedures by CCP Code, by Province, 1999-2000."

Note: Information is not available in this format for Quebec procedures.

Abbreviations: PL: Plastic Surgery; NR: Neurosurgery; OT: Otolaryngology; OR: Orthopaedic Surgery; GS: General Surgery; UR: Urology; IM: Internal Medicine; CA: Cardiovascular Surgery

**Table 12b: Same Day Procedures, 1999-2000**

Procedure	BC	SK	MB	ON	NB	NS	PE	NF
Mammoplasty	881	117	296	2,546	84	69	36	7
Neurolysis (PL)/Peripheral Nerve (NR)	1,398	349	157	7,182	262	497	147	346
Blepharoplasty	282	201	12	1,732	49	32	21	69
Rhinoplasty (PL)/Rhinoplasty &/or Septal Surgery (OT)	3,661	838	1,044	7,166	579	572	100	42
Scar Revision	678	173	252	3,097	230	803	28	39
Hand Surgery (PL)/Digit Neuroma (OR)	3,895	1,129	1,211	12,550	786	1,057	148	487
Dilation and Curettage	9,095	2,158	1,906	23,563	1,103	1,665	261	2,304
Tubal Ligation	5,178	1,260	997	15,620	1,393	1,262	143	749
Hysterectomy (Vaginal/Abdominal)	1	3	2	126	0	10	0	2
Vaginal Repair	909	353	246	2,693	130	298	12	109
Tuboplasty	120	12	4	136	6	15	8	8
Laparoscopic Procedures	4,278	1,472	1,303	14,006	792	1,107	153	665
Hysteroscopic Procedures	4,849	1,603	1,258	11,661	547	859	146	1,100
Cataract Removal	28,729	10,234	6	83,835	5,431	6,780	688	2,352
Cornea Transplant	12	0	0	160	0	0	0	0
Cornea—Pterygium	332	101	0	1,266	44	58	13	93
Iris, Ciliary Body, Sclera, Anterior Chamber	757	527	1	9,936	53	516	10	164
Retina, Choroid, Vitreous	1,507	994	6	17,248	47	191	3	84
Lacrimal Duct Surgery	943	301	51	3,491	81	69	24	73
Strabismus Surgery	1,154	191	165	3,745	237	585	16	87
Operations on Eyelids	2,260	1,164	527	7,599	437	440	64	161
Myringotomy	5,668	4,002	1,582	31,166	2,721	3,858	472	1,340
Tympanoplasty	843	411	168	1,450	281	237	17	184
Thyroid, Parathyroid, and Other Endocrine Glands	48	45	12	504	7	35	3	9
Tonsillectomy and/or Adenoidectomy	2,783	327	1,062	17,731	584	556	41	142
Operations on Nasal Sinuses	3,047	329	586	8,702	426	388	159	382
Hernia/Hydrocele (GS/UR)	8,210	1,073	1,556	20,206	1,232	1,745	235	596
Cholecystectomy	1,971	176	1,003	14,337	299	770	0	62
Colonoscopy (GS/IM)	20,653	9,974	4,843	98,826	3,556	6,144	1,282	3,968
Intestinal Operations	6,444	2,374	1,007	28,785	565	1,552	369	731
Haemorrhoidectomy	1,874	750	80	7,872	193	522	95	463

Source: Canadian Institute for Health Information, "Number of Same Day Procedures by CCP Code, by Province, 1999-2000."

Note: Information is not available in this format for Alberta and Quebec procedures.

Abbreviations: PL: Plastic Surgery; NR: Neurosurgery; OT: Otolaryngology; OR: Orthopaedic Surgery; GS: General Surgery; UR: Urology; IM: Internal Medicine; CA: Cardiovascular Surgery

**Table 12b: Same Day Procedures, 1999-2000**

Procedure	BC	SK	MB	ON	NB	NS	PE	NF
Breast Biopsy	945	499	823	2,761	604	1,024	123	259
Mastectomy	5,321	1,278	857	14,569	720	858	255	747
Bronchus and Lung	31	7	11	271	2	15	1	1
Aneurysm Surgery (GS/NR/CA)	5	1	2	16	0	0	1	0
Varicose Veins	1,396	311	250	5,250	127	330	41	33
Disk Surgery/Laminectomy	0	1	0	61	0	2	0	2
Elective Cranial Bone Flap	23	11	10	90	0	3	0	1
Carotid Endarterectomy (NR/CA)	0	0	1	1	0	0	0	0
Meniscectomy/Arthroscopy	11,434	4,404	3,973	31,958	4,189	2,502	848	599
Removal of Pins	2,358	610	393	5,781	486	406	51	213
Arthroplasty (Hip, Knee, Ankle, Shoulder)	1,696	728	538	3,615	238	292	8	13
Arthroplasty (Interphalangeal, Metatarsophalangeal)	333	53	72	775	55	90	16	30
Hallux Valgus/Hammer Toe	911	213	360	4,621	287	502	47	76
Rotator Cuff Repair	825	299	153	3,168	160	205	12	99
Osteotomy (All Types)	2,732	884	737	9,593	1,003	1,048	196	91
Routine Spinal Instability	0	0	0	3	0	1	0	0
Coronary Artery Bypass	0	0	0	0	0	0	0	2
Valves and Septa of the Heart	5	3	0	15	0	3	0	1
Pacemaker Operations	763	290	447	3,141	24	259	0	131
Non-Radical Prostatectomy	381	7	237	618	23	22	1	6
Radical Prostatectomy	0	0	0	1	0	0	0	0
Transurethral Resection—Bladder	2,890	405	440	5,433	283	494	18	75
Radical Cystectomy	0	1	1	1	0	0	0	0
Cystoscopy	23,131	9,852	2,371	120,669	5,959	10,167	463	4,089
Bladder Fulguration	1,530	316	365	7,785	497	650	35	186
Ureteral Reimplantation for Reflux	2	0	0	0	1	1	0	0
Angiography/Angioplasty	5,184	2,294	1,308	7,934	553	419	85	557
Bronchoscopy	912	60	219	4,481	234	317	50	393
Gastroscopy	1,246	1,325	255	10,477	134	523	190	804
Radiotherapy	216	12	56	107	1	1	0	1
Chemotherapy	52	186	420	16,009	14	23	20	381
Residual	125,572	40,046	28,807	476,378	27,341	42,604	4,079	17,210
Total	312,354	106,737	64,449	1,194,519	65,090	95,453	11,234	42,818

Source: Canadian Institute for Health Information, "Number of Same Day Procedures by CCP Code, by Province, 1999-2000."

Note: Information is not available in this format for Alberta and Quebec procedures.

Abbreviations: PL: Plastic Surgery; NR: Neurosurgery; OT: Otolaryngology; OR: Orthopaedic Surgery; GS: General Surgery; UR: Urology; IM: Internal Medicine; CA: Cardiovascular Surgery

**Table 13: Median Reasonable Wait to Receive Treatment after Appointment with Specialist, by Specialty, 2000-01 (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF	CAN
Plastic Surgery	9.8	9.9	13.0	—	5.9	6.3	14.6	12.7	12.0	—	7.3
Gynaecology	5.0	4.8	9.6	6.0	4.5	5.3	5.6	3.8	5.5	3.9	5.0
Ophthalmology	7.1	5.3	9.5	8.3	6.7	7.7	9.1	6.2	12.0	6.9	7.3
Otolaryngology	6.1	8.1	6.3	6.8	5.1	4.4	4.8	10.2	12.0	5.4	5.6
General Surgery	4.2	3.3	4.1	4.0	3.4	3.4	3.6	3.1	2.3	4.0	3.5
Neurosurgery	4.1	9.2	3.7	1.7	3.9	2.8	8.2	3.7	—	—	4.0
Orthopaedic Surgery	6.4	6.7	8.5	6.7	5.9	6.9	8.6	7.6	—	6.9	6.5
Cardiovascular Surgery (Urgent)	2.2	3.2	1.8	1.1	1.0	0.8	0.7	2.0	—	1.0	1.3
Cardiovascular Surgery (Elective)	5.4	6.0	9.5	8.5	4.1	4.8	6.9	6.9	—	13.6	5.3
Urology	2.8	2.7	2.9	2.5	2.8	2.2	5.3	2.6	2.8	2.3	2.7
Internal Medicine	2.0	2.9	2.0	2.0	2.1	2.5	2.4	2.9	2.6	2.2	2.3
Radiation Oncology	3.3	3.4	4.0	—	3.2	4.9	3.3	5.6	—	6.8	3.6
Medical Oncology	1.8	2.4	6.0	—	2.1	2.0	3.0	2.5	3.1	6.2	2.2
Weighted Median	5.0	4.8	6.2	5.1	4.2	4.9	6.0	5.2	4.6	4.3	4.7

**Table 14a: Plastic Surgery (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Mammoplasty	12.0	12.0	12.0	—	9.0	6.0	20.0	27.0	12.0	—
Neurolysis	6.0	6.0	7.0	—	4.0	4.0	8.0	6.0	12.0	—
Blepharoplasty	10.0	12.0	9.0	—	6.0	5.5	20.0	14.0	12.0	—
Rhinoplasty	10.0	12.0	26.0	—	6.0	7.0	20.0	14.0	12.0	—
Scar Revision	10.0	12.0	10.5	—	6.0	8.0	12.0	14.0	12.0	—
Hand Surgery	8.0	7.5	9.0	—	4.0	8.0	4.0	6.0	12.0	—
Craniofacial Procedures	9.0	10.0	19.0	—	7.5	12.0	1.5	10.5	12.0	—
Skin Cancer and Other Tumors	2.5	3.5	5.0	—	3.0	4.0	4.0	3.0	4.0	—
Weighted Median <sup>1</sup>	9.8	9.9	13.0	—	5.9	6.3	14.6	12.7	12.0	—

<sup>1</sup>Weighted median does not include craniofacial procedures or skin cancer and other tumors.

**Table 14b: Gynaecology (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Dilation and Curettage	3.8	4.0	3.5	3.8	3.0	4.0	4.0	3.0	3.0	2.0
Tubal Ligation	6.0	6.0	12.0	7.0	6.0	8.0	6.5	4.0	8.0	6.0
Hysterectomy (Vaginal/Abdominal)	6.0	6.0	12.0	7.0	5.0	6.0	5.5	4.0	6.0	6.0
Vaginal Repair	6.0	6.0	13.0	7.0	6.0	8.0	6.5	4.0	6.0	8.0
Tuboplasty	9.0	5.5	12.0	6.5	6.0	8.0	10.0	4.0	7.0	10.0
Laparoscopic Procedures	5.0	5.0	11.0	6.0	4.0	5.0	5.5	4.0	5.0	4.0
Hysteroscopic Procedures	4.0	4.0	9.0	4.0	4.0	5.0	5.0	4.0	6.0	2.0
Weighted Median	5.0	4.8	9.6	6.0	4.5	5.3	5.6	3.8	5.5	3.9

**Table 14c: Ophthalmology (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Cataract Removal	8.0	8.0	10.0	9.0	8.0	8.0	9.0	8.0	12.0	7.0
Cornea Transplant	10.0	11.0	22.0	7.0	8.0	10.0	10.0	12.0	—	6.8
Cornea—Pterygium	6.0	8.0	12.0	4.0	8.0	8.0	12.0	9.0	12.0	8.5
Iris, Ciliary Body, Sclera, Anterior Chamber	7.0	5.0	10.0	5.0	5.0	7.0	10.0	5.3	—	—
Retina, Choroid, Vitreous	4.0	2.0	4.0	—	2.0	1.5	0.8	2.3	—	2.5
Lacrimal Duct	8.0	6.0	12.0	9.0	8.0	5.0	8.0	9.0	—	10.0
Strabismus	8.5	6.0	10.0	10.0	8.0	8.0	10.0	6.0	12.0	10.0
Operations on Eyelids	4.0	6.0	12.0	4.0	8.0	6.0	11.0	5.0	12.0	10.0
Glaucoma	4.0	2.3	4.0	5.0	4.0	2.5	6.0	3.3	12.0	5.0
Weighted Median <sup>1</sup>	7.1	5.3	9.5	8.3	6.7	7.7	9.1	6.2	12.0	6.9

<sup>1</sup>Weighted median does not include operations for glaucoma.

**Table 14d: Otolaryngology (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Myringotomy	5.0	12.0	4.0	6.0	5.5	4.0	3.5	12.5	12.0	10.0
Tympanoplasty	4.0	4.0	3.5	6.0	4.0	4.0	8.0	3.5	—	2.0
Thyroid, Parathyroid, and Other Endocrine Glands	8.0	8.5	16.0	6.0	6.0	6.0	8.0	12.0	—	2.5
Tonsillectomy and/or Adenoidectomy	6.0	4.0	4.0	8.0	4.0	4.0	4.0	6.0	—	3.0
Rhinoplasty and/or Septal Surgery	6.0	5.0	16.0	8.0	5.0	4.0	8.0	8.0	—	2.0
Operations on Nasal Sinuses	7.5	6.0	16.0	6.0	6.0	6.0	8.0	11.0	—	3.0
Weighted Median	6.1	8.1	6.3	6.8	5.1	4.4	4.8	10.2	12.0	5.4

**Table 14e: General Surgery (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Hernia/Hydrocele	6.0	4.0	5.0	6.0	5.0	5.0	6.0	5.0	3.0	5.0
Cholecystectomy	6.0	4.0	5.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0
Colonoscopy	2.5	2.8	4.0	4.0	3.0	3.0	3.5	3.0	2.5	6.0
Intestinal Operations	3.0	2.0	3.8	3.5	2.5	3.0	2.0	3.0	2.0	2.0
Haemorrhoidectomy	6.5	8.0	5.5	4.0	5.0	5.0	6.0	4.0	4.0	6.0
Breast Biopsy	2.0	1.8	2.0	2.0	2.0	2.0	2.0	1.3	1.5	2.0
Mastectomy	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.3	1.0	1.8
Bronchus and Lung	2.0	3.0	3.0	4.0	3.0	2.0	—	2.5	—	4.0
Aneurysm Surgery	5.0	4.0	1.5	4.0	6.0	4.0	3.5	—	2.0	—
Varicose Veins	12.0	7.0	6.0	8.0	6.0	8.0	9.0	4.0	4.0	6.5
Weighted Median	4.2	3.3	4.1	4.0	3.4	3.4	3.6	3.1	2.3	4.0

**Table 14f: Neurosurgery (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Peripheral Nerve	5.0	8.0	4.0	—	4.0	2.5	8.0	6.0	—	—
Disc Surgery/Laminectomy	4.5	5.0	4.5	3.0	4.0	4.0	8.0	3.5	—	—
Elective Cranial Bone Flap	4.0	12.0	3.3	1.0	4.0	2.0	9.0	3.0	—	—
Aneurysm Surgery	4.0	12.0	6.0	—	4.0	2.0	8.0	8.0	—	—
Carotid Endarterectomy	2.0	1.0	2.5	—	2.0	2.0	4.0	2.8	—	—
Weighted Median	4.1	9.2	3.7	1.7	3.9	2.8	8.2	3.7	—	—



**Table 14g: Orthopaedic Surgery (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Meniscectomy/Arthroscopy	5.0	4.5	5.0	3.5	4.0	4.0	5.0	6.0	—	5.0
Removal of Pins	6.0	6.0	8.5	5.0	5.5	8.0	14.0	6.0	—	11.0
Arthroplasty (Hip, Knee, Ankle, Shoulder)	8.5	10.0	12.0	12.0	8.0	10.0	10.0	7.5	—	6.0
Arthroplasty (Interphalangeal, Metatarsophalangeal)	6.0	7.5	12.0	7.5	6.0	9.0	12.0	10.0	—	8.0
Hallux Valgus/Hammer Toe	6.0	8.0	12.0	8.0	6.0	9.5	12.0	10.0	—	7.0
Digit Neuroma	6.0	4.0	5.0	4.0	6.0	6.0	12.0	12.0	—	7.5
Rotator Cuff Repair	6.0	5.0	6.0	6.0	5.5	5.0	9.0	6.0	—	6.0
Ostectomy (All Types)	6.0	6.0	12.0	6.0	6.0	8.0	11.0	8.0	—	8.0
Routine Spinal Instability	8.0	10.0	12.0	10.0	6.0	8.0	12.0	9.0	—	8.0
Weighted Median	6.4	6.7	8.5	6.7	5.9	6.9	8.6	7.6	—	6.9

**Table 14h: Cardiovascular Surgery (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF	
<b>EMERGENT</b>	Coronary Artery Bypass	1.0	—	0.0	0.3	0.2	0.0	0.5	0.0	—	1.0
	Valves and Septa of the Heart	1.0	0.1	0.0	0.3	0.2	0.0	0.5	0.0	—	1.0
	Aneurysm Surgery	0.0	0.0	0.0	0.3	0.0	0.0	0.5	0.0	—	1.0
	Carotid Endarterectomy	0.0	0.0	0.1	0.0	0.0	0.0	0.0	—	—	1.0
	Pacemaker Operations	0.2	0.2	0.0	0.0	0.1	0.0	0.5	0.6	—	—
<b>URGENT</b>	Coronary Artery Bypass	3.0	5.0	1.5	1.0	1.0	1.0	0.8	3.0	—	1.0
	Valves and Septa of the Heart	4.0	3.5	2.0	1.0	1.0	1.0	0.8	3.0	—	1.0
	Aneurysm Surgery	2.0	2.8	2.0	1.3	1.0	1.0	0.8	0.8	—	1.0
	Carotid Endarterectomy	2.0	0.5	2.5	1.5	1.0	1.0	0.5	1.0	—	1.0
	Pacemaker Operations	1.0	0.9	2.0	—	1.0	0.2	0.8	0.7	—	—
<b>ELECTIVE</b>	Coronary Artery Bypass	8.0	8.0	9.0	9.5	4.0	6.0	7.0	10.0	—	14.0
	Valves and Septa of the Heart	6.5	8.0	10.0	9.5	5.0	6.0	7.0	10.0	—	14.0
	Aneurysm Surgery	4.0	6.0	7.0	5.5	4.0	4.0	6.0	2.8	—	5.0
	Carotid Endarterectomy	4.0	4.0	4.0	2.8	4.0	4.0	6.0	2.0	—	5.0
	Pacemaker Operations	3.0	2.5	10.0	—	4.0	2.0	7.0	3.0	—	—

**Table 14i: Urology (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Non-radical Prostatectomy	4.5	2.8	10.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
Radical Prostatectomy	2.5	4.0	3.3	2.5	4.0	4.0	2.0	3.0	2.0	2.0
Transurethral Resection—Bladder	2.0	2.5	2.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0
Radical Cystectomy	2.0	3.0	2.5	1.8	3.0	2.0	2.5	2.0	2.0	2.0
Cystoscopy	2.0	2.5	1.5	1.8	2.5	2.0	6.0	2.5	2.0	2.0
Hernia/Hydrocele	6.0	4.0	10.0	6.0	4.0	6.0	6.0	4.0	4.0	5.0
Bladder Fulguration	3.5	3.0	3.0	3.5	3.0	2.0	3.0	2.0	4.0	2.0
Ureteral Reimplantation for Reflux	4.0	4.0	11.0	4.0	5.0	4.0	8.0	4.0	4.0	7.0
Weighted Median	2.8	2.7	2.9	2.5	2.8	2.2	5.3	2.6	2.8	2.3

**Table 14j: Internal Medicine(2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Colonoscopy	2.0	3.5	2.0	2.0	2.3	3.0	2.3	3.5	2.5	2.5
Angiography/Angioplasty	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.0	2.5	2.0
Bronchoscopy	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0
Gastroscopy	2.0	2.8	2.0	2.0	2.0	2.5	3.0	2.8	3.0	2.0
Weighted Median	2.0	2.9	2.0	2.0	2.1	2.5	2.4	2.9	2.6	2.2

**Table 14k: Radiation Oncology (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Cancer of the Larynx	2.0	2.0	1.8	—	2.0	2.0	3.5	2.5	—	4.0
Cancer of the Cervix	2.0	2.0	1.5	—	2.0	2.0	3.5	2.5	—	4.0
Lung Cancer	2.0	2.5	2.3	—	2.0	2.0	2.5	3.0	—	4.0
Prostate Cancer	4.0	4.0	5.0	—	4.0	9.0	4.0	5.5	—	8.0
Breast Cancer	4.0	4.0	5.0	—	4.0	6.0	3.5	9.0	—	8.0
Early Side Effects from Treatment	0.5	1.3	1.0	—	1.0	0.0	1.0	1.0	—	1.0
Late Side Effects from Treatment	3.0	1.5	4.0	—	1.8	1.0	1.0	2.5	—	1.0
Weighted Median <sup>1</sup>	3.3	3.4	4.0	—	3.2	4.9	3.3	5.6	—	6.8

**Table 14l: Medical Oncology (2000-01)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist (in Weeks)**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
Cancer of the Larynx	2.0	2.0	—	—	2.0	2.0	3.0	2.0	4.0	5.0
Cancer of the Cervix	2.0	3.5	—	—	2.0	2.0	3.0	2.0	4.0	—
Lung Cancer	1.5	2.1	—	—	2.0	2.0	3.0	3.0	3.0	5.0
Breast Cancer	2.0	2.5	6.0	—	2.3	2.0	3.0	2.0	3.0	7.0
Side Effects from Treatment	0.2	1.0	0.0	—	0.3	0.2	—	0.0	0.1	1.0
Weighted Median <sup>1</sup>	1.8	2.4	6.0	—	2.1	2.0	3.0	2.5	3.1	6.2

<sup>1</sup>Weighted Median does not include side effects from treatment.

**Table 15: Comparison between the Median Actual Number of Weeks Waited and the Median Reasonable Number of Weeks to Wait for Treatment after Appointment with Specialist, 2000-01**

	British Columbia			Alberta			Saskatchewan			Manitoba			Ontario		
	A	R	D	A	R	D	A	R	D	A	R	D	A	R	D
Plastic Surgery	20.2	9.8	106%	17.6	9.9	78%	27.8	13.0	114%	17.4	—	—	8.9	5.9	51%
Gynaecology	8.4	5.0	68%	8.3	4.8	71%	20.4	9.6	112%	6.9	6.0	15%	5.6	4.5	25%
Ophthalmology	19.5	7.1	173%	8.5	5.3	61%	35.6	9.5	275%	20.0	8.3	143%	16.9	6.7	154%
Otolaryngology	11.6	6.1	92%	10.9	8.1	34%	28.2	6.3	350%	7.7	6.8	14%	7.1	5.1	39%
General Surgery	8.6	4.2	104%	5.8	3.3	77%	16.1	4.1	297%	4.9	4.0	22%	4.2	3.4	23%
Neurosurgery	6.6	4.1	58%	7.2	9.2	-22%	11.9	3.7	220%	14.0	1.7	740%	9.7	3.9	146%
Orthopaedic Surgery	19.3	6.4	199%	17.5	6.7	162%	55.4	8.5	550%	13.6	6.7	102%	10.2	5.9	73%
Cardiovascular Surgery (Urgent)	9.2	2.2	312%	8.4	3.2	159%	1.9	1.8	3%	2.7	1.1	152%	1.1	1.0	7%
Cardiovascular Surgery (Elective)	12.8	5.4	137%	11.4	6.0	91%	6.8	9.5	-28%	16.8	8.5	98%	5.9	4.1	43%
Urology	8.8	2.8	221%	3.5	2.7	30%	6.6	2.9	129%	4.0	2.5	63%	3.3	2.8	18%
Internal Medicine	7.5	2.0	273%	9.8	2.9	237%	6.9	2.0	245%	5.2	2.0	161%	4.4	2.1	108%
Radiation Oncology	2.5	3.3	-26%	6.4	3.4	89%	6.5	4.0	62%	—	—	—	5.2	3.2	60%
Medical Oncology	2.0	1.8	13%	4.0	2.4	69%	5.0	6.0	-17%	—	—	—	2.2	2.1	6%
Weighted Median	12.3	5.0	149%	9.0	4.8	89%	22.6	6.2	265%	9.5	5.1	85%	7.0	4.2	67%

Note: Percentage differences are calculated from exact weighted medians, which have been rounded for inclusion in the table.  
A = Median Actual Wait; R = Median Clinically Reasonable Wait; D = Percentage Difference

**Table 15: Comparison between the Median Actual Number of Weeks Waited and the Median Reasonable Number of Weeks to Wait for Treatment after Appointment with Specialist, 2000-01**

	Quebec			New Brunswick			Nova Scotia			Prince Edward Island			Newfoundland		
	A	R	D	A	R	D	A	R	D	A	R	D	A	R	D
Plastic Surgery	10.6	6.3	69%	22.7	14.6	56%	24.6	12.7	93%	39.5	12.0	229%	63.6	—	—
Gynaecology	6.7	5.3	26%	9.2	5.6	65%	6.2	3.8	62%	6.6	5.5	19%	5.6	3.9	45%
Ophthalmology	15.3	7.7	99%	10.6	9.1	17%	10.8	6.2	75%	20.1	12.0	67%	6.9	6.9	0%
Otolaryngology	6.0	4.4	37%	9.4	4.8	94%	6.1	10.2	-41%	5.4	12.0	-55%	10.5	5.4	93%
General Surgery	5.7	3.4	69%	4.2	3.6	14%	3.4	3.1	9%	5.5	2.3	133%	3.0	4.0	-24%
Neurosurgery	8.0	2.8	182%	14.8	8.2	82%	5.0	3.7	34%	—	—	—	—	—	—
Orthopaedic Surgery	14.5	6.9	110%	18.8	8.6	119%	15.5	7.6	102%	8.9	—	—	13.4	6.9	93%
Cardiovascular Surgery (Urgent)	1.2	0.8	59%	0.7	0.7	0%	1.6	2.0	-20%	—	—	—	1.0	1.0	0%
Cardiovascular Surgery (Elective)	12.8	4.8	164%	9.6	6.9	38%	4.9	6.9	-28%	—	—	—	38.7	13.6	185%
Urology	4.4	2.2	98%	6.7	5.3	26%	6.9	2.6	163%	5.8	2.8	111%	5.1	2.3	125%
Internal Medicine	4.3	2.5	71%	6.2	2.4	154%	4.1	2.9	43%	7.3	2.6	184%	4.3	2.2	93%
Radiation Oncology	8.9	4.9	84%	8.5	3.3	156%	2.7	5.6	-51%	0.0	—	—	8.8	6.8	30%
Medical Oncology	1.0	2.0	-49%	1.5	3.0	-50%	4.0	2.5	59%	2.0	3.1	-35%	9.6	6.2	55%
Weighted Median	9.1	4.9	86%	9.6	6.0	61%	7.8	5.2	50%	8.7	4.6	91%	8.0	4.3	86%

Note: Percentage differences are calculated from exact weighted medians, which have been rounded for inclusion in the table.  
A = Median Actual Wait; R = Median Clinically Reasonable Wait; D = Percentage Difference

**Table 16: Average Percentage of Patients Receiving Treatment Outside of Canada, 2000-01**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF	CAN
Plastic Surgery	1.2%	2.3%	0.7%	1.0%	0.8%	2.0%	0.0%	0.3%	0.0%	0.0%	1.3%
Gynaecology	1.5%	0.3%	0.8%	2.2%	1.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.9%
Ophthalmology	1.4%	1.8%	0.5%	0.9%	3.4%	0.8%	0.2%	3.3%	0.0%	0.7%	2.0%
Otolaryngology	2.5%	1.9%	0.3%	2.0%	3.8%	0.7%	0.5%	0.2%	0.0%	2.0%	1.9%
General Surgery	1.4%	1.6%	0.8%	0.8%	2.7%	0.8%	0.8%	1.3%	0.1%	0.4%	1.6%
Neurosurgery	0.6%	0.5%	1.0%	5.0%	3.1%	1.5%	0.0%	1.0%	—	—	1.6%
Orthopaedic Surgery	1.2%	2.3%	1.3%	1.2%	2.5%	0.7%	0.5%	1.0%	0.0%	0.8%	1.6%
Cardiovascular Surgery	2.0%	0.3%	0.3%	1.3%	1.2%	0.5%	2.5%	2.3%	—	5.0%	1.2%
Urology	1.6%	1.5%	1.0%	3.7%	2.8%	1.1%	1.4%	1.3%	0.0%	0.7%	2.0%
Internal Medicine	2.1%	1.8%	2.3%	1.7%	2.1%	0.8%	0.1%	1.7%	0.7%	2.0%	1.7%
Radiation Oncology	11.7%	1.3%	0.5%	—	5.5%	5.6%	6.5%	2.5%	—	13.3%	5.6%
Medical Oncology	1.5%	3.3%	0.0%	—	1.9%	1.2%	0.0%	0.3%	1.0%	5.0%	1.7%
All Specialties	1.7%	1.6%	1.1%	1.7%	2.4%	0.9%	0.7%	1.5%	0.2%	2.4%	1.7%

# Appendix 1: The Fraser Institute National Waiting List Survey

## General Surgery

Please circle the province in which your office is located:

AB BC MB NB NF NS NT NU ON PE QC SK YT

- From today, how long (in weeks) would a new patient have to wait for a routine office consultation with you?  
\_\_\_\_\_ week(s)
- Do you restrict the number of patients waiting to see **you** in any manner? (i.e. Do you accept referrals only at certain times of the year?)  
 Yes     No
- Over the past 12 months, what percentage of the surgical procedures you performed were done on a day surgery basis?  
\_\_\_\_\_ %
- From today, how long (in weeks) would a new patient have to wait for the following types of elective surgery or diagnostic procedures? What would you consider to be a clinically reasonable waiting time for these types of surgery and procedures?

Surgery or Procedure	Number of Weeks to Wait	Reasonable Number of Weeks to Wait
Hernia repair (all types)/hydrocele		
Cholecystectomy		
Colonoscopy (diagnostic)		
Incision, excision, anastomosis of intestine and other operations on intestine		
Haemorrhoidectomy/other anal surgery		
Breast biopsy		
Mastectomy/segmental resection		
Operations on bronchus and lung		
Incidentally discovered and unruptured aneurysms		
Varicose vein surgery		

5. Has the length of your waiting lists changed since last year at this time?

- Increased     Decreased     Remained the Same

6. If the length of your waiting lists has changed, what are the major reasons for the change? (Check all which may be applicable.)

- \_\_\_\_\_ Availability of O/R nurses  
 \_\_\_\_\_ Availability of other technical staff  
 \_\_\_\_\_ Availability of beds  
 \_\_\_\_\_ Availability of O/R time  
 \_\_\_\_\_ Change in patient load  
 \_\_\_\_\_ Availability of ancillary investigations or consultations (i.e. MRI, CT scans)  
 \_\_\_\_\_ Other

7. What percentage of your patients currently waiting for surgery are on a waiting list primarily because **they** requested a delay or postponement?

\_\_\_\_\_ %

8. What percentage of your patients currently waiting for surgery do you think would agree to having their surgery within the week if an opening arose in O/R?

\_\_\_\_\_ %

9. To the best of your knowledge, what percentage of your patients that are listed on hospital waiting lists might also be listed by other physicians for the same procedure?

\_\_\_\_\_ %

10. Do you use the following types of diagnostic tests? If so, how long (in weeks) would a new patient have to wait for these tests?

Do you use this diagnostic test?	Yes	No	Infrequently	Number of weeks patients wait
CT Scan				
MRI				
Ultrasound				

11. Approximately what percentage of your patients **inquired** in the past 12 months about the availability of medical services:

Outside of the province? \_\_\_\_\_ %    Outside of Canada? \_\_\_\_\_ %

12. Approximately what percentage of your patients **received** non-emergency medical treatment in the past 12 months:

Outside of the province? \_\_\_\_\_ %    Outside of Canada? \_\_\_\_\_ %

*Thank you very much for your cooperation.*



# Appendix 2: Glossary of Terms

**Aneurysm Surgery:** a surgical procedure to correct a localized abnormal dilatation of a blood vessel, usually an artery, due to a congenital defect or a weakness in the wall of the vessel.

**Angiography/Angioplasty:** **angiography** is the diagnostic or therapeutic radiography of the heart and blood vessels using a radiopaque (impenetrable to x-rays or other forms of radiation) contrast medium (types include magnetic resonance imaging, interventional radiology, and computed tomography), and an **angioplasty** is the alteration of a blood vessel, either surgically or by dilating the vessel using a balloon inside the lumen (the space within an artery or vein).

**Arthroplasty:** plastic surgery to reshape or reconstruct a diseased joint (“interphalangeal” refers to a joint between two phalanges, i.e., fingers or toes).

**Bladder Fulguration:** destruction of bladder tissue by means of high-frequency electric sparks.

**Blepharoplasty:** plastic surgery on the eyelid.

**Bronchoscopy:** examination of the bronchi through a bronchoscope (an endoscope designed to pass through the trachea for visual inspection of the tracheobronchial tree).

**Bronchus:** the bronchus, or windpipe, is one of the two large branches of the trachea.

**Carotid Endarterectomy:** a surgical technique for removing intra-arterial obstructions of the lower cervical portion of the internal carotid artery (one of two arteries that comprise the principal blood supply to the head and neck).

**Cataract Removal:** removal of a cataract (i.e., opacity of the lens of the eye, its capsule, or both).

**Cholecystectomy:** excision of the gallbladder by abdominal incision or laparoscopy.

**Colonoscopy:** examination of the upper portion of the rectum with an elongated speculum or a colonoscope (an instrument for examining the colon).

**Cornea—Pterygium:** triangular thickening of the bulbar conjunctiva extending from the inner canthus (eye slit) to the border of the cornea with the apex toward the pupil.

**Cornea Transplant:** transplant of the cornea (transparent anterior portion of the fibrous outer layer of the eyeball composing about one-sixth of its surface).

**Craniofacial Procedures:** procedures concerning the head and the face.

**Cystectomy:** removal of a cyst; excision of the cystic duct and the gallbladder, or just the cystic duct; excision of the urinary bladder or a part of it.

**Cystoscopy:** examination of the bladder with a cystoscope (an instrument for interior examination of the bladder and ureter).

**Digit Neuroma:** a neuroma (i.e., a tumour composed of nerve cells) affecting a digit (finger or toe).

**Dilation and Curettage:** a surgical procedure that expands the cervical canal of the uterus (dilation) so that the surface lining of the uterine wall can be scraped (curettage).

**Disk Surgery/Laminectomy:** a laminectomy is the excision of a vertebral posterior arch, usually to remove a lesion or herniated disc.

**Gastroscopy:** examination of the stomach and abdominal cavity using a gastroscope (an endoscope for inspecting the stomach’s interior).

**Glaucoma:** a group of eye diseases characterized by increased intraocular pressure, resulting in atrophy of the optic nerve and possibly leading to blindness.

**Hallux Valgus:** displacement of the big toe toward the other toes.

**Haemorrhoidectomy:** the removal of haemorrhoids by one of several techniques including surgery, cryotherapy, infrared photocoagulation, laser surgery,

or ligation by use of rubber bands applied to the base of the haemorrhoid.

**Hernia/Hydrocele:** a **hernia** is a protrusion or projection of an organ or part of an organ through the wall of the cavity that normally contains it, and a **hydrocele** is the accumulation of a serous fluid in a saclike cavity.

**Hysterectomy:** surgical removal of the uterus through the abdominal wall or vagina.

**Hysteroscopic Procedures:** procedures involving inspection of the uterus by the use of a special endoscope called a hysteroscope (an instrument for examining the uterine cavity).

**Iris/Ciliary Body/Sclera/Anterior Chamber:** **iris** (the coloured contractile membrane suspended between the lens and the cornea in the aqueous humour of the eye, separating the anterior and posterior chambers of the eyeball and perforated in the centre by the pupil); **ciliary muscle** (the smooth muscle forming a part of the ciliary body of the eye: contraction pulls the choroid forward, lessening tension on the fibres of the zonula (suspensory ligament) and allowing the lens, which is elastic, to become more spherical: accommodation for near vision is accomplished by this process); and, **sclera** (the outer layer of the eyeball made of fibrous connective tissue: at the front of the eye, it is visible as the white of the eye and ends at the cornea, which is transparent).

**Lacrimal Duct:** tear duct.

**Laparoscopic Procedures:** procedures involving abdominal exploration using a laparoscope (an endoscope designed to permit visual examination of the abdominal cavity).

**Mammoplasty:** plastic surgery of the breast.

**Mastectomy:** excision of the breast.

**Meniscectomy/Arthroscopy:** a **meniscectomy** is the removal of meniscus cartilage of the knee, and **arthroscopy** is the direct visualization of a joint by means of an arthroscope (an endoscope for examining the interior of a joint).

**Myringotomy:** incision of the tympanic membrane (of the ear).

**Neurolysis:** the stretching of a nerve to relieve pain; the loosening of adhesions surrounding a nerve; the disintegration or destruction of nerve tissue.

**Ostectomy:** surgical excision of a bone or a portion of one.

**Peripheral Nervous System:** the portion of the nervous system outside the central nervous system.

**Prostatectomy:** excision of part or all of the prostate gland (radical is the complete removal, while non-radical is a partial removal).

**Retina/Choroid/Vitreous:** **retina** (the innermost layer of the eye, which receives images transmitted through the lens and contains the receptors for vision, the rods and cones); **choroid** (the dark blue vascular layer of the eye between the sclera and the retina, extending from the ora serrata to the optic nerve: it consists of blood vessels united by connective tissue containing pigmented cells and contains five layers); and, **vitreous body** (a transparent jelly-like mass composed of collagen fibrils and a gel (vitreous humour): it fills the cavity of the eyeball, behind the lens and in front of the retina).

**Rhinoplasty and/or Septal Surgery:** **rhinoplasty** is plastic surgery of the nose, and **septal surgery** is a surgical procedure on the nasal septum, i.e., the wall dividing the two nasal cavities.

**Strabismus:** a disorder of the eye in which optic axes cannot be directed to the same object: the squinting eye always deviates to the same extent when the eyes are carried in different directions.

**Thyroid and Other Endocrine Glands:** the **thyroid** is an endocrine gland in the neck, anterior to and partially surrounded by the thyroid cartilage and upper rings of the trachea, and **endocrine glands** are ductless glands that produce an internal secretion discharged into the blood or lymph and circulated to all parts of the body (hormones, the active principles of the glands, affect tissues more or less remote from their place of origin).

**Tonsillectomy and/or Adenoidectomy:** a **tonsillectomy** is the surgical removal of the tonsils and an **adenoidectomy** is the excision of the adenoids.

**Tubal ligation:** surgery to tie the fallopian tubes (through which ova and spermatozoa travel).

**Tuboplasty:** plastic repair of a fallopian tube or tubes in an attempt to restore patency so that fertilization of the ovum may occur.

**Tympanoplasty:** any one of several surgical procedures designed either to cure a chronic inflammatory process in the middle ear or to restore function to the sound-transmitting mechanism of the middle ear.

**Varicose vein:** an enlarged, twisted superficial vein.

Source: Thomas (1997).

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