Contents

Preface / 2

Executive Summary / 3

Waiting Your Turn / 6

Selected Graphs / 29

Selected Data Tables / 39

Appendix 1: National Psychiatry Waiting List

Survey / 70

Appendix 2: National Hospital Waiting List Survey

Questionnaire / 76

Appendix 3: Glossary of Terms / 78

References / 81

About the Authors

Nadeem Esmail is Senior Health Policy Analyst and Manager of Health Data Systems at The Fraser Institute. He completed his BA (Honours) in Economics at the University of Calgary, and received an MA in Economics from the University of British Columbia. He has written on a number of health care topics, including *How Good is Canadian Health Care?*, a special, full-length edition of *Fraser Forum* (August 2002) and *Waiting Your Turn: Hospital Waiting Lists in Canada, 12th edition*, co-authored with Michael Walker. He is a frequent contributor to *Fraser Forum* and his articles have been published in newspapers across Canada.

Michael Walker has directed the activities of The Fraser Institute since 1974. Before that, he taught at the University of Western Ontario and Carleton University and was employed at the Bank of Canada and the Federal Department of Finance. He received his Ph.D. at the University of Western Ontario and his B.A. at St. Francis Xavier University. He has written or edited 48 books on economic topics. His articles on technical economic subjects have appeared in professional journals in Canada, the United States, and Europe, including the *Canadian Journal of Economics*, the *American Economic Review*, *The Journal of Finance*, the *Canadian Tax Journal*, *Health Management Quarterly*, and *Health Affairs*. He is a director of a number of firms and other enterprises, including Mancal Corporation, The Milton and Rose D. Friedman Foundation, and The Max Bell Foundation and a member of the Financial Post Board of Economists. In 1992, he was awarded the Colin M. Brown Freedom Medal by the National Citizens Coalition.

Acknowledgments

This edition of *Waiting Your Turn: Hospital Waiting Lists in Canada* draws extensively on previous editions. We are pleased to acknowledge the important contributions of Steven Globerman, Lorna Hoye, Joanna Miyake, Cynthia Ramsay, Greg Wilson, and Martin Zelder in the completion of earlier versions of the survey and in building the base of knowledge that is incorporated into this publication.

Preface

This *Critical Issues Bulletin* is the Institute's thirteenth 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 policy makers 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 have 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 thirteenth annual waiting list survey found that waiting times for surgical and other therapeutic treatments grew in 2003. Total waiting time between referral from a general practitioner and treatment, averaged across all 12 specialties and 10 provinces surveyed, rose from 16.5 weeks in 2001-02 to 17.7 weeks in 2003. This nationwide deterioration reflects waiting-time increases in 7 provinces, while concealing decreases in waiting time in British Columbia, Saskatchewan, and Manitoba.

Among the provinces, Ontario achieved the shortest total wait in 2003, 14.3 weeks, with Manitoba (15.1 weeks) and British Columbia (17.6 weeks) next shortest. Saskatchewan exhibited the longest total wait, 29.9 weeks; the next longest waits were found in Newfoundland (21.8 weeks) and New Brunswick (21.1 weeks).

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

The rise in waiting time between 2001-02 and 2003 is the result of both an increase in the first wait—the wait between visiting a general practitioner and attending a consultation with a specialist—and the wait between consultation with a specialist and actual treatment. The waiting time between referral by a GP and consultation with a specialist grew from 7.3 weeks in 2001-02 to 8.3 weeks in 2003. The shortest waits for specialist consultations were in British Columbia (6.7 weeks), Manitoba (6.9 weeks), and Saskatchewan (7.0 weeks). The longest waits for specialist consultations occurred in Newfoundland (12.6 weeks), New Brunswick (11.8 weeks), and Alberta (10.0 weeks).

The second segment of waiting: between the specialist's decision that treatment is required and treatment

Waiting time between specialist consultation and treatment—the second stage of waiting—increased for Canada as a whole between 2001-02 and 2003, rising from 9.2 to 9.5 weeks. Decreases in British Columbia, Saskatchewan, Manitoba, and New Brunswick disguise increases in the six other provinces. The shortest specialist-to-treatment waits were found in Ontario (7.1 weeks), Manitoba (8.2 weeks), and Alberta (8.5 weeks), while the longest such waits existed in Saskatchewan (23.0 weeks), Prince Edward Island (11.1 weeks), and British Columbia (10.9 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 (6.1 weeks), radiation oncology (8.1 weeks), and general surgery (10.3 weeks). Conversely, patients waited longest between a GP visit and orthopaedic surgery (32.2 weeks), ophthalmology treatment (30.0 weeks), and plastic surgery (28.6 weeks). There were striking increases between 2001-02 and 2003 in the wait times for ophthalmology (+3.4 weeks), otolaryngology (+1.8 weeks), and urology (+1.5 weeks). These increases mask improvements for patients receiving treatment in radiation oncology (-0.4 weeks), gynaecology (-0.3 weeks), and elective cardiovascular surgery (-0.1 weeks).

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 in radiation oncology (2.1 weeks), cardiovascular surgery (3.4 weeks), and medical oncology (3.5 weeks), while the longest waits are for ophthalmology treatment (13.9 weeks), orthopaedic surgery (13.3 weeks), and

neurosurgery (12.4 weeks). For specialist-to-treatment waiting, patients wait the shortest intervals for urgent cardiovascular surgery (2.1 weeks), medical oncology (2.6 weeks), and internal medicine and urology (5.7 weeks), and wait longest for orthopaedic surgery (18.9 weeks), plastic surgery (17.0 weeks), and ophthalmology (16.0 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 118 categories (some comparisons were precluded by missing data), actual waiting time exceeded reasonable waiting time in 92 percent of the comparisons. Averaged across all specialties, Manitoba 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 56 and 60 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.

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 2003. Patients also experienced significant waiting times for various diagnostic technologies across Canada: computed tomography (CT), magnetic resonance imaging (MRI), and ultrasound scans. The median wait for a CT scan across Canada was 5.5 weeks. New Brunswick, Nova Scotia, and Newfoundland had the shortest wait for computed tomography (4.0 weeks), while the

longest wait occurred in Prince Edward Island (8.0 weeks). The median wait for an MRI across Canada was 12.7 weeks. Patients in New Brunswick experienced the shortest wait for an MRI (8.0 weeks), while Newfoundland and Nova Scotia residents waited longest (24.0 weeks). Finally, the median wait for ultrasound was 3.6 weeks across Canada. Both Saskatchewan and Ontario displayed the shortest wait for ultrasound (2.0 weeks), while Manitoba exhibited the longest ultrasound waiting time, 8.0 weeks.

Numbers of procedures for which people are waiting

The numbers of procedures for which people are waiting were also calculated. For the 2003 edition, we have continued to use the methodology first introduced in the eleventh edition, which allows the Institute to more accurately measure the number of procedures for which people are waiting. As well, a significant improvement in our estimation methodology allows us to more accurately estimate the number of procedures for which patients are waiting in 2003. Throughout Canada, the total number of procedures for which people are waiting in 2003 is 876,584, an increase of 3 percent from the estimated 852,308 procedures in 2001-02.1 The number of procedures waited for rose in Alberta, Ontario, Quebec, Nova Scotia, Prince Edward Island, and Newfoundland. Assuming that each person was waiting for only one procedure, 2.78 percent of Canadians were waiting for treatment in 2003, which varied from a low of 2.11 percent in Newfoundland to a high of 7.69 percent in Saskatchewan. However, as noted last year, government of Saskatchewan data suggest that many patients in that province are admitted for multiple procedures, meaning that the estimate of the number of people waiting in that province may be greatly exaggerated.

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

The 2001-02 figures have been restated to include improvements in the estimation procedures, which will make comparison with 2003 figures easier.

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, adds credibility to the Institute's estimates. The evidence from a 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 2003—and its level is high, both historically and internationally. Compared to 1993, waiting time in 2003 is 90 percent longer. 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.

Medical research has shown that longer waits can lead to adverse consequences for cardiac patients. 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 that

examined the impact of increases in government health spending. The study's 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. A follow-up study in 2003 found that increased spending was actually correlated with *increases* in waiting times unless those increases in spending were targeted to physicians or pharmaceuticals.

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 policy makers, 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 thirteenth 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 in years past was the decision by British Columbia's Ministry of Health to disseminate on-line waiting-time information. This year, both the Alberta Ministry of Health and Wellness

and the Saskatchewan Surgical Care Network have begun allowing on-line access to waiting-time information in their respective provinces. 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 queu-

ing 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, a forerunner to Waiting Your Turn, 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 thirteenth edition 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. In this case, the rationing 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. In 1994, Statistics Canada data showed that over one million Canadians felt that they needed care but did not receive it, and that approximately 30 percent of these people were in moderate or severe pain (Statistics Canada, 1994/95). More recent Statistics Canada data show that in 2000-01, an estimated 4.3 million Canadians had difficulties obtaining routine care, health information or advice, immediate care for minor health issues and other first contact services, and approximately 1.4 million Canadians had difficulties gaining access to specialist visits, non-emergency surgery, and selected diagnostic tests (Statistics Canada, 2002). Twenty percent of those who waited for the latter three specialized services indicated that the wait affected their lives; most of these people experienced "worry, stress and anxiety, pain, or diminished health as a result of waiting" (Statistics Canada, 2002). Over 20 percent of the 1.4 million also indicated that their waiting time was unacceptable (Statistics Canada, 2002).

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 preoperative 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 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 waiting is the wage or salary forgone, for which Globerman 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 signaling 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, many arguments 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 1.4 percent of patients received treatment in another country during 2003.

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. Further, specialists rather than general practitioners were surveyed because specialists have primary responsibility for health care management of surgical candidates.

The survey was conducted in all 10 Canadian provinces. Cornerstone List Fulfillment provided mailing lists for the specialists polled. 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. Survey questionnaires were sent to practitioners of 12 different medical specialties: plastic surgery, gynaecology, ophthalmology, otolaryngology, general surgery, neurosurgery, 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 2. 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 in Quebec and New Brunswick 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 January and March 2003.

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 31 percent overall, which is quite high for a mailed survey, and an increase from the 30 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 3). 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, since 1995 waiting time 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.² This means that if the median wait reported is 5 weeks for a

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.

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 15. 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 the 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 surgeries 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 2001-02 and 2003. Table 7 provides frequency distribution data indicating the proportion of survey waiting times that fall within various lengths of time among provinces.

Table 8 summarizes clinically "reasonable" waiting times among provinces and specialties. Tables 9a through 9l 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 10 summarizes the actual versus clinically "reasonable" waiting times among provinces and specialties. Table 11 summarizes the percentage of patients reported as receiving treatment outside Canada among provinces and specialties.

Table 12 presents the estimated number of procedures for which people are waiting, compared among specialties and provinces. Because the questionnaires omit some less commonly performed procedures, the sum of the numbers of procedures for which people are waiting for each specialty in table 12 is, of course, an underestimate of the total number waiting.

The number of non-emergency procedures for which people are waiting that were not included in the survey was also calculated, and is listed in table 12 as the "residual" number of procedures for which people are waiting. To estimate this residual number, 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 median waiting time.

Tables 13a through 13l report the estimated number of procedures for which people are waiting. To allow for interprovincial comparisons, table 14 summarizes the number of procedures for which people are waiting per 100,000 population among specialties and provinces. Table 15 provides the percentage change in the number of procedures for which people are waiting between 2001-02 and 2003.

To estimate the number of procedures for which people are waiting, the total annual number of procedures is divided by 52 (weeks per year) and then multiplied by The Fraser Institute's estimate of the actual provincial average number of 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.

Previously, as noted, the average of survey waiting times was used to provide an estimate of the actual provincial average waiting time (an unobservable measure of the actual patient experience in a province). Continued concerns over exceptionally large numbers of procedures waited for in Saskatchewan led to a revision in the methodology this year to replace the average waiting time measure with the median waiting time measure to estimate the actual patient experience in each province. This change provides a more accurate estimate of the actual number of procedures waited for across Canada, and makes The Fraser Institute's estimates less susceptible to influence from outlier responses (described above).

Because of data production changes at the provincial level, the procedure counts used in the weighting of medians and in the estimation of the procedures for which patients are waiting are based on the Canadian Institute for Health Information's discharge abstract data from 2000-2001. Data for 2001-2002 (the most recent data year available) was not used in the construction of procedure counts this year because the provinces of British Columbia, Nova Scotia, Prince Edward Island, Newfoundland, and parts of Saskatchewan have moved to a newer data standard (ICD-10/CCI), while Alberta, Manitoba, Ontario, Quebec, and New Brunswick fully remain on the previous data standard used in the eleventh and twelfth editions of our survey (ICD-9/CCP). In the interests of data comparability between the provinces, since the new CCI format does not easily compare with last year's CCP format, this study's authors chose to continue using the 2000-2001 data.

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 16) 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.³ The authors made a pro-rated estimate of these procedures in Alberta, Manitoba, and Quebec using the

1999-2000 number of hospitalizations from data published by CIHI.

There are a number of minor problems in matching CIHI's categories of operations to those reported in The Fraser Institute survey. In a few instances, an operation such as rhinoplasty is listed under more than one specialty in Waiting Your Turn. In these cases, we divide the number of patients annually undergoing this type of operation 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 Waiting Your Turn questionnaire has no direct match in the CIHI tabulation. An example is ophthalmologic surgery for glaucoma, which is not categorized separately in the CIHI discharge abstract data. In these cases, we make no estimate of the number of patients waiting for these operations.

Because we are using discharge abstract data, our estimates of procedures waited for are more consistent with those produced by other sources. We expect, in coming years, to further improve our estimates for Manitoba, Alberta, and Quebec. We also anticipate being able to improve our estimates for ophthalmologic 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 16a summarizes the number of acute inpatient discharges by procedure, while table 16b summarizes the number of same-day surgery discharges by procedure.

Verification of current data with governments

In July 2003, we sent preliminary data across Canada to provincial ministries of health, and to provincial cancer and cardiac agencies. As of August 2003, we received substantive replies from provincial health ministries in Alberta, Manitoba, Nova Scotia, and Newfoundland, from cancer agencies in British Columbia, Manitoba,

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

and Ontario, and from the Saskatchewan Surgical Care Network. The BC Ministry of Health, the Alberta Ministry of Health and Wellness, the Saskatchewan Surgical Care Network, and the Cardiac Care Network of Ontario publish data on their web sites providing median waiting times and the numbers of patients waiting.

Many provinces measure the waiting time as the time between the 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 that treatment is required and treatment being received.

British Columbia

In British Columbia, the Ministry of Health defines waiting time in a such way that its estimates are

shorter 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 also understates the patient's actual waiting time between seeing a specialist and receiving treatment. Nevertheless, the ministry suggests that the degree of understatement is small: "We believe that in most procedures 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

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

Specialty	Median Wait (Weeks)	Patients Waiting	Procedures	Procedures/ Week	Expected Wait ¹
Plastic Surgery	5.4	4,341	9,598	184.6	23.5
Gynaecology	4.0	6,339	23,007	442.4	14.3
Ophthalmology	9.1	17,265	31,722	610.0	28.3
Cataract Surgery	10.6	15,291	26,995	519.1	29.5
Cornea Transplant	16.5	616	406	7.8	78.9
Otolaryngology	6.0	4,755	11,279	216.9	21.9
General Surgery	3.9	12,675	38,650	743.3	17.1
Neurosurgery	4.4	1,246	3,722	71.6	17.4
Orthopaedic Surgery	7.3	15,938	26,806	515.5	30.9
Hip Replacement Surgery	18.6	2,487	2,505	48.2	51.6
Knee Replacement Surgery	26.7	4,200	2,646	50.9	82.5
Cardiac Surgery	14.9	651	1,480	28.5	22.9
Vascular Surgery	3.3	1,288	3,296	63.4	20.3
Urology	3.6	5,942	22,665	435.9	13.6
Radiation Oncology	1.1	307	9,380	196.8	1.6

Waits as at March 31, 2003. Procedures column counts the procedures performed between April 1, 2002 and March 31, 2003 except for Radiation Oncology which measures the procedures performed between April 1, 2002 and February 28, 2003.

Source: British Columbia Ministry of Health Services, 2003.

¹Number of weeks to exhaust the list of patients waiting (patients waiting/procedures per week)

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

Specialty	BC Health Median Wait ¹	BC Health Expected Wait ²	Fraser Institute Median Wait ³
Plastic Surgery	5.4	23.5	25.5
Gynaecology	4.0	14.3	8.1
Ophthalmology	9.1	28.3	9.9
Cataract Surgery	10.6	29.5	12.0
Cornea Transplant	16.5	78.9	50.0
Otolaryngology	6.0	21.9	12.6
General Surgery	3.9	17.1	7.2
Neurosurgery	4.4	17.4	9.7
Orthopaedic Surgery	7.3	30.9	24.7
Hip Replacement Surgery	18.6	51.6	52.0
Knee Replacement Surgery	26.7	82.5	52.0
Cardiac Surgery	14.9	22.9	16.6
Vascular Surgery	3.3	20.3	16.6
Urology	3.6	13.6	6.9
Radiation Oncology	1.1	1.6	1.3

¹Retrospective median wait at March 31, 2003

Sources: British Columbia Ministry of Health Services, 2003; and The Fraser Institute's hospital waiting list survey.

reported as waiting for treatment and the reported number of procedures. Charts 1 and 2 summarize this.

For example, the ministry reports that 4,341 patients were waiting for plastic surgery on March 31, 2003 and that there were 9,598 plastic surgeries performed between April 1, 2002 and March 31, 2003 (a rate of 185 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 23.5 weeks (the "expected" wait) to empty the plastic surgery waiting list of those patients waiting at March 31, 2002. The government reported a wait of only 5.4 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 5.4-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 March 31, 2003, the government's reported median wait averaged 32 percent of the "expected" wait, ranging from 16 percent (for vascular surgery) to 71 percent (for radiation oncology). The Institute median wait data, meanwhile, averages 66 percent of the "expected" wait.

The comparison between government median wait and "expected" wait data suggests 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 number of people waiting and the number of procedures performed is broadly consistent with The Fraser Institute's survey estimates. While it was not their intention to do so, the British Columbia government has actually provided independent verification of The Fraser Institute waiting list survey.

Saskatchewan

The Saskatchewan Surgical Care Network (SSCN) launched a wait list web site in January 2003 (Glynn, 2003) providing measures of waiting times in Regina and Saskatoon.4 The measures presented by Saskatchewan are for non-emergent surgeries and measure the wait from when a booking was made to when the procedure was completed. As noted above, this methodol-

²Number of weeks to exhaust the list of patients waiting (patients waiting/procedures per week)

³Prospective median wait, national hospital waiting list survey,

Waiting Your Turn measures waiting times throughout the province of Saskatchewan while Saskatchewan Health measures waiting times only for those procedures performed in Saskatoon and Regina. The measurement of waiting times outside these major centres, where 70 percent of procedures are performed (Glynn, 2003), means that The Fraser Institute's estimates of waiting times will capture information on 30 percent of the procedures in the province that have been missed in Saskatchewan's own measurement.

ogy differs significantly from that used by the Fraser Institute.

One of the differences between the wait times presented here and those available on the SSCN website is a difference between measuring at the time a new patient is seen by the specialist, and when the booking for the procedure is actually made. There are a number of systemic delays that can occur between the time the patient is seen by a specialist and the time a booking is made, the first being that there is often a delay to order and complete tests and analyze the test results (in particular, imaging scans). Another delay relates to the fact that there may be a wait list to make the actual booking. A telephone survey of Saskatchewan physicians conducted by the authors revealed that at least some of the physicians do not place their elective patients on the government waiting list until the patients become urgent cases; then they submit their names for surgery. Thus, waiting times, which measure from booking time to actual procedure, will not capture the waiting times for testing and any delays in booking that occur.

The crucial difference between the two measures, however, is the inclusion of urgent surgeries. The SSCN website measures waiting times for all non-emergent surgeries (i.e., all urgent and elective surgery waits are measured), while *Waiting Your Turn* measures waiting times for only elective surgeries. This means that urgent wait times (which are significantly shorter than elective wait times) are included in the wait time measures available on the SSCN website but not in those measured by the Fraser Institute.

The resulting conclusion is that the numbers available on the SSCN website are not comparable to those measured in *Waiting Your Turn* and may not measure what the government of Saskatchewan thinks they measure. Further work by the department is required—and is in fact in progress—to create waiting list measures that comprehensively and accurately measure the sort of patient experience which it is the intent of *Waiting Your Turn* to capture.

Despite these differences in methodology, it appears that The Fraser Institute's estimates of waiting times in Saskatchewan either closely approximate or underestimate the actual experience in Saskatchewan in most cases (chart 3). Only in the cases of Orthopaedic Sur-

gery, Cardiovascular Surgery, and Otolaryngology are the Institute's estimates notably longer than the wait times reported on the SSCN's web site.

Further verification of the exceptionally long waiting times for elective surgeries measured in Saskatchewan by The Fraser Institute can be found in a study of the median and average waiting times for non-emergent surgeries in that province. In all cases, the average waiting time exceeds the median waiting time for surgery (Chart 4). This suggests that elective procedure waiting times (those measured in *Waiting Your Turn*) may be exceptionally long in the province of Saskatchewan and that Saskatchewan's own measures of waiting times are biased downward by the inclusion of urgent surgical procedures.

As a result of continued concerns over the number of procedures waited for in Saskatchewan this year, it came to The Fraser Institute's attention that there were imperfections with the Institute's methodology for estimating the number of procedures for which people are waiting in Saskatchewan. As a result, the process for estimating the number of procedures for which patients are waiting was revised to use the median of physician responses and not the mean, as described above. Though this change in methodology has resulted in estimates that more closely approximate the actual experience in Saskatchewan (chart 5), there are still substantial differences in some categories.

The imperfection and the resulting distortion in Saskatchewan can be found in unique health care problems in Saskatchewan that are not conducive to the standard estimation method used annually in *Waiting Your Turn*. The problems in Saskatchewan stem from two sources: first, the number of procedures done in Saskatchewan is abnormally high when compared to other Canadian provinces. Second, the wait times in Saskatchewan are also abnormally high when compared to the rest of Canada. Thus, the methodology used in *Waiting Your Turn* to estimate the number of procedures for which people are waiting (described above) generates abnormally high numbers of people waiting in Saskatchewan.

As a result, this year's numbers should be interpreted with caution, especially for Saskatchewan. Although this cautionary note applies to all estimates of the numbers of procedures for which patients are waiting, there do not appear to be significant systematic differences between the numbers of procedures for which people are waiting estimated in this edition of *Waiting Your Turn* and counts of patients waiting provided to us by other provincial ministries.

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 an 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 14.4 weeks for orthopaedic surgery, 5.3 weeks for elective cardiovascular surgery, and 14.4 weeks for ophthalmology procedures in 2003.

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 2003, the wait for radiotherapy was approximately 32 days for cancer of the larynx, 35 days for cancer of the cervix, and 39 days for lung cancer (see tables 3 and 5k). However, the 2003 estimate that the median wait for prostate cancer

Chart 3: Comparison between Saskatchewan Surgical Care Network Wait List Measures and Waiting Your Turn 2003

Specialty	SSCN Wait	SSCN Elective Wait ¹	Fraser Institute Median
Plastic Surgery	26.1	36.7	32.8
Gynaecology	21.1	30.7	16.7
Tubal Ligation	33.1	44.8	20.0
Hysterectomy	24.7	28.2	20.0
Ophthalmology	33.9	36.3	30.3
Cataract Surgery	35.0	36.7	38.0
Operations on Vitreous	7.3	15.1	5.0
Otolaryngology	25.5	40.8	46.6
Myringotomy	6.4	14.5	6.0
Tonsillectomy	44.8	47.5	100.0
General Surgery	16.3	28.3	14.4
Hernia Repair	26.9	33.6	27.0
Breast Biopsy	3.3	14.5	2.5
Mastectomy	7.4	25.2	2.8
Neurosurgery	15.7	24.0	6.8
Disc Surgery/ Laminectomy	16.9	23.5	10.0
Orthopaedic Surgery	30.8	37.3	53.4
Hip Replacement	38.1	39.7	72.0
Knee Replacement	46.2	46.6	72.0
Cardiovascular Surgery	12.3	21.8	2.4 (Urgent)
Bypass Surgery	12.2	20.4	3.0 (Urgent)
Cardiovascular Surgery	12.3	21.8	30.0 (Elective)
Bypass Surgery	12.2	20.4	30.0 (Elective)
Urology	16.0	24.5	10.5
Prostatectomy	18.4	23.8	4.5/54.0
Bladder Resection	7.1	15.9	3.0
Cystoscopy	15.5	23.3	4.0

Note: Saskatchewan Surgical Care Network data is presented as a proportion of patients who received their surgery within certain time frames. This comparison is made based on a weighted measure of the mid-point of each time frame. For example: 37 percent of patients in Saskatchewan waited less than 3 weeks for Neurosurgery, 47 percent waited 3 weeks to 6 months, 11 percent waited 7 to 12 months, and 3 percent waited more than 18 months. Taking the midpoints of each time frame to be 1.5, 14.5, 41.2, 67.2, and 82 weeks respectively gives an average waiting time of 15.7 weeks.

¹ SSCN Elective wait is measured by eliminating the 0-3 weeks time frame in the weighted average measure. SSCN measures non-emergent surgeries, which includes both urgent and elective. In an attempt to eliminate the measure of urgent procedures, the shortest time frame is removed to allow better comparability with the waiting times presented in *Waiting Your Turn* Sources: SSCN, 2003; calculations by authors; and The Fraser Institute's hospital waiting list survey.

Chart 4: Comparison of Saskatchewan Procedural Medians and Averages¹ and Waiting Your Turn

	Saskat- chewan Median	Saskat- chewan Average	Fraser Institute Median
Plastic Surgery	10.0	26.6	32.8
Gynaecology	6.9	20.6	16.7
Ophthalmology	29.1	31.4	30.3
Otolaryngology	4.9	25.3	46.6
General Surgery	3.9	15.3	14.4
Neurosurgery	5.7	13.8	6.8
Orthopaedic Surgery	18.1	32.9	53.4
Cardiovascular (urgent) ²	0.7	3.5	2.4
Cardiovascular (elective) ²	9.6	15.0	30.0
Urology	4.9	15.1	10.5

Note: Saskatchewan data includes those procedures done in Saskatoon and Regina only (approximately 70 percent of all procedures done in Saskatchewan).

¹Includes all waitlisted cases (non-emergent surgery), October 2002 to March 2003.

²The Fraser Institute includes cardiac, thoracic, and vascular surgery in the cardiovascular category; this is not done in Saskatoon where the cardiovascular category is almost entirely cardiac surgery, while thoracic and vascular cases are reported as General Surgery.

Sources: Saskatchewan Health, 2003; and The Fraser Institute's national waiting list survey

treatment was 70 days is notably 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 2003, the wait to see an orthopaedic specialist was 12.0 weeks (see table 3) and the wait to receive hip or knee surgery was 24.0 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 angioplasty and 5.5 months for cardiac bypass surgery. In comparison, 2003 median waiting times for "angiography/angioplasty" ranged from

Chart 5: Comparison of Saskatchewan Surgical Care Network Patients Waiting Data with Fraser Institute Procedures Waited For Data

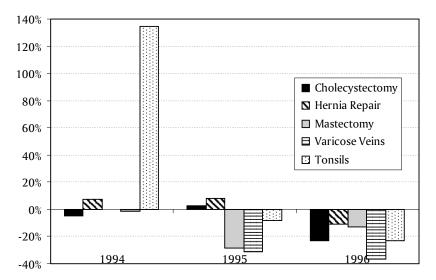
Specialty	SSCN Procedures ¹	SSCN Procedures Annual	SSCN Wait Time	SSCN Estimate	SSCN Estimate of all SK ²	Fraser Institute Estimate
Plastic Surgery	1,120	2,240	26.1	1,125	1,607	1,523
Gynaecology	3,047	6,094	21.1	2,468	3,526	3,296
Ophthalmology	5,202	10,404	33.9	6,784	9,692	9,194
Otolaryngology	1,866	3,732	25.5	1,830	2,614	6,441
General Surgery	3,781	7,562	16.3	2,365	3,379	5,346
Neurosurgery	543	1,086	15.7	328	468	225
Orthopaedic Surgery	3,422	6,844	30.8	4,060	5,800	14,332
Cardiovascular Surgery	672	1,344	12.3	317	453	152
Urology	1,322	2,644	16.0	812	1,160	3,518
Overall Wait Time	_	_	11.0	26,029	37,184	77,628

Note: Estimates of the procedures for which patients are waiting using SSCN data are developed using the same methodology that The Fraser Institute employs to develop its own estimate, which is presented in the last column.

Sources: SSCN, 2003; calculations by authors; and The Fraser Institute's national waiting list survey.

¹SSCN procedure counts between October 2002 and March 2003.

²SSCN counts only those patients waiting in Regina and Saskatoon; these people comprise approximately 70 percent of all surgical cases in Saskatchewan (Glynn, 2003). To determine the total number of people waiting in the province, we added the remaining 30 percent.



Source: DeCoster et al., 1998, and The Fraser Institute's national hospital waiting list surveys.

5.0 weeks in Manitoba, Ontario, and Quebec to 11.0 weeks in Newfoundland (see table 5j), and for elective cardiac bypass ranged from 5.0 weeks in Manitoba to 54.0 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 2003 data indicated that the provincial waiting time for elective bypass surgery (between specialist consultation and treatment) ranged from 5.0 weeks in Manitoba to 54.0 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 2003 Ontario survey data reveal waiting times for emergent, urgent, and elective bypass surgery of 0, 7 and 42 days respectively (see table 5h).

Five more recent studies permit direct comparison of Fraser Institute waiting times and independ-

ently-derived estimates. DeCoster et al. (1998) obtained median waiting times for 5 common surgical procedures in Manitoba and compared them to Fraser Institute estimates of waiting times for those procedures. Waiting times for the five procedures—cholecystectomy, hernia repair, excision of breast lesions, varicose veins stripping and ligation, and tonsillectomy—were compared for the years 1994 to 1996. For eleven of the fifteen comparisons (five procedures over three years) DeCoster et al. found that the Fraser Institute's measures of waiting times in Manitoba were actually equal to or shorter than those measured by MCHPE (chart 6).

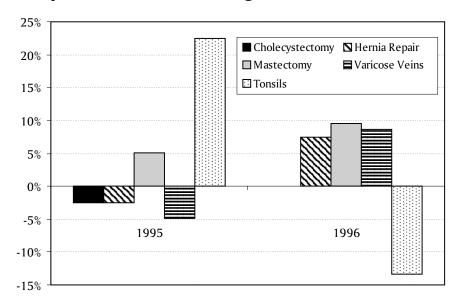
The data gathered by the Manitoba Centre for Health Policy Evaluation provide further valuable insights about the reliability of The Fraser Institute waiting list survey. One of

the concerns of Institute researchers over the years has been the apparent variability of the 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. Numbers larger than this raise 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 measurements are real or are induced by the sampling procedure. Comparable measurements by the Manitoba Centre, which are based on individual physician experience, cast some welcome light on the matter.

As chart 7 shows, the data from DeCoster *et al.* (1998) for two adjacent measurement periods—1995 and 1996—reveal very wide swings in the *ex post* waiting time experienced by patients. Tonsillectomy wait times increased by 22 percent in 1995 only to fall 13 percent the following year, a total swing of 35 percent. Varicose vein surgery waits swung by nearly 14 percent in the same period, and hernia repair waits by nearly

Chart 7: Fluctuation in Manitoba Centre for Health Policy and Evaluation Waiting Times, 1995 and 1996



Source: DeCoster et al., 1998; calculations by authors.

10 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 underestimate the extent of the actual fluctuation.

Overall, the Manitoba estimates are greater than or equal to Fraser Institute estimates in 73 percent of cases, and less than Fraser Institute estimates in 27 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 that 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 (The Fraser Institute recorded a median wait of 12.0 weeks that year; see Zelder with Wilson, 2000). Bellan *et al.* report that estimates of waiting times 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 referring the patient 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 more⁵ in 1996-97 to learn their waiting times for 7 procedures, many of which were diagnostic. Among these, the Institute also collected three: 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. The Institute's survey also tracks three of these procedures—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, 24 independent waiting time estimates exist for comparison with recent Institute figures. In 19 of 24 cases, the Institute figures lie below the comparison values. In only four instances does the Institute value exceed the comparison value, and in one case they are identical. This evidence strongly suggests that the Institute's measurements are not biased upward,

⁵ Although not identified by name, this list presumably consisted of Montreal, Toronto, Winnipeg, Calgary, Edmonton, and Vancouver.

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 times 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, patients with non-cardiac conditions that require immediate care replace some cardiac surgery candidates. 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 increasing the funding for it.

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 2003, an average of 2.0 percent of cardiac patients inquired about receiving treatment in another province, while 1.9 percent asked about treatment in another country. From these inquiries, 1.0 percent of all patients received treatment in another province and 1.2 percent received treatment in another country (Fraser Institute, national hospital waiting list survey, 2003).

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 Fraser Institute 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, 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 median waiting time for urgent, rather than elective, patients. The median waiting time for urgent patients was used instead of the emergent or elective medians 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). This year's median wait time for British Columbia falls outside this range (see table 5h). However, physicians in that province 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 wait for urgent cardiac surgery in Alberta falls outside of this range (see table 4). Finally, the Ontario panel suggests that elective surgeries be performed within a period of 24 weeks. Saskatchewan, Nova Scotia, and Newfoundland currently fall outside of this time frame (see table 4).

Prior to 1998, this Ontario panel's waiting-time estimates were used as the measure of the clinically rea-

sonable 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 cardiovascular specialists to be much less tolerant of long waits than the Ontario panel. This year's respondents felt that urgent patients should only wait 0.9 weeks for surgery (instead of 6 weeks), and that patients requiring elective cardiovascular surgery should only wait 6.1 weeks (instead of 24 weeks; see table 8).

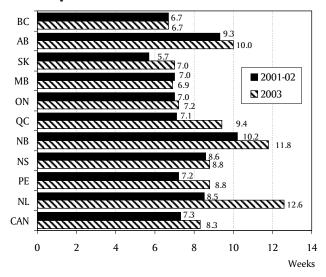
Survey results: estimated waiting in Canada

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 with a specialist. The results of the most recent survey from 2003 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, 8.3 weeks in 2003, has increased by 124 percent since 1993, when it was 3.7 weeks (see graphs 1 and 2). The weighted medians, depicted in chart 8 and graph 1, reveal that British Columbia has the shortest waits in the country for appointments with specialists (6.7 weeks), while Newfoundland has the longest (12.6 weeks). The waiting time to see a specialist has increased in 8 provinces since 2001-02, and has fallen in Manitoba. 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 Alberta, Saskatchewan, Manitoba, New Brunswick, Nova Scotia, or Newfoundland; to see a gynaecologist in Alberta; to see an ophthalmologist in Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, or Newfoundland; to see an otolaryngologist in

Chart 8: Waiting By Province in 2001-02 and 2003: Weeks Waited from Referral by GP to Appointment with Specialist



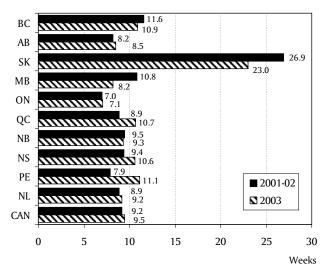
Source: The Fraser Institute, annual waiting list survey, 2003.

Alberta or Newfoundland; to see a neurosurgeon in Alberta, Ontario, Quebec, New Brunswick, or Newfoundland; to see an orthopaedic surgeon in British Columbia, Alberta, Ontario, New Brunswick, Nova Scotia, or Newfoundland; and to see an urologist in Alberta, Manitoba, or New Brunswick.

Waiting time between specialist consultation and treatment

Tables 5a through 5l contain data on the time waited between specialist consultation and treatment for each of the 12 specialties 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 there are only short waits for some treatments, most procedures require waits of at least a month. The data in tables 5a through 5l are summarized in table 4 and chart 9 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 9.2 weeks in 2001-02 to 9.5 weeks in 2003. This portion of waiting has increased by 70 percent since 1993, when the wait for treatment after having seen a specialist was 5.6 weeks (see

Chart 9: Waiting by Province in 2001-02 and 2003: Weeks Waited from Appointment with Specialist to Treatment



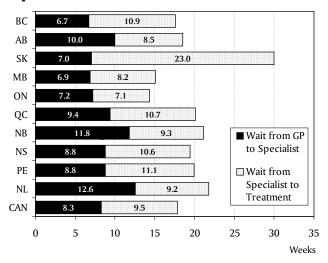
Source: The Fraser Institute, annual waiting list survey, 2003.

graphs 3 and 4). Ranking the provinces according to the 2003 weighted medians indicates that the longest median wait for surgery after visiting a specialist occurs in Saskatchewan (23.0 weeks) and the shortest is in Ontario (7.1 weeks). The median waits for treatment by province are illustrated in chart 9. Among the specialties, the longest Canada-wide waits are for orthopaedic surgery (18.9 weeks), plastic surgery (17.0 weeks), and ophthalmology (16.0 weeks), while the shortest waits exist for urgent cardiovascular surgery (2.1 weeks), medical oncology (2.6 weeks), and urology and internal medicine (5.7 weeks) (see table 4).

Table 7 presents a frequency distribution of the median waits for surgery by province and by region. In all provinces except Saskatchewan, the wait for the majority of operations is less than 13 weeks. Ontario performs the highest proportion of surgeries within 13 weeks (82.5) percent) and within 8 weeks (59.7 percent). Waits of 26 weeks or more are least frequent in Manitoba (5.3 percent), and most frequent in Saskatchewan (41.9 percent).

Table 6 compares the 2001-02 and 2003 waiting times for treatment. This year's study indicates an overall increase in the waiting time between consultation with a specialist and treatment in 6 provinces, with

Chart 10: Median Wait by Province in 2003: Weeks Waited from Referral by GP to Treatment



Note: Totals may not match sum of subtotals due to rounding. Source: The Fraser Institute, annual waiting list survey, 2003.

decreases in British Columbia (6%), Saskatchewan (15%), Manitoba (24%), and New Brunswick (2%) (table 6 and chart 9). At the same time, between 2001-02 and 2003, the median wait increased by 4 percent in Alberta, 1 percent in Ontario, 21 percent in Quebec, 13 percent in Nova Scotia, 41 percent in Prince Edward Island, and 3 percent in Newfoundland.

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, information on the sum of those two segments, the total waiting time, gives a fuller picture is provided. 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 10 present these total wait times for each province in 2003. For Canada as a whole, total waiting time rose to 17.7 weeks in 2003 from its previous value of 16.5 weeks in 2001-02. Among the provinces, total waiting time fell in three of them (British Columbia, Saskatchewan, and Manitoba) between 2001-02 and 2003, but rose in the other 7. The shortest waiting times in 2003 were recorded in Ontario (14.3 weeks),

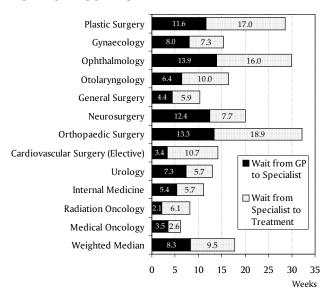
Manitoba (15.1 weeks), and British Columbia (17.6 weeks). The longest total waits were in Saskatchewan (29.9 weeks), Newfoundland (21.8 weeks), and New Brunswick (21.1 weeks).

For Canada as a whole, the longest waits for treatment are in orthopaedic surgery, ophthalmology, and plastic surgery. The median waits for these specialties (table 2 and chart 11) are longer than 6 months: 32.2 weeks for orthopaedic surgery, 30.0 weeks for ophthalmology, and 28.6 weeks for plastic surgery. The shortest wait in Canada is for cancer patients being treated with chemotherapy. These patients wait approximately 6.1 weeks to receive treatment.

Clinically reasonable waiting times

When asked to give a clinically reasonable waiting time for the various procedures, specialists generally indicate a period of time substantially shorter than the median number of weeks patients were actually waiting for treatment (see tables 9a through 9l). Table 8 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. Ninety-two percent of the actual weighted median waiting times (in table 4) are greater than the clinically reasonable weighted median waiting times (in table 8). For example, the median wait for plastic surgery in British Columbia is 25.5 weeks. A clinically reasonable length of time to wait, according to specialists in British Columbia, is 9.6 weeks. In Quebec, the actual time to wait for an ophthalmological procedure is 19.2 weeks, whereas a wait of 7.8 weeks is considered to be clinically reasonable. The differences between the median reasonable and median actual wait for the specialties are summarized in table 10.

Chart 12 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 orthopaedic surgery, where the actual waiting time is 11.6 weeks longer than what is considered to be reasonable by specialists.

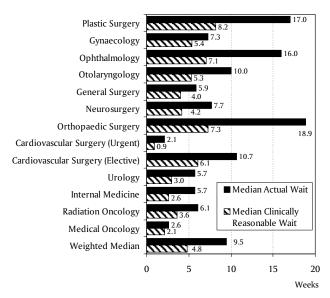


Note: Totals may not match sum of subtotals due to rounding. Source: The Fraser Institute, annual waiting list survey, 2003.

Number of procedures for which people are waiting

Arising from discussions with representatives from Saskatchewan in 2002, as discussed in last year's Waiting Your Turn, counts of the numbers of patients waiting for surgery have been replaced with the numbers of procedures for which patients are waiting. Although there is considerable evidence from provinces outside Saskatchewan that the previous assumption—that one procedure is a good proxy for one patient waiting—is sound, evidence from Saskatchewan suggests that "procedures for which people are waiting" is a description that better reflects The Fraser Institute's methodology (see the section in this Bulletin entitled: "Verification of current data with governments"). Although this change has been made, table 12 still contains an approximate proportion of provincial populations waiting for surgery, which relies on the previous assumption of each patient receiving one procedure. Further, due to continued concern with the estimated counts for Saskatchewan, the methodology by which this calculation is made has also been altered this year (see the section in this Bulletin entitled: "Methodology").

Chart 12: Median Actual Wait Versus Median Clinically Reasonable Wait by Specialty for Canada: Weeks Waited from Appointment with Specialist to Treatment in 2003



Source: The Fraser Institute, annual waiting list survey, 2003.

As a result, this year's numbers should be interpreted with caution, especially for Saskatchewan. Although this cautionary note applies to all estimates of procedures for which people are waiting, there do not appear to be significant systematic differences between the numbers of procedures for which people are waiting estimated in this edition of *Waiting Your Turn* and counts of patients waiting provided to us by provincial ministries other than Saskatchewan.

Tables 13a through 13l estimate the numbers of procedures for which people are waiting for the specific procedures comprising each of the 12 specialties. 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 procedures for which people are waiting. Consequently, table 14 presents the numbers on a population-adjusted basis (per 100,000). This illustrates population-adjusted differences that are not apparent from the raw totals. For example, in Ontario, there are 11,198 gynaecology procedures for which people are waiting, while there are only 4,312 waiting in Alberta (see table 12). How-

ever, when the calculation is adjusted for population, a higher proportion of the population is waiting in Alberta: 138 procedures per 100,000 people there, versus 92 procedures per 100,000 people in Ontario (see table 14). Tables 12 and 14 provide summaries of estimated numbers of procedures for which people are waiting.

Table 15 compares the numbers of procedures for which people were waiting in 2001-02 with those in 2003. In four provinces, the estimated number of procedures for which people are waiting decreased between 2001-02 and 2003. However, the estimated number of procedures for which people are waiting in Canada as a whole rose from 852,308 in 2001-02⁶ to 876,584 in 2003, a 3 percent increase. As a percentage of the population, 2.78 percent of Canadians were waiting for treatment in 2003,7 varying from a low of 2.11 percent in Newfoundland to a high of 7.69 percent in Saskatchewan.

Health expenditures and waiting times

Given the variation in waiting time across the provinces, it is natural to ask whether governments in those provinces with shorter waiting times achieve this result by spending more on health care. To evaluate this hypothesis, provincial weighted medians (i.e., the last line in table 2) for the years 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). A follow-up study in 2003 using similar methodology found that increased health expenditures were actually correlated with *increases* in waiting times, unless those spending increases were targeted to doctors or pharmaceutical expenditures (Esmail, 2003).

These findings, that additional spending has no positive effect on waiting or service provision, must imply that spending increases are being absorbed entirely 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 2002, the fraction of total Canadian health spending attributable to governments was 70.8 percent (OECD, 2003). A substantial body of economic research demonstrates that governments are almost always less effective providers of goods and services than private firms. Borcherding 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. Megginson and Netter, in their comprehensive review of privatization (2001), concluded that privately- owned firms are more efficient and profitable than comparable public sector firms. 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 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.

The 2001-02 figures have been restated to include improvements in the estimation procedures to provide the reader ease of comparison with 2003 figures.

⁷ On the assumption that one procedure is equivalent to one patient.

Comparison	Canadian Value	OECD Average	Canadian Rank	Number of Countries
Doctors per 1,000 Population	2.1	2.5	17	23
CT Scanners per Million Population (2001)	9.5	18.1	16	19
Radiation Equipment per Million Population (2000)	7.0	6.0	8	22
Lithotripters per Million Population (2001)	0.4	2.8	13	13
MRI Scanners per Million Population (2001)	3.5	6.9	14	20
Age-Adjusted National Health Expenditure as a Percent of GDP	11.7	9.4	1	26

¹That is, not including the United States or Mexico Not all countries reported 2001, 2000, or 1999 figures for all categories. Sources: OECD, 2003; and Esmail and Walker, 2002a.

Within hospitals, limited budgets force specialists to work with scarce resources. Chart 13 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 highest spender on health care (as a percentage of GDP) amongst the universal-access, public-health-care-system countries in the OECD in 1999 after accounting for the age of the Canadian population (Esmail and Walker, 2002a), 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, lithotripters (which break up kidney stones), and magnetic resonance imagers (MRIs), with only radiation equipment in relative abundance. 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 14 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 longer in 2003 than in 2001-02. The median wait for a CT scan across Canada was 5.5 weeks. The shortest waits for computed tomography were in New Brunswick, Nova Scotia, and Newfoundland (4.0 weeks), while the longest wait occurred in Prince Edward Island (8.0 weeks). The median wait for an MRI across Canada was 12.7 weeks. New Brunswick patients waited the least amount of time for an MRI (8.0 weeks), while Nova Scotia and

Newfoundland residents waited longest (24.0 weeks). Finally, the median wait for ultrasound was 3.6 weeks across Canada. Saskatchewan and Ontario displayed the shortest wait (2.0 weeks) while Manitobans, at 8.0 weeks, waited the longest for ultrasound.

Conclusion

The 2003 Waiting Your Turn survey indicates that waiting times for medical treatment in Canada continue to grow. 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 7.8 percent of patients are on waiting lists because they requested a delay or postponement of their treatment. The responses range from a low of 4.0 percent of internal medicine patients requesting a delay of treatment, to a high of 11.2 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. Internal medicine and radiation oncology patients are the most anxious to

Chart 14: Waiting for Technology—Weeks Waited to Receive Selected Diagnostic Tests in 2000-01, 2001-02, and 2003.

Province CT-Scan		MRI			Ultrasound				
	2003	2001-02	2000-01	2003	2001-02	2000-01	2003	2001-02	2000-01
British Columbia	6.0	6.0	6.0	12.0	18.0	14.0	2.5	2.5	2.5
Alberta	6.0^{1}	6.0	6.0	12.0 ¹	8.0	12.0	2.8	3.0	2.5
Saskatchewan	6.8	8.0	8.0	20.0	14.0	16.0	2.0	2.0	2.0
Manitoba	7.0	6.0	5.0	10.0	9.0	8.0	8.0	10.0	8.0
Ontario	5.0	5.0	5.0	10.0	11.0	12.0	2.0	2.0	2.0
Quebec	6.0	4.5	4.0	15.0	13.5	12.0	6.0	4.0	4.0
New Brunswick	4.0	4.0	4.0	8.0	5.0	10.0	4.0	4.0	4.0
Nova Scotia	4.0	4.0	3.5	24.0	16.0	13.0	3.0	4.0	3.0
P.E.I.	8.0	6.0	10.3	12.0	12.0	12.0	6.0	9.0	6.0
Newfoundland	4.0	8.0	6.0	24.0	20.0	23.0	6.0	7.5	5.5
Canada	5.5	5.2	5.0	12.7	12.4	12.0	3.6	3.2	2.5

¹Alberta Ministry of Health and Wellness website reports mean wait times for CT scans in the 6 to 93 day range (7 health regions reporting), and mean wait times for MRI scans in the 16 to 166 day range (6 health regions reporting) for the quarter ending December 31, 2002.

receive treatment (Fraser Institute, national hospital waiting list survey, 2003).

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

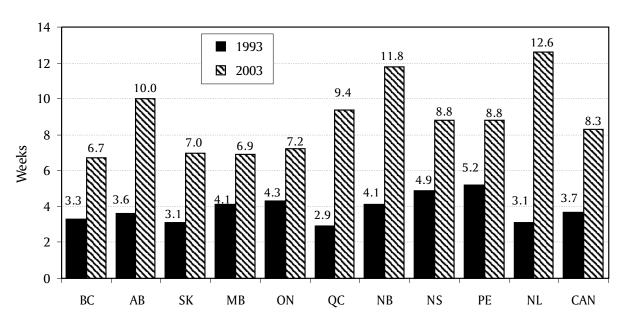
health care are not rewarded with shorter waiting lists. This means that under the current regime—first-dollar coverage with use limited by waiting, and crucial medical resources priced and allocated by governments—prospects for improvement are dim. Only substantial reform of that regime is likely to alleviate the medical system's most curable disease—longer and longer waiting times for medical treatment.

Selected Graphs

Graphs 1–6: Median Actual Waiting Times, 1993 and 2003

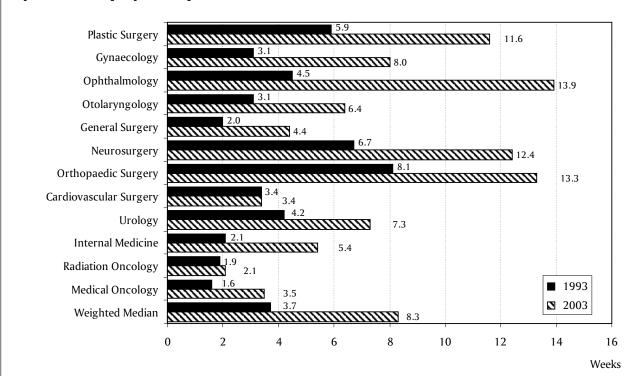
Graphs 7–8: Median Reasonable Waiting Times, 1994 and 2003

Graphs 9–19: Actual versus Reasonable Waiting Times, 1994 through 2003, by Province



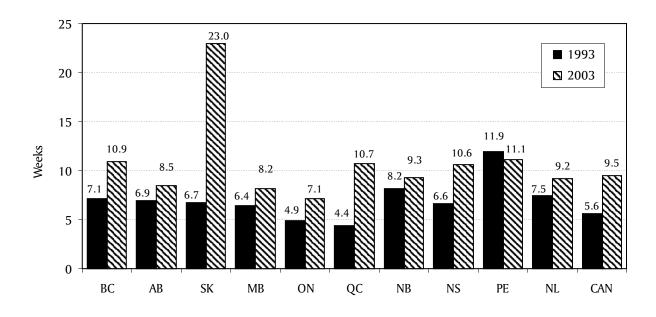
Source: The Fraser Institute, annual waiting list survey, 2003; and Ramsay and Walker, 1997.

Graph 2: Median Wait between Referral by GP and Appointment with Specialist, by Specialty, 1993 and 2003



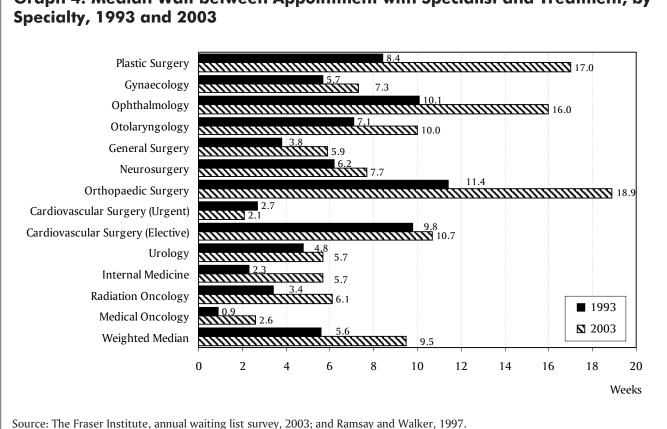
Source: The Fraser Institute, annual waiting list survey, 2003; and Ramsay and Walker, 1997.

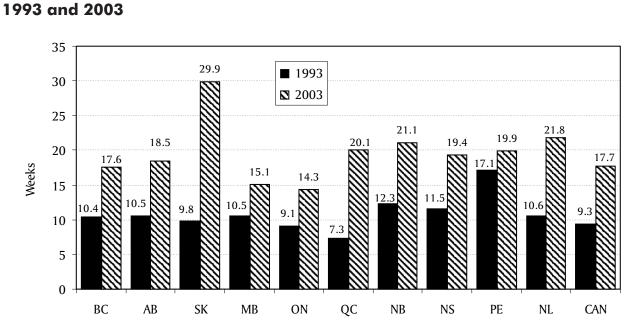




Graph 4: Median Wait between Appointment with Specialist and Treatment, by

Source: The Fraser Institute, annual waiting list survey, 2003; and Ramsay and Walker, 1997.

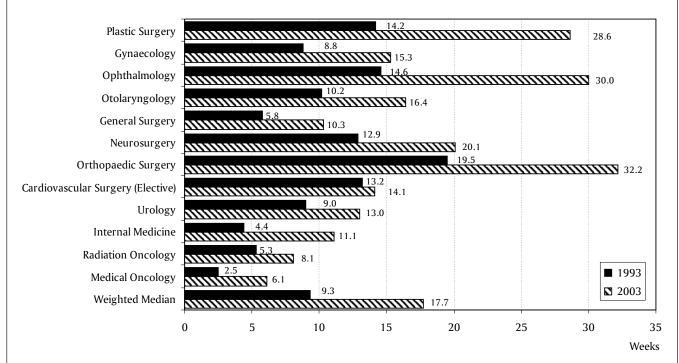




Note: Totals may not equal the sum of the subtotals due to rounding.

Source: The Fraser Institute, annual waiting list survey, 2003; and Ramsay and Walker, 1997.

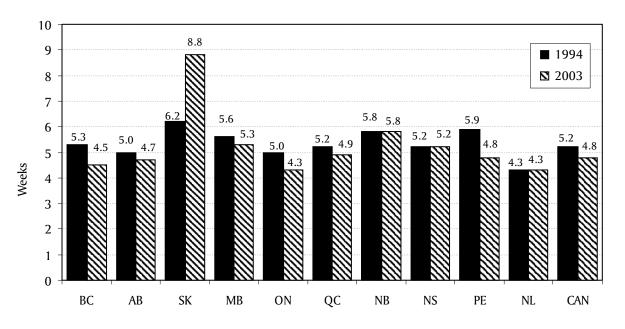




Note: Totals may not equal the sum of the subtotals due to rounding.

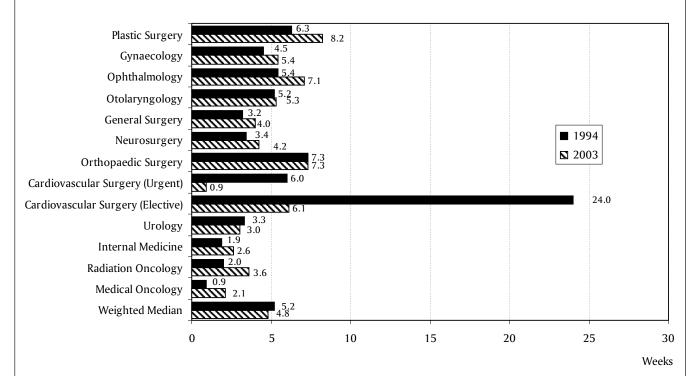
Source: The Fraser Institute, annual waiting list survey, 2003; and Ramsay and Walker, 1997.





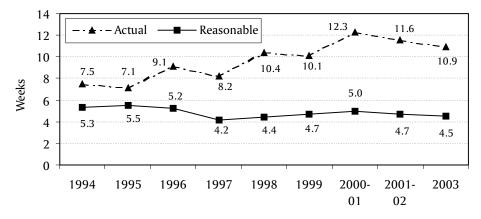
Source: The Fraser Institute, annual waiting list survey, 2003; and Ramsay and Walker, 1997.





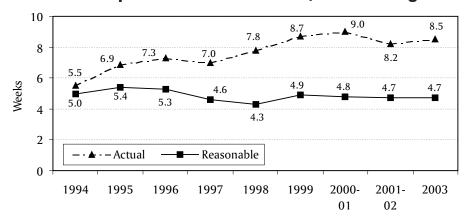
Source: The Fraser Institute, annual waiting list survey, 2003; Ramsay and Walker, 1997; and Naylor et al., 1991.

Graph 9: British Columbia—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



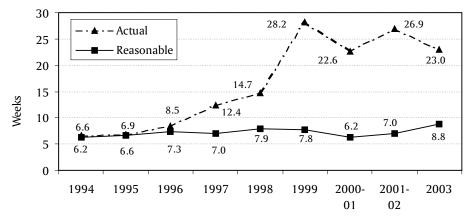
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 10: Alberta—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



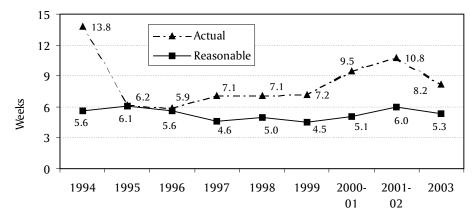
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 11: Saskatchewan—Actual Versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



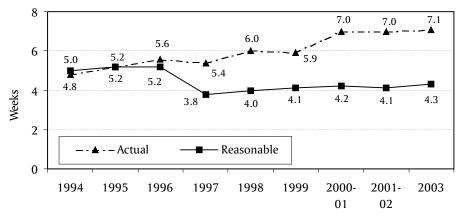
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 12: Manitoba—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



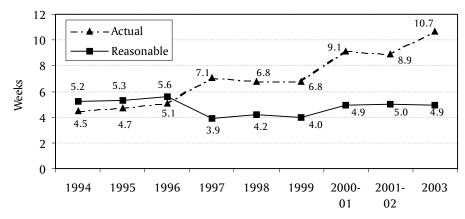
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 13: Ontario—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



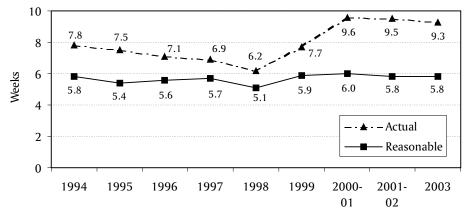
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 14: Quebec—Actual versus Reasonable Waits between Appointment with Specialist and Treatment, 1994 through 2003



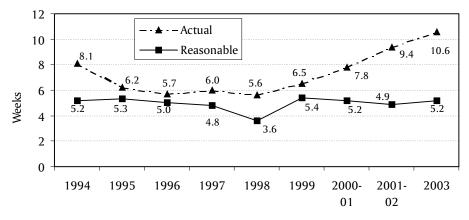
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 15: New Brunswick—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



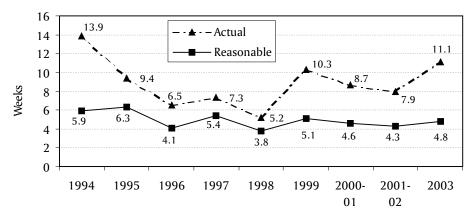
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 16: Nova Scotia—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



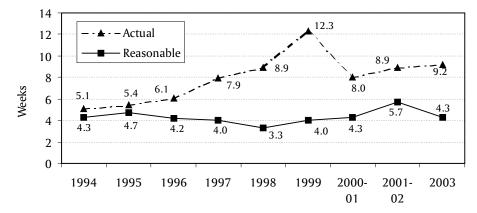
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 17: Prince Edward Island—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



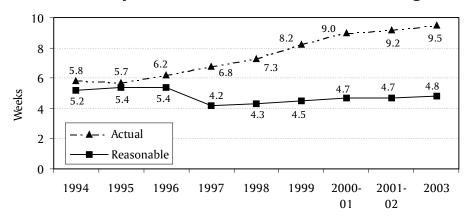
Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 18: Newfoundland—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Graph 19: Canada—Actual versus Reasonable Waits Between Appointment with Specialist and Treatment, 1994 through 2003



Source: The Fraser Institute's annual waiting list surveys, 1995-2003.

Selected Data Tables

Tables 1a–1c: Summary of Responses

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

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

Table 4: Median Patient Wait for Treatment after Appointment with Specialist, by Province and 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, 2001-02 and 2003

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

Table 8: Median Reasonable Wait to Receive Treatment after Appointment with Specialist, by Province and Specialty (Summary)

Tables 9a–9l: Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks), by Specialty

Table 10: Comparison between the Median Expected Waiting Time and the Median Reasonable Number of Weeks to Wait for Treatment after Appointment with Specialist, by Selected Specialties

Table 11: Average Percentage of Patients Receiving Treatment Outside of Canada, by Province and Specialty

Table 12: Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist, by Province and Specialty (Summary)

Tables 13a–13l: Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist, by Specialty

Table 14: Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist—Procedures per 100,000 Population (Summary)

Table 15: Comparison of Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist, by Selected Specialties, 2001-02 and 2003

Table 16a: Acute Inpatient Procedures, 2000-01

Table 16b: Same Day Procedures, 2000-01

Table 1a: Summary	of Responses,	2003—Response	Rates (Percentages)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Plastic Surgery	59%	42%	42%	30%	35%	26%	46%	45%	0%	50%	37%
Gynaecology	33%	32%	39%	40%	31%	23%	36%	37%	40%	20%	30%
Ophthalmology	32%	35%	28%	32%	35%	31%	33%	23%	33%	27%	33%
Otolaryngology	42%	34%	27%	35%	38%	27%	62%	60%	_	14%	36%
General Surgery	42%	38%	27%	27%	35%	25%	42%	48%	67%	27%	33%
Neurosurgery	57%	35%	43%	0%	35%	20%	33%	67%	_	50%	35%
Orthopaedic Surgery	45%	50%	38%	31%	37%	29%	50%	33%	50%	54%	38%
Cardiovascular Surgery	25%	31%	17%	20%	34%	31%	67%	33%	_	33%	31%
Urology	42%	37%	40%	36%	34%	25%	38%	40%	100%	67%	34%
Internal Medicine	25%	22%	25%	21%	24%	17%	23%	27%	33%	22%	22%
Radiation Oncology	4%	28%	33%	50%	29%	32%	50%	22%	_	50%	26%
Medical Oncology	48%	27%		0%	29%	16%	50%	57%	100%	67%	27%
Total	36%	33%	32%	28%	33%	24%	40%	36%	48%	32%	31%

Table 1b: Summary of Responses, 2003—Number of Responses

	_										
	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Plastic Surgery	34	15	5	3	55	27	6	5	0	2	152
Gynaecology	55	38	15	22	188	84	10	16	2	4	434
Ophthalmology	48	26	7	8	131	83	7	9	1	3	323
Otolaryngology	30	11	3	6	78	46	8	12	_	1	195
General Surgery	64	42	10	16	190	105	13	22	4	6	472
Neurosurgery	16	7	3	0	24	11	2	4	_	1	68
Orthopaedic Surgery	70	50	9	10	148	79	12	9	2	7	396
Cardiovascular Surgery	6	5	1	1	25	18	2	2	_	1	61
Urology	27	13	6	5	73	35	6	8	2	4	179
Internal Medicine	69	43	15	22	121	75	8	25	3	6	387
Radiation Oncology	2	9	1	2	37	16	4	2	_	2	75
Medical Oncology	16	7		0	27	17	1	4	1	2	75
Total	437	266	75	95	1,097	596	79	118	15	39	2,817

Table 1c: Summary of Responses, 2003—Number of Questionnaires Mailed Out

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Plastic Surgery	58	36	12	10	159	102	13	11	1	4	406
Gynaecology	169	117	38	55	611	360	28	43	5	20	1,446
Ophthalmology	152	75	25	25	374	266	21	39	3	11	991
Otolaryngology	71	32	11	17	208	168	13	20	_	7	547
General Surgery	154	112	37	59	542	415	31	46	6	22	1,424
Neurosurgery	28	20	7	4	69	54	6	6	_	2	196
Orthopaedic Surgery	155	100	24	32	397	277	24	27	4	13	1,053
Cardiovascular Surgery	24	16	6	5	73	59	3	6	_	3	195
Urology	65	35	15	14	217	139	16	20	2	6	529
Internal Medicine	276	198	59	106	499	443	35	92	9	27	1,744
Radiation Oncology	45	32	3	4	129	50	8	9	_	4	284
Medical Oncology	33	26		5	94	107	2	7	1	3	278
Total	1,230	799	237	336	3,372	2,440	200	326	31	122	9,093

Table 2: Median Total Expected Waiting Time from Referral by GP to Treatment, by Specialty, 2003 (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Plastic Surgery	35.5	26.2	44.8	35.3	17.3	28.4	55.1	76.9	_	71.3	28.6
Gynaecology	12.1	19.7	25.7	15.8	12.9	17.1	17.9	11.6	16.7	16.4	15.3
Ophthalmology	17.9	14.4	38.3	22.5	28.4	35.2	38.4	21.4	52.1	40.0	30.0
Otolaryngology	16.6	22.8	50.6	10.9	13.2	15.0	13.3	14.8	_	27.8	16.4
General Surgery	12.7	9.4	20.4	8.0	8.3	11.2	10.1	11.9	12.2	15.9	10.3
Neurosurgery	19.7	22.1	12.8	_	19.8	19.3	55.1	8.7	_	13.7	20.1
Orthopaedic Surgery	40.7	42.1	63.4	26.1	26.4	26.2	23.2	46.4	24.9	32.8	32.2
Cardiovascular Surgery (Elective)	22.3	26.1	33.0	13.0	8.3	8.4	25.0	26.3	_	60.1	14.1
Urology	10.9	16.3	17.0	15.8	9.5	16.1	26.2	11.9	13.8	15.0	13.0
Internal Medicine	11.4	12.3	12.6	8.6	9.0	12.8	10.6	12.7	23.6	11.8	11.1
Radiation Oncology	3.0	13.4	8.3	9.2	7.6 ¹	9.5	6.7	6.6	_	10.9	8.1
Medical Oncology	3.0	6.5			5.7 ¹	6.3	6.0	15.0	4.0	13.8	6.1
Weighted Median	17.6	18.5	29.9	15.1	14.3	20.1	21.1	19.4	19.9	21.8	17.7

Note: Totals may not equal the sum of subtotals due to rounding.

Table 3: Median Patient Wait to See a Specialist after Referral from a GP, by Specialty 2003 (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Plastic Surgery	10.0	12.0	12.0	16.0	8.0	10.0	38.5	32.0	_	20.5	11.6
Gynaecology	4.0	12.0	9.0	8.0	7.0	10.0	7.5	6.0	11.0	11.5	8.0
Ophthalmology	8.0	8.0	8.0	8.0	14.0	16.0	24.0	12.0	26.0	32.0	13.9
Otolaryngology	4.0	13.0	4.0	3.0	6.0	6.0	4.0	9.0	_	15.0	6.4
General Surgery	5.5	4.0	6.0	3.0	4.0	4.0	6.0	6.5	2.5	11.0	4.4
Neurosurgery	10.0	16.0	6.0	_	12.0	12.0	38.0	5.0	_	12.0	12.4
Orthopaedic Surgery	16.0	24.0	10.0	10.5	12.0	10.0	12.5	13.0	10.0	21.0	13.3
Cardiovascular Surgery	5.8	5.5	3.0	8.0	3.0	2.0	5.5	1.8	_	8.0	3.4
Urology	4.0	12.0	6.5	12.0	6.0	8.0	16.0	7.0	10.0	8.0	7.3
Internal Medicine	4.0	4.0	5.0	4.0	4.0	8.0	5.0	6.5	8.0	6.0	5.4
Radiation Oncology	1.8	3.0^{1}	4.0	1.5 ²	2.0^{3}	1.8	1.8	1.5	_	4.5	2.1
Medical Oncology	1.5	2.51			3.0^{3}	4.3	3.5	8.0	2.0	8.0	3.5
Weighted Median	6.7	10.0	7.0	6.9	7.2	9.4	11.8	8.8	8.8	12.6	8.3

¹Alberta Health and Wellness website reports mean wait times of between 5 and 6 weeks for a radiation oncologist for breast cancer, between 4 and 8 weeks for a radiation oncologist for prostate cancer, and between 3 and 5.5 weeks for a medical oncologist for breast cancer for the quarter ending December 31, 2002.

¹Cancer Care Ontario reports a median total expected waiting time from GP referral to treatment of 6.7 weeks for radiation oncology and 4.9 weeks for medical oncology in June 2003.

²CancerCare Manitoba reports a median wait time of 1.5 weeks for consultation with a radiation oncologist.

³Cancer Care Ontario reports a median wait time of 1.7 weeks for consultation with a radiation oncologist and 2.9 weeks for consultation with a medical oncologist in June 2003.

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Plastic Surgery	25.5	14.2	32.8	19.3	9.3	18.4	16.6	44.9	_	50.8	17.0
Gynaecology	8.1	7.7	16.7	7.8	5.9	7.1	10.4	5.6	5.7	4.9	7.3
Ophthalmology	9.9	6.4	30.3	14.5	14.4	19.2	14.4	9.4	26.1	8.0	16.0
Otolaryngology	12.6	9.8	46.6	7.9	7.2	9.0	9.3	5.8	_	12.8	10.0
General Surgery	7.2	5.4	14.4	5.0	4.3	7.2	4.1	5.4	9.7	4.9	5.9
Neurosurgery	9.7	6.1	6.8	_	7.8	7.3	17.1	3.7	_	1.7	7.7
Orthopaedic Surgery	24.7	18.1	53.4	15.6	14.4	16.2	10.7	33.4	14.9	11.8	18.9
Cardiovascular Surgery (Urgent)	3.2	11.2	2.4	2.0	1.1	0.7	1.2	3.0	_	1.0	2.1
Cardiovascular Surgery (Elective)	16.6	20.6	30.0	5.0	5.3	6.4	19.5	24.6	_	52.1	10.7
Urology	6.9	4.3	10.5	3.8	3.5	8.1	10.2	4.9	3.8	7.0	5.7
Internal Medicine	7.4	8.3	7.6	4.6	5.0	4.8	5.6	6.2	15.6	5.8	5.7
Radiation Oncology	1.3	10.4	4.3	7.7^{2}	5.6^{3}	7.7	4.9	5.1	_	6.4	6.1
Medical Oncology	1.5	4.0			2.7^{3}	2.0	2.5	7.0	2.0	5.8	2.6
Weighted Median	10.9	8.5	23.0^{1}	8.2	7.1	10.7	9.3	10.6	11.1	9.2	9.5

¹Saskatchewan Surgical Care Network website reports that 50 percent of patients in Saskatoon and Regina had non-emergent surgery within 11.0 weeks between October 2002 and March 2003. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan" earlier in this edition of *Waiting Your Turn*.

Table 5a: Plastic Surgery (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Mammoplasty	40.0	18.0	70.0	40.0	12.0	30.0	19.0	104.0	_	143.0
Neurolysis	12.0	13.0	12.0	17.0	7.0	12.0	8.5	12.0	_	45.5
Blepharoplasty	16.0	10.0	6.0	23.0	6.0	6.0	19.3	50.0	_	39.0
Rhinoplasty	30.0	13.0	6.0	14.0	8.0	12.0	19.3	46.0	_	45.5
Scar Revision	20.0	14.0	40.0	14.0	10.0	25.0	21.3	48.0	_	48.5
Hand Surgery	13.0	12.0	44.0	14.0	11.0	15.0	11.5	24.0	_	21.5
Craniofacial Procedures	13.5	14.0	9.0	_	7.5	13.0	_	24.0	_	24.5
Skin Cancer and other Tumors	4.5	4.0	4.5	6.5	5.5	6.0	6.0	6.0	_	5.0
Weighted Median	25.5 ¹	14.2	32.8 ²	19.3	9.3	18.4	16.6	44.9	_	50.8

Note: Weighted median does not include craniofacial procedures or skin cancer and other tumors.

²CancerCare Manitoba reports a median wait time between specialist and treatment of 2.1 weeks for radiation oncology.

³Cancer Care Ontario reports a median wait time between specialist and treatment of 4.4 weeks for radiation oncology, and 1.7 weeks for medical oncology in June 2003.

¹BC Ministry of Health website reports a 5.4 week median wait time for plastic surgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

²Saskatchewan Surgical Care Network website reports that 30 percent of patients in Saskatoon and Regina waited less than 3 weeks, 38 percent waited between 3 weeks and 6 months, 12 percent waited between 7 and 12 months, 8 percent waited between 13 and 18 months, and 12 percent waited more than 18 months for non-emergent plastic surgery between October 2002 and March 2003. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

Table 5b: Gynaecology (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Dilation & Curettage	4.0	6.0	4.5	6.0	5.0	4.0	8.0	4.5	5.0	4.3
Tubal Ligation	8.5	8.0	20.0^{2}	8.0	6.0	9.0	12.0	5.0	6.5	4.3
Hysterectomy (Vaginal/Abdominal)	12.0	10.0	20.0^{2}	8.0	6.5	9.0	12.0	7.0	7.0	6.3
Vaginal Repair	12.0	10.0	61.0	10.0	7.0	10.0	12.0	7.0	7.0	6.3
Tuboplasty	12.5	10.0	39.0	8.0	7.0	11.5	16.0	9.0	0.0	8.0
Laparoscopic Procedures	8.0	8.0	17.0	8.0	6.0	8.0	8.0	5.0	4.0	5.5
Hysteroscopic Procedures	8.0	7.5	8.0	8.0	6.0	6.5	8.0	5.0	5.0	4.3
Weighted Median	8.1 ¹	7.7	16.7 ²	7.8	5.9	7.1	10.4	5.6	5.7	4.9

¹BC Ministry of Health website reports a 4.0 week median wait time for gynaecological surgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

Table 5c: Ophthalmology (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Cataract Removal	12.0 ¹	7.5^{2}	38.0^{3}	18.0	19.0	20.0	16.0	8.0	26.0	7.0
Cornea Transplant	50.0^{1}	10.5	81.5	54.0	24.5	52.0	52.0	43.0	_	24.0
Cornea—Pterygium	10.0	7.5	20.0	6.5	10.0	12.0	7.5	8.0	26.0	6.0
Iris, Ciliary Body, Sclera, Anterior Chamber	13.8	5.5	20.0	6.5	8.0	18.0	8.5	8.0	_	6.0
Retina, Choroid, Vitreous	3.0	4.5	5.0^{3}	_	4.0	6.0	11.0	12.0	_	_
Lacrimal Duct	12.0	7.0	25.0	4.0	8.0	18.0	8.0	12.0	_	22.0
Strabismus	12.0	7.5	30.0	52.0	24.0	14.0	8.5	12.0	42.0	12.0
Operations on Eyelids	8.0	6.0	16.0	5.0	8.0	12.0	6.0	12.0	26.0	12.0
Glaucoma	11.0	4.0	7.0	5.0	8.0	8.0	6.0	10.0	26.0	7.0
Weighted Median	9.9 ¹	6.4	30.3^{3}	14.5	14.4	19.2	14.4	9.4	26.1	8.0

Note: Weighted median does not include treatment for glaucoma.

²Saskatchewan Surgical Care Network website reports that 33 percent of patients in Saskatoon and Regina waited less than 3 weeks, 44 percent waited between 3 weeks and 6 months, 10 percent waited between 7 and 12 months, 4 percent waited between 13 and 18 months, and 9 percent waited more than 18 months for non-emergent obstetrics and gynaecology procedures between October 2002 and March 2003. The percentages for Tubal Ligation are reported to be 27%, 30%, 13%, 11%, and 19% respectively. The percentages for hysterectomy are reported to be 13%, 61%, 12%, 5%, and 9% respectively. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan" in this edition of *Waiting Your Turn*.

¹BC Ministry of Health website reports a 9.1 week median wait time for ophthalmology, a 10.6 week median wait time for cataract surgery, and a 16.5 week median wait time for cornea transplant at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

²Alberta Health and Wellness website reports mean wait times (10 health service regions reporting) for cataract surgery ranging from 26 (3.7 weeks) to 118 days (16.9 weeks) and median wait times (9 health service regions reporting) ranging from 21 (3 weeks) to 90 days (12.9 weeks) for the quarter ending December 31, 2002.

³Saskatchewan Surgical Care Network website reports that 7 percent of patients in Saskatoon and Regina waited less than 3 weeks, 37 percent waited between 3 weeks and 6 months, 37 percent waited between 7 and 12 months, 16 percent waited between 13 and 18 months, and 3 percent waited more than 18 months for non-emergent ophthalmology procedures between October 2002 and March 2003. The percentages for cataract surgery are reported to be 4%, 36%, 40%, 16%, and 3% respectively. The percentages for operations on vitreous are reported to be 56%, 42%, 1%, 0%, and 0% respectively. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Myringotomy	8.0	6.0	6.0^{2}	7.0	6.0	8.0	7.0	4.0	_	7.0
Tympanoplasty	12.0	12.0	100.0	8.0	8.0	12.0	12.0	8.0	_	12.0
Thyroid, Parathyroid, and Other Endocrine Glands	14.0	8.0	52.0	0.0	8.0	10.0	6.0	8.0	_	12.0
Tonsillectomy and/or Adenoidectomy	16.0	14.0	100.0 ²	8.0	8.0	12.0	11.5	8.0	_	16.0
Rhinoplasty and/or Septal Surgery	13.0	12.0	100.0	14.0	8.0	9.5	11.5	6.5	_	20.0
Operations on Nasal Sinuses	14.0	12.0	100.0	11.0	8.0	11.0	11.5	7.0		18.0
Weighted Median	12.6 ¹	9.8	46.6 ²	7.9	7.2	9.0	9.3	5.8	_	12.8

¹BC Ministry of Health website reports a 6.0 week median wait time for ear, nose, and throat surgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

Table 5e: General Surgery (2003) - Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Hernia/Hydrocele	12.0	7.5	27.0^{2}	7.0	4.0	12.0	4.5	8.0	8.5	9.5
Cholecystectomy	8.0	6.0	27.0	6.0	4.0	8.0	4.0	6.0	6.5	10.0
Colonoscopy	8.5	6.5	10.0	6.0	6.0	8.0	6.0	8.0	27.5	3.0
Intestinal Operations	4.0	4.0	4.3	3.0	3.0	4.0	4.0	4.0	3.5	2.5
Haemorrhoidectomy	12.0	7.5	30.0	7.0	5.0	12.0	5.0	7.5	5.5	4.0
Breast Biopsy	2.0	2.0	2.5^{2}	2.0	3.0	3.0	2.0	2.0	1.8	2.0
Mastectomy	2.0	2.0	2.8^{2}	2.5	3.0	3.0	2.0	2.0	1.8	2.0
Bronchus and Lung	10.0	4.0	_	6.0	4.0	3.0	3.0	2.0	4.0	2.0
Aneurysm Surgery	8.0	4.0	_	5.0	4.0	12.0	2.0	1.0	4.0	2.0
Varicose Veins	16.0	8.0	41.0	7.5	6.0	12.0	6.0	5.0	7.5	16.0
Weighted Median	7.2 ¹	5.4	14.4 ²	5.0	4.3	7.2	4.1	5.4	9.7	4.9

¹BC Ministry of Health website reports a 3.9 week median wait time for general surgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

²Saskatchewan Surgical Care Network website reports that 39 percent of patients in Saskatoon and Regina waited less than 3 weeks, 29 percent waited between 3 weeks and 6 months, 11 percent waited between 7 and 12 months, 7 percent waited between 13 and 18 months, and 14 percent waited more than 18 months for non-emergent otolaryngology procedures between October 2002 and March 2003. The percentages for myringotomy are reported to be 62%, 38%, 0%, 0%, and 0% respectively. The percentages for tonsillectomy with or without adenoidectomy are reported to be 6%, 30%, 25%, 13%, and 26% respectively. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

²Saskatchewan Surgical Care Network website reports that 45 percent of patients in Saskatoon and Regina waited less than 3 weeks, 38 percent waited between 3 weeks and 6 months, 8 percent waited between 7 and 12 months, 4 percent waited between 13 and 18 months, and 5 percent waited more than 18 months for non-emergent general surgery between October 2002 and March 2003. The percentages for hernia repair are reported to be 22%, 46%, 14%, 10%, and 9% respectively. The percentages for breast biopsy are reported to be 86%, 14%, 0%, 0%, and 0% respectively. The percentages for mastectomy are reported to be 75%, 19%, 3%, 1%, and 2% respectively. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

Table 5f: Neurosurgery (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Peripheral Nerve	10.0	6.0	4.0	_	8.0	4.0	10.0	_	_	2.5
Disc Surgery/ Laminectomy	15.0	7.5	10.0^{2}	_	8.0	10.0	34.0	3.5	_	1.5
Elective Cranial Bone Flap	7.5	5.8	6.0	_	8.0	7.0	12.0	4.0	_	1.5
Aneurysm Surgery	6.0	8.0	5.0	_	5.0	4.5	24.0	3.5	_	1.0
Carotid endarterectomy	6.5	3.5	3.0		3.5	4.0	6.0	2.3		
Weighted Median	9.7 ¹	6.1	6.8 ²	_	7.8	7.3	17.1	3.7	_	1.7

¹BC Ministry of Health website reports a 4.4 week median wait time for neurosurgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

Table 5g: Orthopaedic Surgery (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Meniscectomy/Arthroscopy	12.0	12.0	26.0	12.0	10.0	12.0	6.5	28.0	11.0	10.0
Removal of Pins	12.0	12.0	52.0	7.5	10.0	16.0	10.5	29.0	8.0	12.0
Arthroplasty (Hip, Knee, Ankle, Shoulder)	52.0 ¹	32.0^{2}	72.0^{3}	26.0	24.0	24.5	16.0	52.0	29.5	16.0
Arthroplasty (Interphalangeal, Metatarsophalangeal)	16.0	19.0	86.0	16.0	12.0	16.0	12.0	20.0	25.0	10.0
Hallux Valgus/Hammer Toe	18.0	12.0	54.0	14.0	10.0	16.0	12.0	20.0	13.0	12.0
Digit Neuroma	12.0	12.0	56.0	8.5	12.0	12.0	12.0	16.0	13.0	8.0
Rotator Cuff Repair	16.0	17.0	24.0	13.0	12.0	14.5	12.0	24.0	22.0	12.0
Ostectomy (All Types)	15.0	14.0	100.0	14.0	13.5	16.0	11.0	25.0	14.0	12.0
Routine Spinal Instability	44.8	20.5	56.0	14.0	12.0	17.5	30.0	51.0	38.5	10.0
Weighted Median	24.7 ¹	18.1	53.4 ³	15.6	14.4	16.2	10.7	33.4	14.9	11.8

¹BC Ministry of Health website reports a 7.3 week median wait time for orthopaedic surgery, a 18.6 week median wait time for hip replacement surgery, and a 26.7 week median wait time for knee replacement surgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

²Saskatchewan Surgical Care Network website reports that 37 percent of patients in Saskatoon and Regina waited less than 3 weeks, 47 percent waited between 3 weeks and 6 months, 11 percent waited between 7 and 12 months, 2 percent waited between 13 and 18 months, and 3 percent waited more than 18 months for non-emergent neurosurgery between October 2002 and March 2003. The percentages for laminectomy/discectomy are reported to be 30%, 54%, 10%, 3%, and 3% respectively. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

²Alberta Health and Wellness web site reports mean wait times (7 health regions reporting) for hip and knee replacement surgery ranging from 0.4 months (1.7 weeks) to 8.1 months (35.1 weeks), and median wait times (4 health regions reporting) ranging from 3.4 months (14.7 weeks) to 7.4 months (32.1 weeks) for the quarter ending December 31, 2002.

³Saskatchewan Surgical Care Network website reports that 18 percent of patients in Saskatoon and Regina waited less than 3 weeks, 42 percent waited between 3 weeks and 6 months, 16 percent waited between 7 and 12 months, 12 percent waited between 13 and 18 months, and 12 percent waited more than 18 months for non-emergent orthopaedic surgery between October 2002 and March 2003. The percentages for total hip replacement are reported to be 3%, 42%, 25%, 14%, and 15% respectively. The percentages for total knee replacement are reported to be 1%, 33%, 24%, 20%, and 22% respectively. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

Table 5h: Cardiovascular Surgery (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	• •	•	•		•						
		ВС	АВ	SK	MB	ON	QC	NB	NS	PE	NL
	Coronary Artery Bypass	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.2	_	0.0
Emergent	Valves & Septa of the Heart	0.5	0.5	0.0	0.0	0.0	0.0	0.3	0.2	_	0.0
nerg	Aneurysm Surgery	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	_	0.0
豆	Carotid Endarterectomy	0.0	0.0	0.0	_	0.0	0.0	0.0	_	_	0.0
	Pacemaker Operations	0.5	0.3	0.0		0.1	0.0	0.3	0.3		
	Weighted Median	0.5	0.1	0.0	0.0	0.0	0.0	0.2	0.2	_	0.0
	Coronary Artery Bypass	4.5	18.0^{2}	3.0^{4}	2.0	1.0	1.0	1.0	3.0	_	1.0
nt	Valves & Septa of the Heart	4.5	12.0 ²	2.0	2.0	1.5	0.8	1.0	3.0	_	1.0
Urgent	Aneurysm Surgery	4.0	14.3	2.0	3.0	1.0	0.5	1.0	6.0	_	2.0
_	Carotid Endarterectomy	1.5	1.5	2.0	_	1.0	0.5	_	_	_	1.0
	Pacemaker Operations	2.0	2.0	2.0		1.0	0.2	1.5	3.0		
	Weighted Median	3.2	11.2	2.4^{4}	2.0	1.1	0.7	1.2	3.0^{6}	_	1.0
	Coronary Artery Bypass	27.0	30.0^{3}	30.0^{4}	5.0	6.0^{5}	8.0	19.5	30.0	_	54.0
ĭ.	Valves & Septa of the Heart	27.0	25.0^{3}	30.0	5.0	8.0	7.0	19.5	30.0	_	54.0
Elective	Aneurysm Surgery	8.0	36.0	30.0	5.0	7.0	6.0	19.5	20.0	_	6.0
Ш	Carotid Endarterectomy	8.0	20.0	30.0	_	4.0	5.0	_	_	_	6.0
	Pacemaker Operations	6.0	5.5	30.0	_	3.5	3.0	_	18.0	_	_
	Weighted Median	16.6 ¹	20.6	30.0 ⁴	5.0	5.3	6.4	19.5	24.6	_	52.1

¹BC Ministry of Health web site reports median wait times of 14.9 weeks for cardiac surgery and 3.3 weeks for vascular surgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia." ²Alberta Health and Wellness web site reports median wait times for urgent outpatient open heart surgery in the 18.6 to 23.0 week range, and urgent inpatient open heart surgery in the 1.0 to 1.9 week range for the quarter ending December 31, 2002. ³Alberta Health and Wellness web site reports median wait times for planned open heart surgery in the 17.0 to 23.1 week range for the quarter ending December 31, 2002.

⁴Saskatchewan Surgical Care Network website reports that 48 percent of patients in Saskatoon and Regina waited less than 3 weeks, 42 percent waited between 3 weeks and 6 months, 8 percent waited between 7 and 12 months, 2 percent waited between 13 and 18 months, and 1 percent waited more than 18 months for non-emergent cardiovascular surgery between October 2002 and March 2003. The percentages for bypass surgery are reported to be 43%, 47%, 8%, 1%, and 1% respectively. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

⁵Cardiac Care Network of Ontario reports a median wait time for bypass surgery of 43 days (6.1 weeks) between October and December 2002, and a median wait time of 49 days (7 weeks) between January and March 2003.

⁶Nova Scotia Department of Health reports an average wait time of 3.5 days for urgent cardiac surgery.

Table 5i: Urology (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	АВ	SK	MB	ON	QC	NB	NS	PE	NL
Non-radical Prostatectomy	9.5	4.5	54.0 ²	4.0	5.5	12.0	8.0	6.0	8.5	29.5
Radical Prostatectomy	5.5	7.5	4.5^{2}	5.5	6.0	5.0	5.0	4.5	5.3	8.0
Transurethral Resection— Bladder	6.0	4.0	3.0^{2}	3.0	4.0	4.0	5.5	3.5	4.0	7.0
Radical Cystectomy	4.5	4.0	3.0	6.0	6.0	4.0	3.0	4.0	5.3	6.0
Cystoscopy	6.0	4.0	4.0^{2}	2.5	3.0	8.0	11.0	5.0	2.5	5.5
Hernia/Hydrocele	12.0	8.0	53.0	12.0	6.0	18.0	14.0	5.3	8.5	8.0
Bladder Fulguration	6.0	4.0	3.0	4.0	4.0	4.0	5.0	3.5	2.5	7.0
Ureteral Reimplantation for Reflux	18.0	9.5	92.0	5.0	7.0	4.0	16.0	8.0	8.5	24.0
Weighted Median	6.9 ¹	4.3	10.5 ²	3.8	3.5	8.1	10.2	4.9	3.8	7.0

¹BC Ministry of Health web site reports a 3.6 week median wait time for urological surgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

Table 5j: Internal Medicine (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Colonoscopy	7.5	10.0	7.0	4.5	5.5	5.5	4.0	6.0	20.0	4.0
Angiography /Angioplasty	8.0	6.0	9.0	5.0	5.0	5.0	7.0	8.0	6.0	11.0
Bronchoscopy	4.0	4.0	6.0	4.0	3.0	3.0	7.0	4.0	8.0	5.0
Gastroscopy	6.0	6.0	7.0	4.8	4.0	4.0	5.0	4.0	6.0	4.0
Weighted Median	7.4	8.3	7.6	4.6	5.0	4.8	5.6	6.2	15.6	5.8

²Saskatchewan Surgical Care Network web site reports that 36 percent of patients in Saskatoon and Regina waited less than 3 weeks, 50 percent waited between 3 weeks and 6 months, 5 percent waited between 7 and 12 months, 3 percent waited between 13 and 18 months, and 5 percent waited more than 18 months for non-emergent urology procedures between October 2002 and March 2003. The percentages for prostatectomy are reported to be 23%, 61%, 6%, 4%, and 5% respectively. The percentages for resection of bladder are reported to be 61%, 38%, 0%, 1%, and 0% respectively. The percentages for cystoscopy are reported to be 37%, 53%, 4%, 1%, and 6% respectively. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

	ВС	АВ	SK	MB	ON	QC	NB	NS	PE	NL
Cancer of the Larynx	1.0	5.0	2.0	5.0^{3}	2.5^{4}	2.3	3.5	3.5	_	3.5
Cancer of the Cervix	1.0	5.0	3.0	5.0^{3}	3.0^{4}	3.5	5.0	3.5	_	3.5
Lung Cancer	1.0	4.0	4.0	6.0^{3}	3.5^{4}	4.0	4.0	5.5	_	3.5
Prostate Cancer	1.8	16.0^2	5.0	12.0^{3}	8.0^{4}	12.0	7.0	5.0	_	8.0
Breast Cancer	1.0	12.0^{2}	4.0	5.5^{3}	6.0^{4}	10.0	4.0	5.0	_	7.5
Early Side Effects from Treatment	1.5	0.5	0.0	0.0^{3}	1.0	0.3	0.0	0.3	_	0.8
Late Side Effects from Treatment	2.3	2.0	0.0	0.8 ³	1.5	1.0	1.0	1.8	_	1.5
Weighted Median	1.3 ¹	10.4	4.3	7.7 ³	5.6 ⁴	7.7	4.9	5.1	_	6.4

Note: Weighted median does not include early or late side effects from treatment.

Table 51: Medical Oncology (2003)—Median Patient Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Cancer of the Larynx	1.5	2.8	_	_	2.0	2.0	2.5	_	_	3.3
Cancer of the Cervix	1.5	3.3	_	_	2.0	2.0	2.5	_	_	4.0
Lung Cancer	1.5	3.5	_	_	2.5^{2}	2.0	2.5	_	2.0	3.3
Breast Cancer	1.5	4.5 ¹	_	_	3.0^{2}	2.0	2.5	7.0	2.0	8.0
Side Effects from Treatment	0.5	0.0	_	_	0.5	0.1	0.0	0.0	0.2	0.5
Weighted Median	1.5	4.0	_	_	2.7^{2}	2.0	2.5	7.0	2.0	5.8

Note: Weighted median does not include side effects from treatment.

¹BC Ministry of Health web site reports a 1.1 week median wait time for radiation oncology at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—British Columbia."

²Alberta Health and Wellness web site reports mean wait times ranging from less than 2 weeks to 4 weeks for both prostate and breast cancer for the quarter ending December 31, 2002.

³CancerCare Manitoba reports median wait times of 5.1 weeks for cancer of the larynx, 2.4 weeks for cancer of the cervix, 1.9 weeks for lung cancer, 4.1 weeks for prostate cancer, 3.7 weeks for breast cancer, 0 weeks for early side effects, and 0.8 weeks for late side effects. CancerCare Manitoba reports an overall median wait time of 2.1 weeks for radiation oncology.

⁴Cancer Care Ontario reports median wait times of 4.7 weeks for cancer of the larynx, 4.1 weeks for cancer of the cervix, 1.1 weeks for lung cancer, 7.1 weeks for prostate cancer, and 5.4 weeks for breast cancer in June 2003. Cancer Care Ontario reports an overall median wait time of 4.4 weeks for radiation oncology in June 2003.

¹Alberta Health and Wellness web site reports a mean wait time of 1 week for breast cancer for the quarter ending December 31, 2002.

²Cancer Care Ontario reports median wait times of 0.9 weeks for lung cancer, 2.0 weeks for breast cancer, and an overall median wait time of 1.7 weeks in June 2003.

Table 6: Comparison of Median Weeks Waited to Receive Treatment after Appointment with Specialist by Selected Specialties, 2001-02 and 2003

	Britis	h Colu	ımbia	ļ	Albert	a	Sask	catche	wan	М	anito	ba	(Ontari	0
	2003	2001- 02	% chg	2003	2001- 02	% chg	2003	2001- 02	% chg	2003	2001- 02	% chg	2003	2001- 02	% chg
Plastic Surgery	25.5	26.6	-4%	14.2	14.6	-3%	32.8	43.6	-25%	19.3	50.9	-62%	9.3	9.2	1%
Gynaecology	8.1	9.9	-18%	7.7	7.1	8%	16.7	38.3	-56%	7.8	8.0	-3%	5.9	5.7	4%
Ophthalmology	9.9	16.8	-41%	6.4	6.2	3%	30.3	40.2	-25%	14.5	21.5	-32%	14.4	15.0	-4%
Otolaryngology	12.6	12.9	-2%	9.8	8.3	18%	46.6	35.8	30%	7.9	10.0	-21%	7.2	7.2	0%
General Surgery	7.2	7.3	-1%	5.4	5.3	1%	14.4	16.3	-12%	5.0	5.7	-14%	4.3	4.2	2%
Neurosurgery	9.7	7.2	35%	6.1	7.9	-23%	6.8	5.9	16%	_	5.8	_	7.8	6.8	14%
Orthopaedic Surgery	24.7	23.3	6%	18.1	18.5	-2%	53.4	71.0	-25%	15.6	18.0	-14%	14.4	13.2	9%
Cardiovascular Surgery (Urgent)	3.2	3.2	0%	11.2	7.0	59%	2.4	1.9	25%	2.0	1.1	78%	1.1	1.2	-15%
Cardiovascular Surgery (Elective)	16.6	9.9	67%	20.6	25.7	-20%	30.0	13.1	130%	5.0	14.6	-66%	5.3	5.1	4%
Urology	6.9	5.7	22%	4.3	3.4	26%	10.5	6.0	75%	3.8	2.8	34%	3.5	3.6	-3%
Internal Medicine	7.4	8.3	-10%	8.3	7.0	18%	7.6	4.0	93%	4.6	5.2	-13%	5.0	5.3	-7%
Radiation Oncology	1.3	2.2	-43%	10.4	3.7	181%	4.3	9.2	-53%	7.7	7.9	-2%	5.6	6.6	-15% ¹
Medical Oncology	1.5	1.6	-8%	4.0	5.5	-28%	_				7.0	_	2.7	2.0	34%1
Weighted Median	10.9	11.6	-6%	8.5	8.2	4%	23.0	26.9	-15%	8.2	10.8	-24%	7.1	7.0	1%

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.

Table 6: Comparison of Median Weeks Waited to Receive Treatment after Appointment with Specialist, by Selected Specialties, 2001-02 and 2003

		Quebe	ec	New	Brun	swick	No	va Sc	otia		ce Edv Islanc		New	found	lland
	2003	2001- 02	% chg	2003	2001- 02	% chg	2003	2001- 02	% chg	2003	2001- 02	% chg	2003	2001- 02	% chg
Plastic Surgery	18.4	10.8	71%	16.6	11.4	46%	44.9	34.9	29%	_	20.6	_	50.8	25.9	96%
Gynaecology	7.1	6.7	7%	10.4	9.8	6%	5.6	6.7	-16%	5.7	5.1	12%	4.9	8.1	-39%
Ophthalmology	19.2	16.0	20%	14.4	12.9	12%	9.4	10.7	-12%	26.1	20.0	30%	8.0	6.5	23%
Otolaryngology	9.0	5.3	71%	9.3	13.1	-29%	5.8	6.6	-13%	_	_	_	12.8	4.2	204%
General Surgery	7.2	5.3	35%	4.1	4.5	-8%	5.4	4.9	10%	9.7	5.4	80%	4.9	5.3	-7%
Neurosurgery	7.3	7.2	1%	17.1	16.8	2%	3.7	7.1	-48%	_	_	_	1.7	4.7	-64%
Orthopaedic Surgery	16.2	16.1	1%	10.7	11.9	-10%	33.4	29.6	13%	14.9	7.7	95%	11.8	25.0	-53%
Cardiovascular Surgery (Urgent)	0.7	0.8	-13%	1.2	3.8	-67%	3.0	0.8	255% ²	_	_	_	1.0	3.8	-73%
Cardiovascular Surgery (Elective)	6.4	9.3	-31%	19.5	13.1	49%	24.6	14.3	72%	_	_	_	52.1	50.1	4%
Urology	8.1	5.4	50%	10.2	8.7	17%	4.9	4.1	19%	3.8	_	_	7.0	4.6	53%
Internal Medicine	4.8	4.9	0%	5.6	8.9	-36%	6.2	4.6	36%	15.6	5.0	210%	5.8	5.1	15%
Radiation Oncology	7.7	6.5	18%	4.9	7.9	-38%	5.1	4.5	15%	_	_	_	6.4	6.7	-5%
Medical Oncology	2.0	1.1	75%	2.5	2.5	0%	7.0	2.1	236%	2.0	2.0	0%	5.8	_	
Weighted Median	10.7	8.9	21%	9.3	9.5	-2%	10.6	9.4	13%	11.1	7.9	41%	9.2	8.9	3%

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.

¹Cancer Care Ontario reports an increase in waiting time over the previous year (2002 to 2003) for radiation oncology from 3.9 to 4.4 weeks (13%) but no change in the wait for medical oncology (1.7 weeks).

²Nova Scotia Department of Health reports no increase in wait times for urgent cardiac surgery.

Table 7: Frequency Distribution of Waiting Times (Specialist to Treatment) by Province, 2003—Proportion of Survey Waiting Times that Fall Within Given Ranges

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
0 - 3.99 Weeks	17.7%	18.1%	18.3%	21.4%	25.6%	23.3%	19.8%	24.5%	22.0%	26.2%
4 - 7.99 Weeks	21.4%	30.1%	16.3%	34.1%	34.1%	24.0%	26.3%	30.4%	36.3%	29.5%
8 - 12.99 Weeks	26.9%	25.4%	13.3%	25.5%	22.8%	24.2%	27.1%	23.2%	22.0%	23.0%
13 - 25.99 Weeks	16.1%	14.6%	10.3%	13.7%	10.0%	16.0%	15.1%	9.4%	7.7%	11.9%
26 - 51.99 Weeks	10.4%	9.2%	11.3%	1.8%	4.9%	6.9%	6.1%	6.4%	9.9%	5.7%
1 year plus	7.5%	2.7%	30.6%	3.5%	2.6%	5.6%	5.5%	6.2%	2.2%	3.7%

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

Table 8: Median Reasonable Patient Wait for Treatment after Appointment with Specialist 2003 (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Plastic Surgery	9.6	8.1	13.6	7.4	6.4	8.4	6.5	14.0	_	24.7	8.2
Gynaecology	5.3	5.3	12.6	5.5	4.9	5.3	7.7	5.0	_	1.8	5.4
Ophthalmology	5.8	5.3	11.0	7.0	6.5	7.8	8.9	5.7	12.0	6.3	7.1
Otolaryngology	5.4	5.4	14.4	5.3	5.2	4.2	5.2	5.2	_	2.1	5.3
General Surgery	3.9	3.7	6.9	4.2	3.8	3.9	4.2	4.0	3.3	3.6	4.0
Neurosurgery	3.8	4.5	5.2	_	4.3	3.9	6.2	4.8	_	_	4.2
Orthopaedic Surgery	6.9	7.7	11.7	8.6	6.7	7.2	7.3	8.5	6.7	4.2	7.3
Cardiovascular Surgery (Urgent)	1.0	1.7	1.5	1.5	0.9	0.3	1.0	2.0	_	1.0	0.9
Cardiovascular Surgery (Elective)	6.1	12.2	8.1	10.0	4.4	5.4	9.5	9.5	_	11.8	6.1
Urology	2.6	2.5	8.1	3.6	2.5	2.9	5.7	3.9	2.8	5.4	3.0
Internal Medicine	2.0	3.0	3.1	2.3	2.4	2.7	2.7	2.7	4.0	2.5	2.6
Radiation Oncology	_	4.0	6.1	3.0	2.9	3.8	4.3	3.9	_	3.2	3.6
Medical Oncology	1.5	2.4	_	_	1.9	2.0	2.5	4.0	4.0	5.3	2.1
Weighted Median	4.5	4.7	8.8	5.3	4.3	4.9	5.8	5.2	4.8	4.3	4.8

Table 9a: Plastic Surgery (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Mammoplasty	12.0	12.0	20.0	10.0	9.0	11.0	5.0	21.0	_	78.0
Neurolysis	6.0	4.0	9.0	6.0	5.0	6.0	3.5	4.0	_	12.0
Blepharoplasty	8.0	8.0	6.0	7.0	6.0	6.0	5.0	16.0	_	26.0
Rhinoplasty	11.0	8.0	6.0	7.0	6.0	8.0	7.0	16.0	_	26.0
Scar Revision	10.0	8.0	12.0	7.0	6.0	12.0	12.0	18.0	_	26.0
Hand Surgery	6.0	8.0	25.5	7.0	6.0	5.0	5.0	4.0	_	19.0
Craniofacial Procedures	6.0	13.0	9.0	_	6.0	5.0	_	4.5	_	19.0
Skin Cancer and other Tumors	2.5	2.5	4.5	5.0	3.0	3.8	3.0	2.0	_	5.0
Weighted Median	9.6	8.1	13.6	7.4	6.4	8.4	6.5	14.0		24.7

Note: Weighted median does not include craniofacial procedures or skin cancer and other tumors.

Table 9b: Gynaecology (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Dilation & Curettage	3.8	4.0	4.0	4.0	4.0	4.0	7.0	4.0		1.3
Tubal Ligation	6.0	6.0	20.0	6.0	6.0	8.0	8.0	5.0	_	2.8
Hysterectomy (Vaginal/Abdominal)	7.0	6.0	15.0	6.0	5.0	6.0	8.0	6.0	_	2.0
Vaginal Repair	7.5	7.0	20.0	6.0	6.0	8.0	8.0	6.0	_	1.8
Tuboplasty	8.0	6.0	12.0	4.0	6.0	8.0	12.0	6.0	_	3.5
Laparoscopic Procedures	5.0	6.0	12.0	5.5	5.0	5.0	7.5	4.5	_	3.0
Hysteroscopic Procedures	4.5	5.5	12.0	4.0	4.0	4.0	7.5	4.0	_	1.3
Weighted Median	5.3	5.3	12.6	5.5	4.9	5.3	7.7	5.0	_	1.8

Table 9c: Ophthalmology (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Cataract Removal	7.0	6.0	12.0	8.0	8.0	8.0	9.0	6.0	12.0	7.0
Cornea Transplant	10.0	8.0	15.0	5.0	8.0	12.0	16.0	6.0	_	5.5
Cornea—Pterygium	7.0	7.0	12.0	4.0	8.0	8.0	7.0	6.0	12.0	7.0
Iris, Ciliary Body, Sclera, Anterior Chamber	6.0	4.5	12.0	5.0	4.0	6.5	8.0	6.0	_	4.0
Retina, Choroid, Vitreous	2.0	4.0	5.0	_	3.0	4.0	7.0	4.5	_	1.5
Lacrimal Duct	7.0	6.5	10.0	4.0	6.0	8.0	9.0	7.0	_	6.5
Strabismus	6.0	8.0	12.0	10.0	6.0	8.0	10.0	8.0	12.0	8.0
Operations on Eyelids	6.0	5.5	12.0	4.0	5.0	7.5	8.0	5.0	12.0	7.0
Glaucoma	4.0	4.0	4.5	4.0	4.0	4.0	4.0	3.5	12.0	4.0
Weighted Median	5.8	5.3	11.0	7.0	6.5	7.8	8.9	5.7	12.0	6.3

Note: Weighted median does not include treatment for glaucoma.

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Myringotomy	4.0	4.0	6.0	5.0	4.0	4.0	4.0	3.5	_	2.0
Tympanoplasty	6.0	5.0	26.0	8.0	6.0	6.0	4.0	7.5	_	2.0
Thyroid, Parathyroid, and Other Endocrine Glands	4.0	4.0	12.0	1.5	4.0	4.0	4.0	4.0	_	2.0
Tonsillectomy and/or Adenoidectomy	6.0	8.0	26.0	6.0	6.5	4.0	8.0	7.0	_	2.0
Rhinoplasty and/or Septal Surgery	7.0	7.0	26.0	6.0	7.0	6.0	4.0	7.5	_	2.0
Operations on Nasal Sinuses	6.0	5.0	26.0	6.0	6.0	4.0	4.0	7.5		2.5
Weighted Median	5.4	5.4	14.4	5.3	5.2	4.2	5.2	5.2	_	2.1

Table 9e: General Surgery (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Hernia/Hydrocele	5.5	4.0	12.0	6.0	5.0	6.0	5.5	6.5	4.0	8.0
Cholecystectomy	4.0	4.0	12.0	5.0	4.0	4.0	5.0	4.0	3.5	4.0
Colonoscopy	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	2.0
Intestinal Operations	2.5	3.0	4.5	3.0	3.0	3.0	4.0	3.3	4.0	2.0
Haemorrhoidectomy	7.0	6.0	12.0	7.5	6.0	6.0	5.5	6.5	4.0	10.0
Breast Biopsy	2.0	2.0	2.0	1.5	2.0	2.0	2.0	2.0	1.8	2.0
Mastectomy	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	2.0
Bronchus and Lung	2.0	2.0	_	4.0	3.3	2.5	2.0	2.0	2.0	2.5
Aneurysm Surgery	2.0	4.5	_	3.0	4.5	3.0	4.0	4.0	2.0	3.0
Varicose Veins	12.0	8.0	12.0	8.0	6.5	8.0	8.0	6.5	4.5	8.0
Weighted Median	3.9	3.7	6.9	4.2	3.8	3.9	4.2	4.0	3.3	3.6

Table 9f: Neurosurgery (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Peripheral Nerve	4.5	4.0	4.0	_	6.0	4.0	7.0	7.0	_	_
Disc Surgery/ Laminectomy	4.0	6.5	10.0	_	4.0	4.0	9.0	3.0	_	_
Elective Cranial Bone Flap	4.0	4.0	3.0	_	4.0	4.0	4.0	5.0	_	_
Aneurysm Surgery	3.3	5.0	4.0	_	4.0	4.0	8.0	4.0	_	_
Carotid endarterectomy	1.5	2.0	2.0	_	2.0	2.5	5.0	2.0	_	_
Weighted Median	3.8	4.5	5.2	_	4.3	3.9	6.2	4.8	_	_

Table 9g: Orthopaedic Surgery (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Meniscectomy/Arthroscopy	5.0	6.0	6.0	5.0	4.0	4.0	4.0	5.0	5.0	4.0
Removal of Pins	6.0	6.0	12.0	7.5	6.0	8.0	10.0	6.0	4.0	4.0
Arthroplasty (Hip, Knee, Ankle, Shoulder)	10.0	12.0	12.0	12.0	9.0	10.0	10.0	12.0	11.0	5.0
Arthroplasty (Interphalangeal, Metatarsophalangeal)	6.0	7.0	18.0	15.0	8.0	8.0	8.0	8.0	12.0	4.0
Hallux Valgus/Hammer Toe	6.0	7.0	20.0	7.5	8.0	8.0	12.0	8.0	7.0	4.0
Digit Neuroma	6.0	6.0	12.0	7.5	7.5	8.0	8.0	7.5	7.0	4.0
Rotator Cuff Repair	6.0	6.0	6.0	7.0	6.0	6.0	6.0	6.0	6.0	4.0
Ostectomy (All Types)	6.0	6.0	24.0	7.5	7.0	8.0	9.5	10.0	8.0	4.0
Routine Spinal Instability	9.0	8.0	24.0	11.0	8.0	8.5	12.0	8.5	15.0	4.0
Weighted Median	6.9	7.7	11.7	8.6	6.7	7.2	7.3	8.5	6.7	4.2

Table 9h: Cardiovascular Surgery (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

		ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
	Coronary Artery Bypass	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	_	0.0
ent	Valves & Septa of the Heart	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	_	0.0
Emergent	Aneurysm Surgery	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	_	0.0
En	Carotid Endarterectomy	0.0	0.0	0.0	_	0.0	0.0	0.0	_	_	0.0
	Pacemaker Operations	0.0	0.1	0.0	_	0.1	0.0	0.0	0.1	_	_
	Weighted Median	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	_	0.0
	Coronary Artery Bypass	1.0	2.0	1.5	1.5	1.0	0.5	1.0	1.3	_	1.0
nt	Valves & Septa of the Heart	1.0	2.0	2.0	1.5	1.0	0.5	1.0	1.3	_	1.0
Urgent	Aneurysm Surgery	1.0	1.3	2.0	1.0	1.0	0.3	1.5	6.0	_	2.0
٦	Carotid Endarterectomy	0.8	0.5	1.5	_	1.0	0.0	_	_	_	1.0
	Pacemaker Operations	1.0	1.2	1.5	_	0.8	0.0		3.0		_
	Weighted Median	1.0	1.7	1.5	1.5	0.9	0.3	1.0	2.0	_	1.0
	Coronary Artery Bypass	8.0	18.0	12.0	10.0	5.0	6.0	9.5	9.0	_	12.0
ive	Valves & Septa of the Heart	8.0	12.0	12.0	10.0	5.0	6.0	9.5	9.0	_	12.0
Elective	Aneurysm Surgery	4.0	18.0	6.0	4.0	4.0	6.0	9.5	20.0	_	6.0
Ħ	Carotid Endarterectomy	6.0	10.0	8.0	_	4.0	4.0	_	_	_	6.0
	Pacemaker Operations	4.0	4.0	4.0		3.3	4.0		10.0		
	Weighted Median	6.1	12.2	8.1	10.0	4.4	5.4	9.5	9.5	_	11.8

Table 9i: Urology (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Non-radical Prostatectomy	4.0	4.0	20.0	4.0	4.0	4.0	4.5	4.0	6.5	7.0
Radical Prostatectomy	2.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0	3.3	3.5
Transurethral Resection—Bladder	2.0	2.3	4.0	3.0	2.5	2.0	3.5	2.5	2.5	2.5
Radical Cystectomy	2.0	3.0	3.0	4.0	4.0	2.0	3.0	2.0	2.8	2.5
Cystoscopy	2.0	2.0	4.0	2.5	2.0	2.8	6.0	4.0	1.8	5.5
Hernia/Hydrocele	6.0	8.0	52.0	10.0	6.0	6.5	7.0	4.5	6.5	8.0
Bladder Fulguration	2.0	2.0	4.0	4.0	3.0	3.0	4.0	3.0	2.3	4.0
Ureteral Reimplantation for Reflux	6.0	8.0	_	6.0	4.0	4.0	12.0	4.5	6.5	12.0
Weighted Median	2.6	2.5	8.1	3.6	2.5	2.9	5.7	3.9	2.8	5.4

Table 9j: Internal Medicine (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Colonoscopy	2.0	3.0	3.0	2.5	2.5	3.0	3.0	3.0	4.0	3.0
Angiography/ Angioplasty	2.0	3.3	3.0	1.5	2.5	3.0	2.5	2.5	3.0	1.8
Bronchoscopy	2.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0	4.0	1.5
Gastroscopy	2.0	2.5	3.5	2.5	2.0	2.0	2.5	2.0	4.5	3.0
Weighted Median	2.0	3.0	3.1	2.3	2.4	2.7	2.7	2.7	4.0	2.5

Table 9k: Radiation Oncology (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Cancer of the Larynx	_	3.0	1.0	3.0	2.0	2.0	3.5	2.8	_	3.0
Cancer of the Cervix	_	2.5	1.0	3.0	2.0	2.0	4.0	2.8	_	3.0
Lung Cancer	_	2.8	2.0	2.0	2.0	2.0	3.0	4.8	_	3.0
Prostate Cancer	_	4.5	12.0	4.0	4.0	5.5	6.0	3.5	_	3.5
Breast Cancer	_	5.0	4.0	3.0	3.0	5.0	4.0	3.5	_	3.0
Early Side Effects from Treatment	_	0.5	0.0	0.0	1.0	0.0	0.0	0.3	_	1.3
Late Side Effects from Treatment	_	2.0	0.0	0.8	1.0	1.0	1.0	2.3	_	2.0
Weighted Median	_	4.0	6.1	3.0	2.9	3.8	4.3	3.9	_	3.2

Note: Weighted median does not include early or late side effects from treatment.

Table 91: Medical Oncology (2003)—Median Reasonable Wait for Treatment after Appointment with Specialist (in Weeks)

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Cancer of the Larynx	1.8	2.0	_	_	2.0	2.0	2.5	_	4.0	3.3
Cancer of the Cervix	2.0	2.0	_	_	2.0	2.0	2.5	_	4.0	4.0
Lung Cancer	1.5	1.8	_	_	1.8	2.0	2.5	_	4.0	2.8
Breast Cancer	1.5	3.0	_	_	2.0	2.0	2.5	4.0	4.0	7.5
Side Effects from Treatment	0.5	0.0	_	_	0.2	0.3	0.0	0.3	0.2	0.5
Weighted Median	1.5	2.4	_	_	1.9	2.0	2.5	4.0	4.0	5.3

Note: Weighted median does not include side effects from treatment.

Table 10: Comparison between the Median Actual Weeks Waited and the Median Reasonable Number of Weeks to Wait for Treatment after Appointment with Specialist, by Selected Specialies, 2003

	Britisl	1 Colu	ımbia	A	lbert	a	Sask	atche	wan	M	anito	ba	0	ntari	0
	A	R	D	Α	R	D	A	R	D	Α	R	D	A	R	D
Plastic Surgery	25.5	9.6	165%	14.2	8.1	76%	32.8	13.6	142%	19.3	7.4	162%	9.3	6.4	45%
Gynaecology	8.1	5.3	51%	7.7	5.3	45%	16.7	12.6	33%	7.8	5.5	42%	5.9	4.9	22%
Ophthalmology	9.9	5.8	70%	6.4	5.3	20%	30.3	11.0	176%	14.5	7.0	109%	14.4	6.5	122%
Otolaryngology	12.6	5.4	133%	9.8	5.4	82%	46.6	14.4	224%	7.9	5.3	47%	7.2	5.2	37%
General Surgery	7.2	3.9	86%	5.4	3.7	44%	14.4	6.9	110%	5.0	4.2	17%	4.3	3.8	13%
Neurosurgery	9.7	3.8	153%	6.1	4.5	36%	6.8	5.2	31%	_	_	_	7.8	4.3	81%
Orthopaedic Surgery	24.7	6.9	260%	18.1	7.7	136%	53.4	11.7	358%	15.6	8.6	82%	14.4	6.7	116%
Cardiovascular Surgery (Urgent)	3.2	1.0	226%	11.2	1.7	569%	2.4	1.5	56%	2.0	1.5	34%	1.1	0.9	16%
Cardiovascular Surgery (Elective)	16.6	6.1	173%	20.6	12.2	69%	30.0	8.1	270%	5.0	10.0	-50%	5.3	4.4	22%
Urology	6.9	2.6	167%	4.3	2.5	70%	10.5	8.1	30%	3.8	3.6	6%	3.5	2.5	40%
Internal Medicine	7.4	2.0	272%	8.3	3.0	179%	7.6	3.1	149%	4.6	2.3	97%	5.0	2.4	108%
Radiation Oncology	1.3	_	_	10.4	4.0	157%	4.3	6.1	-30%	7.7	3.0	157%	5.6	2.9	93%
Medical Oncology	1.5	1.5	-1%	4.0	2.4	67%	_	_	_	_	_	_	2.7	1.9	44%
Weighted Median	10.9	4.5	140%	8.5	4.7	82%	23.0	8.8	160%	8.2	5.3	56%	7.1	4.3	66%

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.

A = Median Actual Wait; R = Median Clinically Reasonable Wait; D = Percentage Difference

Table 10: Comparison between the Median Actual Weeks Waited and the Median Reasonable Number of Weeks to Wait for Treatment after Appointment with Specialist, by Selected Specialies, 2003

	Q	uebe	ec	New	Brun	swick	No	va Sc	otia		ce Edv Island		New	found	lland
	A	R	D	A	R	D	Α	R	D	Α	R	D	Α	R	D
Plastic Surgery	18.4	8.4	120%	16.6	6.5	157%	44.9	14.0	221%	_	_	_	50.8	24.7	105%
Gynaecology	7.1	5.3	36%	10.4	7.7	35%	5.6	5.0	13%	5.7	_	_	4.9	1.8	165%
Ophthalmology	19.2	7.8	145%	14.4	8.9	62%	9.4	5.7	63%	26.1	12.0	118%	8.0	6.3	27%
Otolaryngology	9.0	4.2	114%	9.3	5.2	79%	5.8	5.2	11%	_	_	_	12.8	2.1	513%
General Surgery	7.2	3.9	84%	4.1	4.2	-2%	5.4	4.0	36%	9.7	3.3	192%	4.9	3.6	36%
Neurosurgery	7.3	3.9	87%	17.1	6.2	178%	3.7	4.8	-22%	_	_	_	1.7	_	_
Orthopaedic Surgery	16.2	7.2	126%	10.7	7.3	47%	33.4	8.5	294%	14.9	6.7	123%	11.8	4.2	179%
Cardiovascular Surgery (Urgent)	0.7	0.3	117%	1.2	1.0	22%	3.0	2.0	47%	_	_	_	1.0	1.0	0%
Cardiovascular Surgery (Elective)	6.4	5.4	19%	19.5	9.5	105%	24.6	9.5	160%	_	_	_	52.1	11.8	343%
Urology	8.1	2.9	176%	10.2	5.7	80%	4.9	3.9	26%	3.8	2.8	36%	7.0	5.4	30%
Internal Medicine	4.8	2.7	77%	5.6	2.7	112%	6.2	2.7	130%	15.6	4.0	291%	5.8	2.5	132%
Radiation Oncology	7.7	3.8	105%	4.9	4.3	16%	5.1	3.9	31%	_	_	_	6.4	3.2	102%
Medical Oncology	2.0	2.0	0%	2.5	2.5	0%	7.0	4.0	75%	2.0	4.0	-50%	5.8	5.3	9%
Weighted Median	10.7	4.9	117%	9.3	5.8	60%	10.6	5.2	106%	11.1	4.8	133%	9.2	4.3	115%

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.

A = Median Actual Wait; R = Median Clinically Reasonable Wait; D = Percentage Difference

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Plastic Surgery	0.7%	0.3%	0.3%	3.0%	1.3%	0.7%	0.4%	2.5%	_	_	1.0%
Gynaecology	3.0%	4.2%	0.1%	1.8%	1.0%	0.5%	1.4%	0.8%	0.0%	0.0%	1.4%
Ophthalmology	0.8%	1.4%	0.8%	0.8%	1.5%	0.7%	0.4%	0.6%	0.0%	0.1%	1.1%
Otolaryngology	1.2%	1.5%	0.2%	0.5%	2.4%	0.4%	0.4%	0.3%	_	0.5%	1.4%
General Surgery	0.9%	1.6%	0.8%	0.2%	1.1%	0.4%	0.3%	0.2%	1.7%	8.0%	0.9%
Neurosurgery	3.3%	1.8%	0.3%	_	2.7%	0.0%	2.0%	0.0%	_	1.0%	2.1%
Orthopaedic Surgery	1.3%	2.2%	2.1%	0.7%	2.3%	0.6%	0.5%	0.5%	0.3%	0.9%	1.5%
Cardiovascular Surgery	0.5%	0.5%	0.0%	0.0%	2.6%	0.4%	0.5%	0.5%	_	0.0%	1.2%
Urology	2.3%	1.6%	0.0%	3.3%	2.0%	1.1%	1.5%	0.8%	0.3%	0.0%	1.7%
Internal Medicine	2.2%	1.4%	0.3%	2.0%	2.1%	0.9%	1.2%	1.4%	2.0%	0.0%	1.7%
Radiation Oncology	5.0%	0.6%	0.0%	0.5%	1.4%	0.8%	0.9%	0.0%	_	0.0%	1.1%
Medical Oncology	1.7%	2.3%	_	_	1.9%	1.0%	3.0%	1.8%	1.0%	2.5%	1.7%
All Specialties	1.7%	1.9%	0.6%	1.4%	1.7%	0.6%	0.8%	0.9%	0.9%	1.5%	1.4%

Table 12: Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist, by Specialty, 2003

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Plastic Surgery	4,423	1,678	1,523	1,471	5,513	5,655	786	2,299	_	988
Gynaecology	5,220	4,312	3,296	2,572	11,198	7,565	1,525	907	128	623
Ophthalmology	8,907	3,478	9,194	1,718	40,989	82,691	1,864	2,467	360	464
Otolaryngology	4,939	3,011	6,441	1,371	10,910	7,973	1,273	802	_	1,004
General Surgery	8,027	5,290	5,346	1,955	18,728	19,682	980	1,767	509	912
Neurosurgery	892	524	225	_	2,574	1,696	354	68	_	27
Orthopaedic Surgery	18,158	9,479	14,332	3,380	32,176	16,067	2,157	5,991	429	696
Cardiovascular Surgery	703	1,660	152	81	723	443	52	223	_	27
Urology	5,749	3,040	3,518	598	12,590	19,100	2,279	1,546	114	818
Internal Medicine	4,993	4,233	2,022	831	10,594	9,246	626	1,096	384	647
Radiation Oncology	24	163	28	46	295	302	46	32	_	8
Medical Oncology	79	288	_	_	1,213	610	79	123	4	108
Residual	47,683	30,925	31,553	12,803	110,251	97,748	8,913	14,923	1,393	4,892
Total	109,796	68,082	77,628 ¹	26,828	257,755	268,780	20,935	32,245	3,320	11,215
Proportion of Population	2.65%	2.18%	7.69%	2.33%	2.13%	3.60%	2.77%	3.41%	2.37%	2.11%
Canada:	Total num	ber of pro	cedures fo	r which pa	itients are	waiting in 2	2003		876,	584
	Percentag		2	2.78%						

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.

¹Saskatchewan Surgical Care Network web site reports 26,029 patients on wait lists in Regina and Saskatoon for non-emergent surgery at March 31, 2003. For an extensive explanation, please refer to "Verification of current data with governments—Saskatchewan."

Table 13a: Plastic Surgery (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Mammoplasty	1,898	568	611	528	1,611	1,704	261	578	_	223
Neurolysis	292	384	83	214	1,032	1,020	80	104	_	288
Blepharoplasty	73	70	22	52	233	92	19	59	_	41
Rhinoplasty	1,143	145	54	123	544	417	165	312	_	130
Scar Revision	724	327	428	364	1,277	1,744	202	1,101	_	255
Hand Surgery	293	185	324	189	817	679	59	145	_	52
Total	4,423 ¹	1,678	1,523	1,471	5,513	5,655	786	2,299	_	988

¹BC Ministry of Health web site reports 4,341 patients waiting for plastic surgery at March 31, 2003.

Table 13b: Gynaecology (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	АВ	SK	MB	ON	QC	NB	NS	PE	NL
Dilation & Curettage	686	1,224	192	284	2,315	1,162	194	153	26	174
Tubal Ligation	972	639	598	1,372	2,091	594	428	164	28	79
Hysterectomy (Vaginal/Abdominal)	1,507	898	758	305	2,359	2,061	511	273	41	162
Vaginal Repair	442	314	781	118	879	927	116	117	8	37
Tuboplasty	50	23	25	6	34	47	5	3	0	4
Laparoscopic Procedures	825	716	672	252	1,962	1,742	168	106	14	77
Hysteroscopic Procedures	737	499	268	234	1,558	1,032	103	92	10	90
Total	5,220 ¹	4,312	3,296	2,572	11,198	7,565	1,525	907	128	623

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

¹BC Ministry of Health web site reports 6,339 patients waiting for gynaecological surgery at March 31, 2003.

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Cataract Removal	7,061 ¹	2,153 ²	7,922	1,502	33,017	76,225	1,689	1,248	322	314
Cornea Transplant	31 ¹	9	2	16	96	84	0	2	_	1
Cornea—Pterygium	65	50	51	29	246	251	6	8	6	10
Iris, Ciliary Body, Sclera, Anterior Chamber	294	153	288	99	1,762	1,980	13	137	_	17
Retina, Choroid, Vitreous	577	771	203	_	2,118	901	21	711		_
Lacrimal Duct	228	103	216	9	756	1,506	36	69		41
Strabismus	274	47	129	0	1,637	684	31	155	5	15
Operations on Eyelids	379	194	382	63	1,357	1,060	68	136	28	66
Total	8,907 ¹	3,478	9,194	1,718	40,989	82,691	1,864	2,467	360	464

The procedure data reports generally includes only those procedures 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.

Table 13d: Otolaryngology (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Myringotomy	853	725	444	564	3,748	4 597	428	276	_	204
Tympanoplasty	262	63	808	37	315	406	92	53	_	62
Thyroid, Parathyroid, and Other Endocrine Glands	384	201	470	0	891	638	38	66	_	52
Tonsillectomy and/or Adenoidectomy	1,577	1,178	2,785	393	3,432	592	462	227	_	350
Rhinoplasty and/or Septal Surgery	606	119	827	211	711	546	98	80	_	100
Operations on Nasal Sinuses	1,256	724	1,108	166	1,813	1,194	155	100	_	236
Total	4,939 ¹	3,011	6,441	1,371	10,910	7,973	1,273	802	_	1,004

¹BC Ministry of Health web site reports 17,265 patients waiting for ophthalmology, 15,291 waiting for cataract surgery, and 616 waiting for cornea transplant at March 31, 2003.

²Alberta Health and Wellness web site reports 4,732 patients waiting for cataract surgery in non-hospital surgical facilities at December 31, 2002.

¹BC Ministry of Health web site reports 4,755 patients waiting for ear, nose, and throat surgery at March 31, 2003.

Table 13e: General Surgery (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Hernia/Hydrocele	2,237	1,061	1,408	408	2,389	2,980	182	419	68	222
Cholecystectomy	1,357	881	1,477	322	2,198	2,906	205	354	56	311
Colonoscopy	1,503	1,174	858	436	7,462	8,565	230	406	305	128
Intestinal Operations	1,209	1,091	408	334	3,442	2,326	212	340	44	115
Haemorrhoidectomy	652	427	727	176	947	1,278	39	99	12	41
Breast Biopsy	45	43	29	18	196	146	25	41	2	8
Mastectomy	294	216	105	102	1,122	679	51	62	12	42
Bronchus and Lung	169	60	_	51	267	128	12	15	1	5
Aneurysm Surgery	38	15	_	8	64	101	2	1	0	1
Varicose Veins	522	321	334	99	641	573	22	31	7	37
Total	8,027 ¹	5,290	5,346	1,955	18,728	19,682	980	1,767	509	912

Table 13f: Neurosurgery (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Peripheral Nerve	118	96	16	_	512	176	43	0	_	8
Disc Surgery/ Laminectomy	360	144	101	_	795	824	196	18	_	8
Elective Cranial Bone Flap	351	263	102	_	1,202	630	98	47	_	11
Aneurysm Surgery	5	4	1	_	10	7	4	0	_	0
Carotid endarterectomy	57	16	5		55	58	14	3		0
Total	892 ¹	524	225	_	2,574	1,696	354	68	_	27

¹BC Ministry of Health web site reports 12,675 patients waiting for general surgery at March 31, 2003.

¹BC Ministry of Health web site reports 1,246 patients waiting for neurosurgery at March 31, 2003.

Table 13g: Orthopaedic Surgery (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Meniscectomy/Arthroscopy	2,806	2,213	2,618	510	6,692	3,536	572	1,343	163	143
Removal of Pins	792	485	899	134	1,646	1,153	138	312	9	77
Arthroplasty (Hip, Knee, Ankle, Shoulder)	10,500 ¹	4,458 ²	5,479	1,696	13,638	5,541	626	2,745	144	223
Arthroplasty (Interphalangeal, Metatarsophalangeal)	222	144	182	53	345	216	23	77	8	14
Hallux Valgus/Hammer Toe	566	75	556	0	1,524	473	135	253	18	45
Digit Neuroma	722	518	825	369	2,224	1,485	114	238	29	63
Rotator Cuff Repair	290	325	190	75	901	603	56	133	7	37
Ostectomy (All Types)	1,337	942	3,177	448	4,398	2,575	310	673	51	75
Routine Spinal Instability	923	319	407	96	810	486	183	218	0	18
Total	18,158 ¹	9,479	14,332	3,380	32,176	16,067	2,157	5,991	429	696

Table 13h: Cardiovascular Surgery (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Coronary Artery Bypass	354	1,330 ²	77	69	345 ³	356	20	95	_	24
Valves & Septa of the Heart	133	213 ²	12	11	125 ³	39	4	27	_	2
Aneurysm Surgery	3	6	0	1	2	1	0	1	_	0
Carotid Endarterectomy	11	6	3	_	17	9	_	_	_	1
Pacemaker Operations	201	104	60		235	38	28	100		
Total	703 ¹	1,660	152	81	723	443	52	223		27

¹BC Ministry of Health web site reports 15,938 patients waiting for orthopaedic surgery, 2,487 waiting for hip replacement surgery, and 4,200 waiting for knee replacement surgery at March 31, 2003.

²Alberta Health and Wellness web site reports 3,026 patients waiting for hip or knee replacement surgery at December 31, 2002.

¹BC Ministry of Health web site reports 651 patients waiting for cardiac surgery and 1,288 patients waiting for vascular surgery at March 31, 2003.

²Alberta Health and Wellness web site reports 579 persons waiting for open heart procedures at December 31, 2002.

³Cardiac Care Network of Ontario reports 1,298 patients waiting for open-heart surgery at March 31, 2003.

Table 13i: Urology (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Non-radical Prostatectomy	833	152	1,205	54	969	1,075	106	106	25	161
Radical Prostatectomy	80	53	11	13	229	92	10	16	3	16
Transurethral Resection—Bladder	508	143	54	30	806	436	80	62	6	45
Radical Cystectomy	12	5	1	2	36	12	1	3	0	2
Cystoscopy	2,997	2,070	946	232	7,799	15,428	1,691	1,138	49	480
Hernia/Hydrocele	944	355	1,120	167	1,435	1,501	293	120	23	51
Bladder Fulguration	351	249	97	97	1,276	542	93	73	7	55
Ureteral Reimplantation for Reflux	24	13	83	2	40	14	5	28	0	8
Total	5,749 ¹	3,040	3,518	598	12,590	19,100	2,279	1,546	114	818

Table 13j: Internal Medicine (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Colonoscopy	2,377	3,063	957	564	6,297	6,032	173	608	333	210
Angiography /Angioplasty	2,258	774	778	136	2,796	1,506	342	381	15	297
Bronchoscopy	144	139	33	38	510	1,003	59	63	11	70
Gastroscopy	214	258	253	94	990	705	52	44	25	70
Total	4,993	4,233	2,022	831	10,594	9,246	626	1,096	384	647

¹BC Ministry of Health website reports 5,942 patients waiting for urological surgery at March 31, 2003.

Table 13k: Radiation Oncology (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Radiotherapy	24^{1}	163	28	46	295	302	46	32	_	8

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.

Table 13I: Medical Oncology (2003)—Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL
Chemotherapy	79	288	_	_	1,213	610	79	123	4	108

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.

Table 14: Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist (2003)—Procedures per 100,000 Population

		•	•			-		•		
	ВС	АВ	SK	MB	ON	QC	NB	NS	PE	NL
Plastic Surgery	107	54	151	128	46	76	104	243	_	186
Gynaecology	126	138	326	224	92	101	202	96	91	117
Ophthalmology	215	111	910	149	339	1,108	246	261	256	87
Otolaryngology	119	96	638	119	90	107	168	85	_	189
General Surgery	193	169	529	170	155	264	130	187	363	172
Neurosurgery	21	17	22	_	21	23	47	7	_	5
Orthopaedic Surgery	437	303	1,419	294	266	215	285	634	306	131
Cardiovascular Surgery	17	53	15	7	6	6	7	24	_	5
Urology	138	97	348	52	104	256	301	164	81	154
Internal Medicine	120	135	200	72	87	124	83	116	274	122
Radiation Oncology	1	5	3	4	2	4	6	3	_	2
Medical Oncology	2	9	_	_	10	8	10	13	3	20

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.

¹BC Ministry of Health web site reports 307 patients waiting for radiation oncology at March 31, 2003.

Table 15: Comparison of Estimated Number of Procedures for which Patients are Waiting after Appointment with Specialist, by Selected Specialties, 2001-02 and 2003

	1-1-		!)))								
	Briti	British Columbia	bia	•	Alberta		Sas	Saskatchewan	5	Ž	Manitoba	_		Ontario	
	2003	2001-02	% chg	2003	2001-02	% chg	2003	2001-02	% chg	2003	2001-02	% chg	2003	2001-02	% chg
Plastic Surgery	4,423	4,575	-3%	1,678	1,791	%9-	1,523	2,082	-27%	1,471	3,909	-62%	5,513	5,473	1%
Gynaecology	5,220	6,390	-18%	4,312	3,983	%8	3,296	7,552	-26%	2,572	2,645	-3%	11,198	10,735	4%
Ophthalmology	8,907	15,105	-41%	3,478	3,394	2%	9,194	12,192	-25%	1,718	2,550	-33%	40,989	42,849	4%
Otolaryngology	4,939	5,045	-2%	3,011	2,549	18%	6,441	4,953	30%	1,371	1,739	-21%	10,910	10,893	%0
General Surgery	8,027	8,182	-2%	5,290	5,241	1%	5,346	6,199	-14%	1,955	2,254	-13%	18,728	18,173	3%
Neurosurgery	892	647	38%	524	642	-18%	225	185	22%		161		2,574	2,222	16%
Orthopaedic Surgery	18,158	17,114	%9	9,479	9,673	-5%	14,332	19,011	-25%	3,380	3,903	-13%	32,176	29,569	%6
Cardiovascular Surgery	703	710	-1%	1,660	1,054	27%	152	122	24%	81	49	%29	723	857	-16%
Urology	5,749	4,687	23%	3,040	2,422	76%	3,518	2,002	%92	298	450	33%	12,590	12,930	-3%
Internal Medicine	4,993	5,520	-10%	4,233	3,581	18%	2,022	1,019	%86	831	949	-12%	10,594	11,470	%8-
Radiation Oncology	24	41	-43%	163	28	181%	28	09	-53%	46	47	-5%	295	348	-15%
Medical Oncology	79	98	%8-	288	400	-28%	l	I		I	260	I	1,213	803	34%
Residual	47,683	52,281	%6-	30,925	28,949	2%	31,553	37,923	-17%	12,803	16,605	-23%	110,251	109,442	1%
Total	109,796	109,796 120,384	%6-	68,082	63,738	7%	77,628	93,301	-17%	26,828	35,520	-24%	257,755	255,863	1%

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

Table 15: Comparison of Estimated Number of Procedures for which Patients are Waiting after Appointment

		Quebec		New	New Brunswick	vick	ž	Nova Scotia	٥	Prince	Prince Edward Island	Island	Nev	Newfoundland	pu
	2003	2001-02	% chg	2003	2001-02	% chg	2003	2001-02	% chg	2003	2001-02	% chg	2003	2001-02	% chg
Plastic Surgery	5,655	3,363	%89	786	550	43%	2,299	1,746	32%		178	I	886	456	117%
Gynaecology	7,565	7,068	2%	1,525	1,439	%9	206	1,080	-16%	128	248	-49%	623	1,024	-39%
Ophthalmology	82,691	68,965	20%	1,864	1,661	12%	2,467	2,809	-12%	360	276	30%	464	377	23%
Otolaryngology	7,973	4,666	71%	1,273	1,792	-29%	802	920	-13%	I		l	1,004	314	220%
General Surgery	19,682	15,113	30%	086	1,055	-7%	1,767	1,621	%6	209	287	77%	912	934	-2%
Neurosurgery	1,696	1,633	4%	354	316	12%	89	165	-29%	1			27	78	-65%
Orthopaedic Surgery	16,067	15,949	1%	2,157	2,409	-10%	5,991	5,330	12%	429	216	%66	969	1,488	-53%
Cardiovascular Surgery	443	512	-13%	52	169	%69-	223	64	247%				27	103	-74%
Urology	19,100	12,704	20%	2,279	1,974	15%	1,546	1,298	19%	114			818	537	52%
Internal Medicine	9,246	8,887	4%	929	984	-36%	1,096	791	39%	384	120	220%	647	588	10%
Radiation Oncology	302	256	18%	46	74	-38%	32	28	15%				∞	6	-5%
Medical Oncology	610	348	75%	79	79	%0	123	37	236%	4	4	%0	108		
Residual	97,748	79,681	23%	8,913	9,262	-4%	14,923	13,646	%6	1,393	1,102	76%	4,892	4,720	4%
Total	268,780	219,144	23%	20,935	21,763	-4%	32,245	29,535	%6	3,320	2,431	37%	11,215	10,628	%9

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

incomplete.

Table 16a: Acute Inpat Procedure	ВС	AB	SK	ON	NB	NS	PE	NL
Arthroplasty (Hip, Knee, Ankle,				0.11	145	113		
Shoulder)	8,512	6,717	2,919	25,695	1,787	2,374	246	691
Arthroplasty (Interphalangeal/ Metatarsophalangeal)	341	197	45	666	48	84	2	33
Hallux Valgus/Hammer Toe	634	613	302	3,085	289	106	19	102
Meniscectomy/Arthroscopy	722	667	674	2,552	379	171	23	49
Ostectomy	1,927	2,114	836	7,218	567	478	18	230
Removal of Pins	1,009	854	280	2,861	226	195	16	108
Rotator Cuff Repair	215	221	96	569	57	58	4	41
Routine Spinal Instability	1,071	1,096	378	3,510	318	222	0	92
Bladder Fulguration	1,481	1,327	1,294	7,683	509	564	126	195
Cystoscopy	3,464	1,865	1,447	13,009	2,044	2,014	294	892
Non-radical Prostatectomy	3,966	1,435	1,154	8,557	667	889	155	279
Radical Cystectomy	135	101	25	314	22	40	2	19
Radical Prostatectomy	760	487	127	1,988	107	188	33	103
Transurethral Resection—Bladder	1,325	742	504	4,891	450	326	69	248
Ureteral Reimplantation for Reflux	70	174	47	298	15	179	2	17
Cataract Removal	514	229	118	809	133	252	14	33
Cornea Transplant	25	3	1	8	0	2	1	1
Cornea—Pterygium	1	1	0	3	0	1	0	0
Iris, Ciliary Body, Sclera, Anterior Chamber	392	347	178	621	20	360	13	76
Lacrimal Duct Surgery	90	105	126	294	34	233	0	40
Operations on Eyelids	423	263	142	868	92	167	7	41
Retina, Choroid, Vitreous	5,058	4,472	1,024	6,466	23	2,509	4	259
Strabismus Surgery	58	28	77	110	7	12	1	1
Myringotomy	543	359	231	1,784	577	239	38	178
Operations on Nasal Sinuses	1,475	1,162	235	2,190	274	351	57	221
Thyroid, Parathyroid, and Other Endocrine Glands	1,375	1,251	418	5,236	320	373	24	218
Tonsillectomy and/or Adenoidectomy	2,295	1,551	1,212	4,120	1,593	862	230	1,016
Tympanoplasty	237	140	34	609	86	105	7	46
Radiotherapy	723	738	274	2,562	484	324	50	67
Chemotherapy	2,676	1,889	567	9,152	1,625	898	85	322
Breast Biopsy	195	141	89	560	90	62	3	20
Bronchus and Lung	839	758	289	3,230	215	373	19	139

Note: Information is not available in this format for Quebec procedures, and is incomplete for Manitoba procedures. Source: Canadian Institute for Health Information, "Number of Procedures by CCP Code, by Province, 2000-01."

Table 16a: Acute Inpatient Procedures, 2000-01 (Part II)

Procedure	ВС	AB	SK	ON	NB	NS	PE	NL
Cholecystectomy	6,577	4,855	2,619	13,151	2,284	2,062	431	1,500
Haemorrhoidectomy	836	558	312	1,560	218	220	9	117
Intestinal Operations	8,234	6,026	2,443	25,407	2,094	2,615	302	1,477
Mastectomy	2,831	2,007	808	6,071	518	646	127	430
Varicose Veins	292	377	104	625	87	53	19	91
Disk Surgery/Laminectomy	1,245	1,141	523	5,113	299	259	0	270
Elective Cranial Bone Flap	2,416	2,290	881	7,701	423	615	0	392
Blepharoplasty	7	9	16	86	6	46	0	0
Mammoplasty	1,580	990	324	3,905	628	159	53	72
Scar Revision	1,251	1,552	418	3,430	271	386	43	217
Coronary Artery Bypass	4,089	3,496	1,340	17,936	1,026	1,655	0	1,247
Pacemaker Operations	4,155	2,418	1,185	8,739	950	1,209	58	219
Valves & Septa of the Heart	1,531	1,159	300	4,314	203	467	0	112
Angiography/Angioplasty	8,895	5,186	2,255	20,418	1,857	1,938	59	1,128
Bronchoscopy	980	1,476	211	4,835	249	477	25	436
Gastroscopy	634	875	340	3,312	402	232	73	279
Dilation and Curettage	716	553	160	1,549	123	43	28	93
Hysterectomy	6,528	4,811	1,968	18,743	2,211	2,013	308	1,343
Hysteroscopic Procedures	190	206	82	532	47	8	7	47
Laparoscopic Procedures	2,023	924	844	4,258	377	173	35	115
Tubal Ligation	1,406	1,294	737	3,733	511	453	72	260
Tuboplasty	108	95	24	138	5	6	2	9
Vaginal Repair	1,052	1,012	393	3,970	381	553	27	225
Rhinoplasty and/or Septal Surgery	837	302	187	1,090	290	506	52	294
Hernia/Hydrocele	5,677	4,691	2,582	22,794	1,598	1,926	271	915
Carotid Endarterectomy	851	497	152	1,690	177	129	44	89
Hand Surgery/Digit Neuroma	319	191	119	871	88	70	4	85
Neurolysis/Peripheral Nerve	517	603	183	4,409	235	137	11	116
Colonoscopy	2,730	2,475	1,267	10,169	991	605	187	742
Aneurysm Surgery	328	241	60	1,037	57	48	4	33
Residual	103,183	84,173	30,879	308,565	24,263	32,319	2,661	15,572
Total	214,569	168,530	68,859	631,669	55,927	67,039	6,474	33,702

Note: Information is not available in this format for Quebec procedures, and is incomplete for Manitoba procedures. Source: Canadian Institute for Health Information, "Number of Procedures by CCP Code, by Province, 2000-01."

Procedure	ВС	SK	ON	NB	NS	PE	NL
Arthroplasty (Hip, Knee, Ankle, Shoulder)	1,988	1,038	3,854	246	371	7	33
Arthroplasty (Interphalangeal/Metatarsophalangeal)	382	65	828	51	116	15	42
Hallux Valgus/Hammer Toe	1,001	233	4,838	297	552	53	95
Meniscectomy/Arthroscopy	11,436	4,561	32,244	4,199	2,323	747	693
Ostectomy	2,708	816	9,721	898	922	173	95
Removal of Pins	2,421	619	5,697	456	364	43	226
Rotator Cuff Repair	729	316	3,335	187	230	13	120
Routine Spinal Instability	1	0	0	0	0	0	2
Bladder Fulguration	1,563	393	8,901	462	522	29	212
Cystoscopy	22,507	10,851	122,180	5,951	9,824	715	3,650
Non-radical Prostatectomy	591	6	600	19	26	0	5
Transurethral Resection—Bladder	3,079	434	5,582	303	602	14	85
Ureteral Reimplantation for Reflux	0	0	1	0	1	0	0
Cataract Removal	30,082	10,722	89,554	5,356	7,862	629	2,301
Cornea Transplant	7	0	196	0	0	0	1
Cornea—Pterygium	336	133	1,276	42	53	12	88
Iris, Ciliary Body, Sclera, Anterior Chamber	719	572	10,829	57	528	15	74
Lacrimal Duct Surgery	898	324	4,620	200	68	12	57
Operations on Eyelids	2,039	1,101	7,955	497	422	48	246
Retina, Choroid, Vitreous	4,935	1,090	21,064	76	574	6	96
Strabismus Surgery	1,130	147	3,436	184	661	5	62
Myringotomy	5,003	3,617	30,700	2,605	3,345	349	1,337
Operations on Nasal Sinuses	3,191	341	9,592	428	389	69	462
Thyroid, Parathyroid, and Other Endocrine Glands	53	52	553	7	55	1	8
Tonsillectomy and/or Adenoidectomy	2,831	236	18,187	496	615	56	121
Tympanoplasty	898	386	1,440	311	241	1	222
Radiotherapy	256	64	164	1	0	0	2
Chemotherapy	78	309	14,210	13	18	8	647
Breast Biopsy	983	521	2,835	569	1,005	71	200
Bronchus and Lung	41	3	246	1	11	0	3
Cholecystectomy	2,241	226	15,427	379	1,007	20	115
Haamanihaidaatamu	1.001	0.40	0.000	100	166	4.00	

Note: Information is not available in this format for Alberta and Quebec procedures, and is incomplete for Manitoba procedures. Source: Canadian Institute for Health Information, "Number of Procedures by CCP Code, by Province, 2000-01."

948

8,290

183

466

102

419

1,991

Haemorrhoidectomy

Table 16b: Same Day Procedures, 2000-01 (Part II)

Procedure	ВС	SK	ON	NB	NS	PE	NL
Intestinal Operations	7,483	2,545	34,255	661	1,799	353	922
Mastectomy	4,809	1,186	13,372	812	972	239	673
Varicose Veins	1,406	319	4,926	100	270	31	30
Disk Surgery/Laminectomy	4	0	55	0	3	0	1
Elective Cranial Bone Flap	20	7	111	1	2	1	1
Blepharoplasty	229	177	1,933	46	15	7	54
Mammoplasty	888	130	3,074	87	130	44	9
Scar Revision	632	139	3,212	224	807	32	56
Pacemaker Operations	1,072	368	3,460	24	529	2	117
Valves & Septa of the Heart	11	2	12	0	0	0	0
Angiography/Angioplasty	5,784	2,241	8,664	683	537	72	274
Bronchoscopy	887	77	4,013	189	343	45	296
Gastroscopy	1,218	1,539	9,557	136	336	142	631
Dilation and Curettage	8,207	2,063	22,530	1,140	1,727	238	2,040
Hysterectomy	4	4	131	2	12	0	1
Hysteroscopic Procedures	4,600	1,661	12,970	620	949	98	1,055
Laparoscopic Procedures	3,337	1,213	12,745	714	929	151	617
Tubal Ligation	4,543	818	14,391	1,345	1,249	155	707
Tuboplasty	100	9	114	10	10	5	14
Vaginal Repair	863	273	2,558	123	318	31	84
Rhinoplasty and/or Septal Surgery	3,569	712	7,066	600	487	6	113
Hernia/Hydrocele	8,107	1,229	20,695	1,598	1,985	283	630
Carotid Endarterectomy	0	0	2	0	0	0	0
Hand Surgery/Digit Neuroma	3,980	1,030	12,627	674	1,019	111	454
Neurolysis/Peripheral Nerve	1,362	386	6,585	478	559	173	378
Colonoscopy	22,945	10,305	114,038	3,259	7,304	1,257	4,212
Aneurysm Surgery	1	0	19	0	0	0	0
Residual	129,861	41,248	494,619	27,346	45,103	3,872	17,308
Total	322,040	109,805	1,246,089	65,346	100,567	10,561	42,396

Note: Information is not available in this format for Alberta and Quebec procedures, and is incomplete for Manitoba procedures. Source: Canadian Institute for Health Information, "Number of Procedures by CCP Code, by Province, 2000-01."

Appendix 1: Psychiatry Waiting List Survey (1st Edition)

Over the last few years, there has been an increasing amount of anecdotal evidence presented in the media about the long waiting times that psychiatry patients experience. Further, many patients and reporters have also come to The Fraser Institute searching for information about waiting times for this medical specialty. Such data is typically not available from local or regional governments and, where it is available, is not comparable across jurisdictions. We have responded to this absence by adding Psychiatry to this year's edition of *Waiting Your Turn*.

As this is the first year that this data is being presented, readers should interpret the survey results below with extreme caution. Though the authors are confident about the actual survey responses, the survey methodology and the methodology by which the final median scores for psychiatry are calculated are still being developed and will likely change significantly over the next few years. For this same reason, this year's Psychiatry survey results have been placed in an appendix to *Waiting Your Turn* rather than included in the main body of the text.

Despite these caveats, the authors feel it is important to present the numbers from the first annual survey of psychiatrists. Information on the performance of the health care system is rare in Canada, and patients with mental health concerns want the same access to information that is available for those with physical ailments in both *Waiting Your Turn* and through some provinces' provincial health ministries.

Methodology

The psychiatry waiting list survey was conducted between May and July 2003. Surveys were sent out to all of the specialists in the psychiatry category of the Canadian Medical Association's membership rolls who have allowed their names to be provided by Cornerstone List Fulfillment. Due to the large population of psychiatrists in Ontario, a 50 percent sample was taken in the cities of Ottawa (216 specialists, 108 surveyed), Hamilton (89, 45 surveyed), Toronto (628, 314 surveyed), London (97, 49 surveyed), and North York (85, 43 surveyed). As is the practice with the traditional 12 specialties surveyed in Waiting Your Turn, psychiatrists in Quebec and New Brunswick who indicate that their language of preference is French are sent French-language surveys. The response rate to the psychiatry survey was 21 percent overall, ranging from 45 percent in Saskatchewan to 18 percent in Ontario (table A1).

The treatments identified in the following tables represent a cross-section of common procedures carried out by psychiatrists. The list of treatments was developed in consultation with the Canadian Psychiatric Association, who also assisted in making adjustments to the standard survey form to reflect differences between psychiatric practices and practices in the other specialties presented in this document.

The major findings from the psychiatry survey can be found in tables A2 through A6. Table A2 reports the median time a patient waits to see a specialist after

Table A1: Summary	of	Responses
-------------------	----	-----------

· · · · · · · · · · · · · · · · · · ·												
	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	Canada	
Mailed	522	255	38	128	1,120	927	35	104	5	35	3,169	
Number of Responses	104	81	17	25	204	185	10	29	1	7	663	
Response Rates	20%	32%	45%	20%	18%	20%	29%	28%	20%	20%	21%	

Table A2: Psychiatry (2003)—Median Patient Wait to See a Specialist after Referral from a GP

	ВС	АВ	SK	MB	ON	QC	NB	NS	PE	NL	Canada
Urgent	2.0	2.0	2.0	2.0	2.0	2.0	3.0	1.0	1.0	2.0	2.0
Elective	9.0	9.0	12.0	6.0	8.0	9.0	20.0	7.0	8.0	10.0	8.5

referral from a general practitioner. Waiting times are presented for both urgent and elective referrals. Table A3 summarizes the second stage of waiting, that between the decision by a specialist that treatment is required and the treatment being received.

Unlike other specialities in Waiting Your Turn in which the waiting times are weighted by the total number of such procedures that have been done by all physicians, the overall median for psychiatry is presented as an unweighted measure (see the section on Methodology for a clear description of The Fraser Institute's weighting procedures). All of the median measures that make up the final specialty median are given equal weight. This alteration to the standard methodology results from a lack of data counting the number of patients treated by psychologists, separated by treatment. We hope, in the coming years, to develop a weighting system for psychiatric treatments to allow a weighted average for this specialty to be calculated. In the current estimates, national medians are developed through a weighting system that bases the weight of each provincial median on the number of specialists in that province.

Table A4 summarizes clinically "reasonable" waiting times for psychiatric treatments. The times presented here are the medians of physicians' estimates of clinically reasonable lengths of time to wait for treatment after an appointment with a specialist. The methodology for calculating an overall median is described above. Table A5 compares the actual and clinically reasonable wait times after an appointment with a specialist.

Finally, table A6 provides waiting times for diagnostic technologies used by psychiatrists. Though two of these technologies (CT and MRI) are also used by specialists in the other 12 specialties, the wait times for psychiatrists' access to these services has been presented separately in order to allow for any fundamental differences that may exist in the wait times between physical and mental health services.⁸

Survey results: estimated waiting in Canada

The total waiting time for psychiatric treatment is composed of two segments: waiting after being referred by a general practitioner before consultation with a psychiatrist, and subsequently, waiting to receive treatment after the first consultation with a psychiatrist. The 2003 psychiatry survey provides details of waiting for each segment.

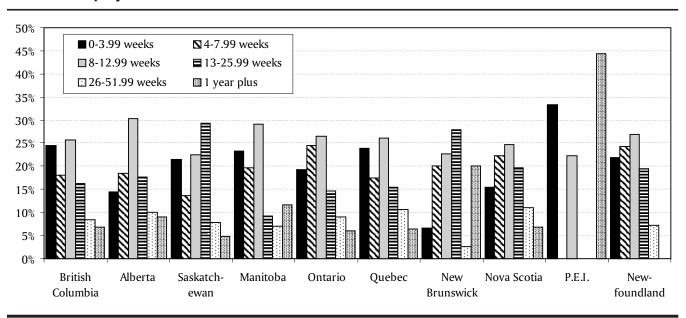
Table A2 indicates the number of weeks that patients wait for initial appointments with psychiatrists after referral from their general practitioners or from other specialists. The waiting time to see a psychiatrist on an urgent basis was 2.0 weeks, both for Canada as a whole and in most provinces. The waiting time for referrals on an elective basis for Canada as a whole was 8.5 weeks. The longest waiting times for elective referrals was in New Brunswick (20.0 weeks), followed by Saskatchewan (12.0 weeks), and Newfoundland (10.0 weeks). The shortest wait for an elective referral was in Manitoba (6.0 weeks), followed by

For comparison, the overall Canadian median waiting time for CT Scans was 5.5 weeks in the traditional 12 specialties and 5.4 weeks in the psychiatry survey, with a mean absolute difference (the average of absolute differences between the two measures) of 1.8 for 9 provinces (PEI was not included in this measure due to the small sample). The overall Canadian median waiting time for magnetic resonance imaging in the psychiatry survey was 14.4 weeks, compared to 12.7 weeks for the other 12 specialities. The mean absolute difference in this case, again for 9 provinces, was 3.0 weeks.

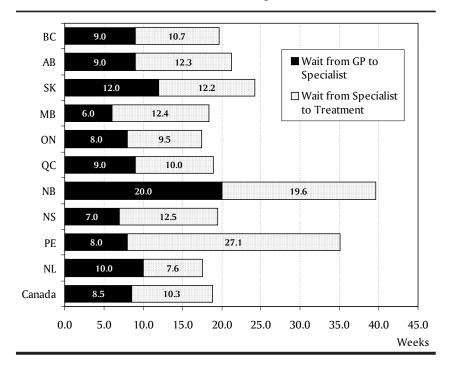
Table A3: Psychiatry (2003)—Median Patient Wait for Treatment after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CDA
Initiate a course of brief psychotherapy	8.0	8.0	12.0	6.0	8.0	8.0	11.0	10.0	3.0	7.0	8.0
Initiate a course of long-term psychotherapy	12.0	12.0	16.0	8.0	9.0	12.0	20.0	10.0	52.0	14.0	10.6
Initiate a course of pharmacotherapy	4.0	4.0	7.0	4.0	4.0	3.5	6.5	5.0	8.0	4.0	4.0
Initiate a course of couple/marital therapy	10.0	8.0	11.0	6.0	8.0	8.5	20.0	9.0	30.0	6.0	8.5
Initiate cognitive behaviour therapy	8.0	9.5	14.0	9.0	9.0	10.0	15.0	7.0	_	8.0	9.2
Access a day program	8.0	8.0	11.0	5.0	6.0	4.0	6.5	17.0	1.0	4.0	6.2
Access an eating disorders program	12.0	15.0	14.0	8.0	12.0	20.0	8.0	14.0	12.0	16.0	14.1
Access a housing program	24.0	24.0	8.0	10.0	24.0	10.0	11.0	18.0	54.0	5.0	19.4
Access an evening program	7.5	12.0	11.0	8.0	8.0	10.0	83.0	8.0	54.0	4.0	9.5
Access a sleep disorders program	20.0	27.0	26.0	52.0	6.0	15.5	25.0	33.0	54.0	_	14.6
Access assertive community treatment or similar program	4.0	7.5	4.0	20.0	10.0	8.0	10.0	6.0	3.0	_	8.6
Unweighted Median	10.7	12.3	12.2	12.4	9.5	10.0	19.6	12.5	27.1	7.6	10.3

Graph A1: Frequency Distribution of Survey Waiting Times (Specialist to Treatment) by Province 2003



Graph A2: Median Wait by Province in 2003: Weeks Waited from Referral by GP to Treatment



Nova Scotia (7.0 weeks), and Prince Edward Island and Ontario (8.0 weeks).

Table A3 summarizes the waiting time for certain psychiatric treatments after an appointment with a specialist. The longest waiting times for this second segment of the total waiting time were found in Prince Edward Island (27.1 weeks), New Brunswick (19.6 weeks), and Nova Scotia (12.5 weeks), while the shortest waits were found in Newfoundland (7.6 weeks), Ontario (9.5 weeks), and Quebec (10.0 weeks). Among the treatments, patients waited longest to access a housing program (19.4 weeks) or a sleep disorders program (14.6 weeks), while the wait times were shortest for pharmacotherapy (4.0 weeks), and accessing a day program (6.2 weeks).

Table A4: Psychiatry (2003)—Median Reasonable Patient Wait for Treatment after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CDA
Initiate a course of brief psychotherapy	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.8	2.0	3.0	4.0
Initiate a course of long-term psychotherapy	8.0	4.0	8.0	6.0	5.8	6.0	4.5	8.0	8.0	5.0	6.1
Initiate a course of pharmacotherapy	2.0	2.0	1.5	2.0	2.0	1.5	2.0	2.0	1.0	2.0	1.9
Initiate a course of couple/marital therapy	4.0	4.0	5.0	4.0	4.0	4.0	2.5	6.0	8.0	3.0	4.0
Initiate cognitive behaviour therapy	4.0	4.0	6.0	4.0	4.0	4.0	4.0	6.0	_	3.0	4.1
Access a day program	3.3	3.0	4.0	2.0	3.0	2.0	3.0	5.0	1.0	3.5	2.8
Access an eating disorders program	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0	3.5	4.0
Access a housing program	4.0	4.0	2.5	4.0	4.0	4.0	4.0	5.0	1.0	3.0	4.0
Access an evening program	4.0	4.0	6.0	4.0	4.0	3.0	2.5	5.5	4.0	3.0	3.8
Access a sleep disorders program	5.0	4.5	8.0	6.0	4.0	4.0	3.5	6.0	8.0	4.0	4.3
Access assertive community treatment or similar program	2.0	2.0	2.0	5.5	4.0	3.0	2.0	4.0	1.0	3.0	3.3
Unweighted Median	4.0	3.6	4.6	4.1	3.9	3.6	3.2	5.1	3.8	3.3	3.8

Table A5: Psychiatry (2003)—Difference Between Actual and Reasonable Patient Waits for Treatment after Appointment with Specialist

	ВС	AB	SK	MB	ON	QC	NB	NS	PE	NL	CDA
Initiate a course of brief psychotherapy	100%	100%	200%	50%	100%	100%	214%	111%	50%	133%	101%
Initiate a course of long-term psychotherapy	50%	200%	100%	33%	57%	100%	344%	25%	550%	180%	75%
Initiate a course of pharmacotherapy	100%	100%	367%	100%	100%	133%	225%	150%	700%	100%	112%
Initiate a course of couple/marital therapy	150%	100%	120%	50%	100%	113%	700%	50%	275%	100%	110%
Initiate cognitive behaviour therapy	100%	138%	133%	125%	125%	150%	275%	17%	_	167%	126%
Access a day program	146%	167%	175%	150%	100%	100%	117%	240%	0%	14%	121%
Access an eating disorders program	200%	275%	250%	100%	200%	400%	129%	250%	200%	357%	254%
Access a housing program	500%	500%	220%	150%	500%	150%	175%	260%	5,300%	67%	386%
Access an evening program	88%	200%	83%	100%	100%	233%	3,220%	45%	1,250%	33%	150%
Access a sleep disorders program	300%	500%	225%	767%	50%	288%	614%	450%	575%	_	237%
Access assertive community treatment or similar program	100%	275%	100%	264%	150%	167%	400%	50%	200%	_	159%
Unweighted Median	166%	242%	163%	199%	143%	177%	517%	144%	613%	131%	166%

Note: Percentage changes are calculated from exact unweighted medians.

Graph A1 presents a frequency distribution of the survey responses by province and by region. In all provinces the wait for the majority of treatments is less than 13 weeks. Newfoundland performs the highest proportion of treatments both within 13 weeks (73.2 percent) and within 8 weeks (46.3%). Waits of 26 weeks or more are least frequent in Newfoundland (7.3%) and most frequent in Prince Edward Island (44.4%).

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 these 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 treatment is begun. For Canada as a whole, the total waiting time in 2003 was 18.8 weeks for Psychiatry (Graph A2). The shortest waiting times were recorded in Ontario (17.5 weeks), Newfoundland (17.6 weeks), and Manitoba (18.4 weeks). The longest total waits were found in New Brunswick (39.6 weeks), Prince Edward Island (35.1 weeks), and Saskatchewan (24.2 weeks).

Finally, physicians responding to the survey are asked to provide a clinically reasonable waiting time for the various treatments. Specialists generally indicate a period of time substantially shorter than the median number of weeks patients were actually waiting for treatment (see tables A4 and A5). Table A4 summarizes the reasonable waiting times for psychiatric treatments and is based on the same methodology used to create table A3. Of the actual median waiting times for treatments (in table A3), 99 percent are greater than the clinically reasonable median waiting times (in table A4). For the specialty of Psychiatry, Newfoundland and Ontario came closest to meeting the standard of "reasonable," in that their actual specialist-to-treatment waits only exceeded the corresponding "reasonable" values by 131 and 143 percent, respectively, smaller gaps than in the other provinces. The differences between the median reasonable and median actual wait for psychiatric treatments are summarized in table A5.

Finally, patients would also prefer earlier treatment, according to this year's survey data. On average, only

Table A6: Waiting for Technology 2003—Weeks Waited to Receive Selected Diagnostic Tests

Province	Computed Tomography	Magnetic Resonance Imaging	Electro- encephalogram		
British Columbia	6.0	13.0	3.0		
Alberta	4.0	14.0	4.0		
Saskatchewan	9.5	14.0	5.0		
Manitoba	6.0	8.0	2.8		
Ontario	5.0	16.0	4.0		
Quebec	6.0	12.0	4.0		
New Brunswick	5.0	11.0	2.8		
Nova Scotia	3.0	22.0	3.3		
P.E.I.	30.0	45.0	6.0		
Newfoundland	12.0	22.0	4.3		
Canada	5.4	14.4	3.8		

4.4 percent of patients are on waiting lists because they have requested a delay or postponement of their treatment. Conversely, the proportion of patients who would have begun their treatment within a few days if it were available is 79.3 percent (Fraser Institute, national hospital waiting list survey, 2003).

A note on technology

The wait to see a specialist and the wait to receive treatment are not the only waits that patients face. This year's Psychiatry survey also examined the wait that mental health patients have for various diagnostic technologies across Canada. Table A6 displays the median number of weeks patients must wait for access to a CT or MRI scanner, or an electroencephalogram (EEG). The median wait for a CT scan across Canada was 5.4 weeks, ranging from a high of 30.0 weeks (Prince Edward Island), to a low of 3.0 weeks (Nova Scotia). The median wait for an MRI across Canada was 14.4 weeks. Again, Prince Edward Island patients

waited the longest (45.0 weeks), while patients in Manitoba waited the least amount of time (8.0 weeks). Finally, the median wait for an EEG across Canada was 3.8 weeks. Residents of New Brunswick and Manitoba faced the shortest waits for an EEG (2.8 weeks), while residents of Prince Edward Island waited longest (6.0 weeks).

Conclusion

The information documented here suggests that patients seeking mental health treatment are likely to be disappointed with their access to it. With waiting times nearing 5 months from a general practitioner to treatment, and with wait times from a meeting with a specialist to treatment that are nearly 3 times longer than what specialists feel is appropriate, it is clear that a great many patients in need of psychiatric attention are facing the effects of rationing in our health care system and experiencing a deterioration of their condition before they get the care they need.

Appendix 2: The Fraser Institute National Waiting List Survey

General Surgery

Please circle the province in which your office is located:

	AB	ВС	MB	NB	NL	NS	NT	NU	ON	PE	QC	SK	YT
1.	From toda	ay, how lo		eeks) wou	ıld a nev	v patient	have to v	wait for a	routine o	office co	nsultation	n with yo	u?
_				6					211				
2.	Do you re times of the		number (of patien	ts waitin	ig to see	you in ar	ıy mannei	r? (i.e. Do	you acc	ept refer	rals only	at certain
	☐ Yes	□ No											
3.	Over the p	ast 12 mo	onths, wha	at percen	tage of t	he surgic	al proced	ures you ¡	performe	d were d	one on a	day surge	ery basis?
		%											
4.	From toda diagnostic and proce	procedui				-						_	-
Su	rgery or	Procedu	re			Num	ber of	Weeks t	o Wait	Rea	sonable Weeks	Numb	
He	ernia repair (a	ll types)/hy	drocele										
Ch	olecystectom	ny											
Со	lonoscopy (d	iagnostic)											
l .	cision, excision erations on in		nosis of in	testine an	d other								
На	emorrhoidec	tomy/othe	r anal surg	ery									
Bre	east biopsy												
Ma	astectomy/seg	gmental res	section										
Op	perations on l	oronchus a	nd lung										
Inc	cidentally disc	covered an	d unruptu	red aneur	ysms								
Va	ricose vein su	ırgery											

5.	Has the length of your waiting	lists changed sii	nce last year at	this time?								
	☐ Increased ☐ Decreased	sed 🗖 Rem	nained the Samo	•								
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 nurse Availability of other tecl Availability of beds Availability of O/R time Change in patient load Availability of ancillary i Other	nnical staff	· consultations	i.e. MRI, CT scans)								
7.	What percentage of your patien delay or postponement?	ts currently wait	ing for surgery	are on a waiting list prima	arily because they requested a							
	%											
8.	What percentage of your patien the week if an opening arose in		ing for surgery	do you think would agree	e to having their surgery within							
	%	%										
9. 10.	To the best of your knowledge, listed by other physicians for the second of the second	ne same procedi	ure?									
Do	you use this diagnostic	Yes	No	Infrequently	Number of weeks patients wait							
СТ	Scan				-							
MR	I											
Ult	rasound											
11.	Approximately what percentage services:	e of your patien	ts inquired in t	ne past 12 months about	t the availability of medical							
	In another province?%	Outside of C	anada?	%								
12.	Approximately what percentage of your patients received non-emergency medical treatment in the past 12 months:											
	In another province? % Outside of Canada? %											

Thank you very much for your cooperation.

Appendix 3: 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).

References

- Aaron, Henry J., and William B. Schwartz (1984). *The Painful Prescription: Rationing Hospital Care*. Washington, DC: The Brookings Institution.
- Agbayewa, O. (1995). "Suicides among Elderly Linked to Societal Factors." *Medical Post* 7 (October 7).
- Alberta Ministry of Health and Wellness (2003). *Performance Indicators*. Digital documents available at www.health.gov.ab.ca/reading/publications.html.
- Alter, David A., Antoni S.H. Basinski, and C. David Naylor (1998). "A Survey of Provider Experiences and Perceptions of Preferential Access to Cardiovascular Care in Ontario, Canada." *Annals of Internal Medicine* 129: 567–72.
- Alter, David A., C. David Naylor, Peter Austin, and Jack V. Tu (1999). "Effects of Socioeconomic status on access to invasive cardiac procedures and on mortality after acute myocardial infarction." *New England Journal of Medicine* 341: 1359-67.
- Amoko, D.H.A., R.E. Modrow, and J.K.H. Tan (1992). "Surgical Waiting Lists II: Current Practices & Future Directions. Using the Province of British Columbia as a Test Study." Healthcare Management FORUM 5.
- Beanlands, Rob S.B., Paul J. Hendry, Roy G. Masters, Robert A. deKemp, Kirsten Woodend, and Terrence D. Ruddy (1998). "Delay in Revascularization is Associated With Increased Mortality Rate in Patients With Severe Left Ventricular Dysfunction and Viable Myocardium on Fluorine 18-Fluorodeoxyglucose Positron Emission Tomography Imaging." *Circulation* 19 Supplement II: 51-6.
- Bell, Chaim M., Matthew Crystal, Allan S. Detsky, and Donald A. Redelmeier (1998). "Shopping Around for Hospital Services." *Journal of the American Medical Association* 279: 1015-7.
- Bellan, Lorne, and Mathen Mathen (2001). "The Manitoba Cataract Waiting List Program." *Canadian Medical Association Journal* 164(8): 1177-80.

- Binney, E., and C. Estes (1988). "The Retreat of the State and Its Transfer of Responsibility." *International Journal of Health Sciences* 18: 83–96.
- Blomqvist, Ake (1979). *The Health Care Business*. Vancouver, BC: The Fraser Institute.
- Borcherding, Thomas E., Werner W. Pommerehne, and Friedrich Schneider (1982). "Comparing the Efficiency of Private and Public Production: The Evidence from Five Countries." *Zeitschrift für Nationalokonomie* 2: 125-56.
- British Columbia Ministry of Health (2001). "Surgical wait list data, December 31, 2000." Digital document available at: www.hlth.gov.bc.ca/ waitlist/index.html
- British Columbia Ministry of Health Services (2003). Surgical Wait Times. Web site. Available at: www.healthservices.gov.bc.ca/waitlist/index.html.
- Canadian Hospital Association (1994). "CHA Comments on The Fraser Institute's Latest Waiting Lists Survey." Leadership in Health Services (November/December).
- Canadian Institute for Health Information (1999). *Facts and Figures*. Digital document: www.cihi.ca/facts/fac.html
- 2000). "Table 8: Separations and Days, Rates per 100,000 Population and Average Days Per Separation by the Canadian Procedure List and Sex, Canada and Provinces/Territories, 1997/98." Produced for The Fraser Institute.
- _____ (2001). "Table 8: Separations and Days, Rates per 100,000 Population and Average Days Per Separation by the Canadian Procedure List and Sex, Canada and Provinces/Territories, 1998/99." Produced for The Fraser Institute.
- (2001). Discharge abstract database. Acute inpatient and same day surgery data by the Canadian Classification of Diagnostic, Therapeutic and Surgical Procedures, Canada and Provinces, 1999/2000.

- Cardiac Care Network of Ontario (April 30, 2001). *Hospital Wait Times*. Digital document available at: www.ccn.on.ca/ access/waittimes.html
- Carroll, R.J., et al. (1995). "International Comparison of Waiting Times for Selected Cardiovascular Procedures." *Journal of the American College of Cardiology* (March 1): 557-63.
- College of Family Physicians of Canada (1996). "Advocating on Behalf of Patients Survey." *News Release* (April 24).
- Collins-Nakai, R.L., H.A. Huysmans, and H.E. Skully. "Task Force 5: Access to Cardiovascular Care: An International Comparison." *Journal of the American College of Cardiology* 19: 1477-85.
- Coyte, P.C., et al. (1994). "Waiting Times for Knee Replacement Surgery in the United States and Ontario." *New England Journal of Medicine* (October 20).
- Cullis, John G. and Philip R. Jones (1986). "Rationing by Waiting Lists: An Implication." *American Economic Review* 76, 1 (March): 250-6.
- DeCoster, Carolyn, KC Carrière, Sandra Peterson, Randy Walld, and Leonard MacWilliam (1998). "Surgical Waiting Times in Manitoba." Winnipeg: Manitoba Centre for Health Policy and Evaluation.
- DeCoster, Carolyn, Keumhee Chough Carriere, Sandra Peterson, Randy Walld, and Leonard MacWilliam (1999). "Waiting Times for Surgical Procedures." *Medical Care* 37: 187-205.
- DeCoster, Carolyn, Leonard MacWilliam, and Randy Walld (2000). *Waiting Times for Surgery: 1997/98 and 1998/99 Update*. Winnipeg: Manitoba Centre for Health Policy and Evaluation.
- Donnelly, Lauren (2002). Personal Communication. Executive Director, Acute and Emergency Services, Saskatchewan Health (July 4).
- Dunlop, Sheryl, Peter C. Coyte, and Warren McIsaac (2000). "Socio-economic status and the utilisation of physicians' services: results from the Canadian National Population Health Survey." *Social Science and Medicine*: 1-11.
- Esmail, Nadeem (2003). "Spend *and* Wait?" *Fraser Forum* (March). Vancouver: The Fraser Institute, pp. 25-26.
- Esmail, Nadeem, and Michael Walker (2002a). *How Good is Canadian Health Care?* Fraser Forum Special Issue (August). Vancouver: The Fraser Institute.

- _____ (2002b). *Waiting Your Turn: Hospital Waiting Lists in Canada* (12th edition). Vancouver: The Fraser Institute.
- Frech, H.E., III (1996). *Competition and Monopoly in Medical Care*. Washington, DC: AEI Press.
- *Globe and Mail* (1989). "Cancer Patients Face Wait for Treatment" (September 13): A1.
- Globerman, Steven, with Lorna Hoye (1990). "Waiting Your Turn: Hospital Waiting Lists in Canada." *Fraser Forum* (May).
- Globerman, Steven (1991). "A Policy Analysis of Hospital Waiting Lists (1991)." *Journal of Policy Analysis and Management* 10: 247-62.
- Glynn, Peter (2003). Personal Communication. Chair, Saskatchewan Surgical Care Network (July 25).
- _____ (2002). Personal Communication. Chair, Saskatchewan Surgical Care Network (July 16).
- Harriman, David, William McArthur, and Martin Zelder (1999). *The Availability of Medical Technology in Canada: An International Comparative Study*. Public Policy Sources No. 28. Vancouver, BC: The Fraser Institute.
- Health Canada (1996). "National Health Expenditures in Canada, 1975–1994."
- Jackson, N.W., M.P. Doogue, and J.M. Elliott (1999). "Priority Points and Cardiac Events While Waiting for Coronary Artery Bypass Surgery." *Heart* 81: 367-73.
- Kelly, David S. (1999). Personal Communication, British Columbia Ministry of Health and Ministry Responsible for Seniors (July 30).
- Liu, Yan and Graham E. Trope (1999). "Waiting Times for Surgical Procedures in Ophthalmology at a Major Teaching Hospital." *Ontario Medical Review* (January): 30-3.
- Mackillop, William J., H. Fu, C.F. Quirt, P. Dixon, M. Brundage, and Y. Zhou (1994). "Waiting for Radiotherapy in Ontario." *International Journal of Radiation Oncology*, Biology, Physics 30: 221-8.
- Mackillop, W.J., J. Zhang-Salomons, P.A. Groome, L. Paszat, and E. Holowaty (1997). "Socioeconomic Status and Cancer Survival in Ontario." *Journal of Clinical Oncology* 15: 1680-9.

- Mayo, Nancy E., Susan C. Scott, Ningyan Shen, James Hanley, Mark S. Goldberg, and Neil MacDonald (2001). "Waiting Time for Breast Cancer Surgery in Quebec." Canadian Medical Association Journal 164(8): 1133-8.
- McArthur, William, Cynthia Ramsay, and Michael Walker, eds. (1996). Healthy Incentives: Canadian Health Reform in an International Context. Vancouver, BC: The Fraser Institute.
- McDonald, Paul, Sam Shortt, Claudia Sanmartin, Morris Barer, Steven Lewis, and Sam Sheps (1998). Waiting Lists and Waiting Times for Health Care in Canada: More Management!! More Money?? Summary Report. National Health Research and Development Program.
- McKinnon, A. (1995). "We've Got the Best Cared For Seniors in the Country." Canadian Association on Gerontology Meeting (Vancouver, BC, October 28).
- Megginson, William L., and Jeffery M. Netter. (2001). "From State to Market: A Survey of Empirical Studies on Privatization." Journal of Economic Literature. Vol. 39. No. 2: 321-389.
- Miyake, Joanna and Michael Walker (1993). Waiting Your Turn: Hospital Waiting Lists in Canada (3rd edition). Vancouver: The Fraser Institute.
- Morgan, C.D., K. Sykora, and C.D. Naylor (1998). "Analysis of Death While Waiting for Cardiac Surgery Among 29,293 Consecutive Patients in Ontario, Canada." Heart 74: 345-49.
- Mueller, Dennis C. (1989). Public Choice II. Cambridge: Cambridge University Press.
- Naylor, C.D., et al. (1991). "Assigning Priority to Patients Requiring Coronary Revascularization: Consensus Principles from a Panel of Cardiologists and Cardiac Surgeons." Canadian Journal of Cardiological Medicine 7: 207–13.
- Naylor, C.D., K. Sykora, S.B. Jaglal, S. Jefferson, et al. (1995). "Waiting for Coronary Artery Bypass Surgery: Population-Based Study of 8517 Consecutive Patients in Ontario, Canada." Lancet 346: 1605-9.
- Ombudsman Ontario (2001). Ombudsman's Conclusions and Recommendations Pursuant to section 21 of the Ombudsman Act: Investigation into the Ministry of Health and Long-Term Care's Funding for Breast and Prostate Cancer Patients who must Travel for Radiation Treatment. Toronto: Ombudsman Ontario.

- Organisation for Economic Co-operation and Development [OECD] (2003). OECD Health Data 2003. 2nd ed. Electronic Version.
- Priest, Lisa (2000). "Northern Ontario Cancer Patients Face 'Discrimination': Many Complain that they Must Pay Hotel, Gas and Other Expenses that are Covered for Patients from Southern Ontario Who Travel for Treatment." Globe and Mail (June 17): A3.
- Propper, Carol (1990). "Contingent Valuation of Time Spent on NHS Waiting Lists." The Economic Journal 100: 193-9.
- Ramsay, C. (1998). "How to Ruin a Good Idea—Lessons from the British Columbia Ministry of Health." Fraser Forum (February).
- (1997). "Outside the City Walls: Not so Equal Acess to Health Care in Canada." Fraser Forum (January): 19-23.
- Ramsay, Cynthia and Michael Walker (1994). Waiting Your Turn: Hospital Waiting Lists in Canada (4th edition). Vancouver: The Fraser Institute.
- (1995). Waiting Your Turn: Hospital Waiting Lists in Canada (5th edition). Vancouver: The Fraser Institute.
- (1996). Waiting Your Turn: Hospital Waiting Lists in Canada (6th edition). Vancouver: The Fraser Institute.
- (1997). Waiting Your Turn: Hospital Waiting Lists in Canada (7th edition). Vancouver: The Fraser Institute.
- (1998). Waiting Your Turn: Hospital Waiting Lists in Canada (8th edition). Vancouver: The Fraser Institute.
- Rosanio, Salvatore, Monica Tocchi, David Cutler, Barry F. Uretsky, George A. Stouffer, Christopher R. deFilippi, Edward J. MacInerney, Susan R. Runge, Joann Aaron, Javier Otero, Sandeep Garg, and, Marschall S. Runge (1999). "Queuing for Coronary Angiography During Severe Supply-Demand Mismatch in a US Public Hospital: Analysis of a Waiting List Registry." Journal of the American Medical Association 282: 145-52.
- Saskatchewan Health (2003). Saskatoon and Regina health district waiting list data. Special data extract for The Fraser Institute.
- Saskatchewan Surgical Care Network (SSCN) (2003). Wait list information. Digital documents available at www.sasksurgery.ca.

- Statistics Canada (1986). Canadian Classification of Diagnostic,
 Therapeutic, and Surgical Procedures. Ottawa: Statistics
 Canada.

 _____ (1991). General Social Survey-Health. Public Use
 Microdata File.

 _____ (1994). "Hospital Morbidity and Surgical Procedures
 1993/94." Health Report No. 82-216-XPB.

 _____ (1994/95). National Population Health Survey.

 _____ (2002). Access to Health Care Services in Canada, 2001.
 Catalogue No. 82-575-XIE. Ottawa: Statistics Canada.
- Taube, Michael (1999). "Entrepreneurs Creating Health Care Choices." *Fraser Forum* (February).
- Thomas, Clayton L. (1997). *Taber's Cyclopedic Medical Dictionary*, 18th edition.
- United States, General Accounting Office, Human Resources Division (1991). *Canadian Health Insurance: Lessons for the US.* 91–90 (June). Report to the Chairman of the Committee of Government Operations, House of Representatives.
- Walker, Michael (1997). "Low Income Cancer Patients have Shorter Life Expectancy in Canada." *Fraser Forum* (July): 24-6.

- Walker, Michael, Joanna Miyake, Steven Globerman and Lorna Hoye (1992). *Waiting Your Turn: Hospital Waiting Lists in Canada* (2nd edition). Vancouver: The Fraser Institute.
- Walker, Michael and Martin Zelder (1999). Waiting Your Turn: Hospital Waiting Lists in Canada (9th edition). Vancouver: The Fraser Institute.
- Walker, R. (1996). "Waiting Lists Are an Accepted Part of Canadian Health System." *Medical Post* (February 20).
- Williams, J. Ivan, and C. David Naylor (1993). "Hip and Knee Replacement in Ontario." *Patterns of Healthcare in Ontario* #5 (October 18). Institute for Clinical Evaluative Studies in Ontario.
- Zelder, Martin (2000a). *How Private Hospital Competition Can Improve Canadian Health Care*. Public Policy Sources no. 35. Vancouver: The Fraser Institute.
- _____ (2000b). *Spend More, Wait Less? The Myth of Underfunded Medicare in Canada.* Fraser Forum Special Issue (August). Vancouver: The Fraser Institute.
- Zelder, Martin with Greg Wilson (2000). Waiting Your Turn: Hospital Waiting Lists in Canada (10th edition). Vancouver: The Fraser Institute.