

# **National Psychiatry Waiting List Survey, 2008**

*an excerpt from*

***Waiting Your Turn: Hospital Waiting Lists in Canada,  
2008 Report***

***by Nadeem Esmail and Maureen Hazel with Michael A. Walker***

*The full report, **Waiting Your Turn: Hospital Waiting Lists in Canada, 2008 Report**, including a complete list of references and a full explanation of the methodology, is available at the Fraser Institute's web site: [www.fraserinstitute.org](http://www.fraserinstitute.org).*

## Appendix B: Psychiatry waiting list survey, 2008 report

With each passing week, it becomes more obvious that the deterioration in Canada's public health care program is not confined to just the five priority areas now being focused on by governments across the country, or to the twelve medical specialties examined in the main text of *Waiting Your Turn*. In particular, 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 media representatives have come to the Fraser Institute in search of more complete information on waiting times for these services. Such data is typically not available from local or regional governments for this specialty, and where it is available, it is not comparable across jurisdictions. We responded to this absence in 2003 by adding psychiatry to the annual measurement of waiting lists reported in *Waiting Your Turn*, thus creating the first national, comprehensive, and comparable measurement of waiting times for mental health services available in Canada.

Information on the performance of the health care system is rare in Canada, and patients with mental health concerns desire the same access to information that is available for those with physical ailments in both *Waiting Your Turn* and through some provinces' health ministries.

### Methodology

The psychiatry waiting list survey was conducted between January 8 and April 18, 2008. 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 the Cornerstone Group of Companies. 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 were sent

**Table B1: Summary of Responses**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Mailed	552	290	51	135	1,664	976	36	103	10	39	3,856
Number of Responses	86	52	9	8	240	112	8	18	1	9	543
Response Rates	16%	18%	18%	6%	14%	11%	22%	17%	10%	23%	14%

**Table B2: Psychiatry—Median Patient Wait to See a Specialist after Referral from a GP, 2008**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Urgent	2.0	2.0	2.0	1.5	2.0	1.5	1.5	2.0	1.0	1.8	1.8
Elective	8.0	12.0	18.0	4.5	7.0	8.0	12.0	6.5	6.0	12.0	7.9

**Table B3: Psychiatry—Median Patient Wait for Treatment after Appointment with Specialist, 2008**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Initiate a course of brief psychotherapy	5.3	10.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0	22.0	7.8
Initiate a course of long-term psychotherapy	7.0	15.0	11.0	12.0	12.0	12.0	13.0	8.0	170.0	52.0	12.2
Initiate a course of pharmacotherapy	4.0	4.3	3.3	4.0	4.0	4.0	4.0	8.0	6.0	7.0	4.2
Initiate a course of couple/marital therapy	6.0	6.0	8.0	6.5	8.0	8.0	12.0	11.0	—	25.0	7.8
Initiate cognitive behaviour therapy	6.0	8.0	8.0	8.0	10.0	12.0	11.5	8.0	—	36.0	9.9
Access a day program	5.0	12.0	8.0	10.0	6.0	4.0	12.0	27.0	—	8.0	6.6
Access an eating disorders program	16.0	18.0	8.0	11.0	12.0	15.0	5.0	5.0	—	9.5	13.4
Access a housing program	18.0	52.0	8.0	15.0	24.0	8.0	14.0	52.0	50.0	12.0	21.3
Access an evening program	6.0	12.0	6.0	23.0	8.0	12.0	—	6.0	—	13.5	9.5
Access a sleep disorders program	12.0	52.0	56.0	25.0	6.0	13.0	19.0	72.0	50.0	37.0	15.7
Access assertive community treatment or similar program	5.5	6.0	3.5	5.0	12.0	5.0	11.0	6.5	4.0	12.0	8.3
Unweighted Median	8.3	17.8	11.6	11.3	10.0	9.2	11.0	19.2	48.0	21.3	10.7

French-language surveys. The response rate to the psychiatry survey was 14 percent overall in 2008, slightly lower than in 2007 (17%), and ranged from 23 percent in Newfoundland and Labrador to 6 percent in Manitoba (table B1).

The treatments identified in the following tables represent a cross-section of common treatments 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 B2 through B7. Table B2 reports the median time a patient waits to see a specialist after referral

**Table B4i: Comparison of Median Weeks Waited to Receive Psychiatric Treatment after Appointment with Specialist, by Province, 2008 and 2007**

British Columbia			Alberta			Saskatchewan			Manitoba			Ontario		
2008	2007	% chg	2008	2007	% chg	2008	2007	% chg	2008	2007	% chg	2008	2007	% chg
8.3	10.2	-19%	17.8	15.7	13%	11.6	13.0	-10%	11.3	14.5	-22%	10.0	9.7	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.

**Table B4ii: Comparison of Median Weeks Waited to Receive Psychiatric Treatment after Appointment with Specialist, by Province, 2008 and 2007**

Quebec			New Brunswick			Nova Scotia			Prince Edward Island			Newfoundland & Labrador		
2008	2007	% chg	2008	2007	% chg	2008	2007	% chg	2008	2007	% chg	2008	2007	% chg
9.2	8.9	3%	11.0	14.3	-23%	19.2	15.2	27%	48.0	30.7	56%	21.3	20.2	5%

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.

from a general practitioner. Waiting times are presented for both urgent and elective referrals. Table B3 summarizes the second stage of waiting, that between the decision by a specialist that treatment is required and the treatment being received. Table B4 provides the percentage change in median waits to receive treatment after the first appointment with a specialist between the years 2007 and 2008.

Unlike other specialties 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* in the main document text 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 psychiatrists, 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 contacted in that province.

Table B5 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 B6 com-

**Table B5: Psychiatry—Median Reasonable Patient Wait for Treatment after Appointment with Specialist, 2008**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Initiate a course of brief psychotherapy	4.0	4.0	4.5	4.0	4.0	4.0	4.0	5.0	2.0	4.0	4.0
Initiate a course of long-term psychotherapy	4.0	6.0	10.0	8.0	6.0	7.5	4.0	6.0	12.0	8.0	6.2
Initiate a course of pharmacotherapy	2.0	2.0	2.0	2.0	2.0	2.0	3.5	3.0	1.0	2.0	2.0
Initiate a course of couple/marital therapy	4.0	4.0	4.5	3.0	4.0	4.0	4.0	6.0	—	4.0	4.0
Initiate cognitive behaviour therapy	4.0	4.0	8.0	4.0	4.0	4.0	4.0	5.0	—	4.0	4.1
Access a day program	3.0	4.0	4.0	6.0	3.0	2.0	4.0	6.0	2.0	4.0	3.0
Access an eating disorders program	4.0	4.0	6.0	5.0	4.0	4.0	2.0	3.0	2.0	3.8	4.0
Access a housing program	4.0	4.0	3.0	3.5	4.0	4.0	3.0	4.0	10.0	3.0	4.0
Access an evening program	4.0	4.0	4.0	4.8	4.0	4.0	4.0	4.0	—	4.0	4.0
Access a sleep disorders program	4.0	4.0	8.0	3.3	4.0	6.0	4.0	9.0	5.0	4.0	4.7
Access assertive community treatment or similar program	2.0	2.0	2.0	10.0	4.0	3.0	4.0	4.0	4.0	3.0	3.5
Unweighted Median	3.5	3.8	5.1	4.9	3.9	4.0	3.7	5.0	4.8	4.0	4.0

compares the actual and clinically reasonable wait times after an appointment with a specialist.

Finally, table B7 provides waiting times for diagnostic technologies used by psychiatrists. Though two of these technologies (CT and magnetic resonance imaging (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<sup>4</sup>

4 For comparison, the overall Canadian median waiting time for CT scans was 4.9 weeks in the traditional 12 specialties and 5.0 weeks in the psychiatry survey, with a mean absolute difference (the average of absolute differences between the two measures in each province) of 2.2 weeks for 10 provinces. The overall Canadian median waiting time for MRIs in the psychiatry survey was 10.9 weeks, compared to 9.7 weeks for the other 12 specialties. The mean absolute difference in this case, again for 10 provinces, was 7.3 weeks.

**Table B6: Psychiatry—Difference Between Actual and Reasonable Patient Waits for Treatment after Appointment with Specialist, 2008**

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	CAN
Initiate a course of brief psychotherapy	31%	150%	78%	25%	100%	100%	100%	60%	300%	450%	93%
Initiate a course of long-term psychotherapy	75%	150%	10%	50%	100%	60%	225%	33%	1,317%	550%	96%
Initiate a course of pharmacotherapy	100%	113%	63%	100%	100%	100%	14%	167%	500%	250%	104%
Initiate a course of couple/marital therapy	50%	50%	78%	117%	100%	100%	200%	83%	—	525%	94%
Initiate cognitive behaviour therapy	50%	100%	0%	100%	150%	200%	188%	60%	—	800%	144%
Access a day program	67%	200%	100%	67%	100%	100%	200%	350%	—	100%	117%
Access an eating disorders program	300%	350%	33%	120%	200%	275%	150%	67%	—	153%	234%
Access a housing program	350%	1,200%	167%	329%	500%	100%	367%	1,200%	400%	300%	436%
Access an evening program	50%	200%	50%	384%	100%	200%	—	50%	—	238%	135%
Access a sleep disorders program	200%	1,200%	600%	669%	50%	117%	375%	700%	900%	825%	237%
Access assertive community treatment or similar program	175%	200%	75%	-50%	200%	67%	175%	63%	0%	300%	139%
Weighted median	133%	365%	128%	133%	156%	127%	197%	285%	911%	435%	169%

### 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 2008 psychiatry survey provides details of waiting for each segment.

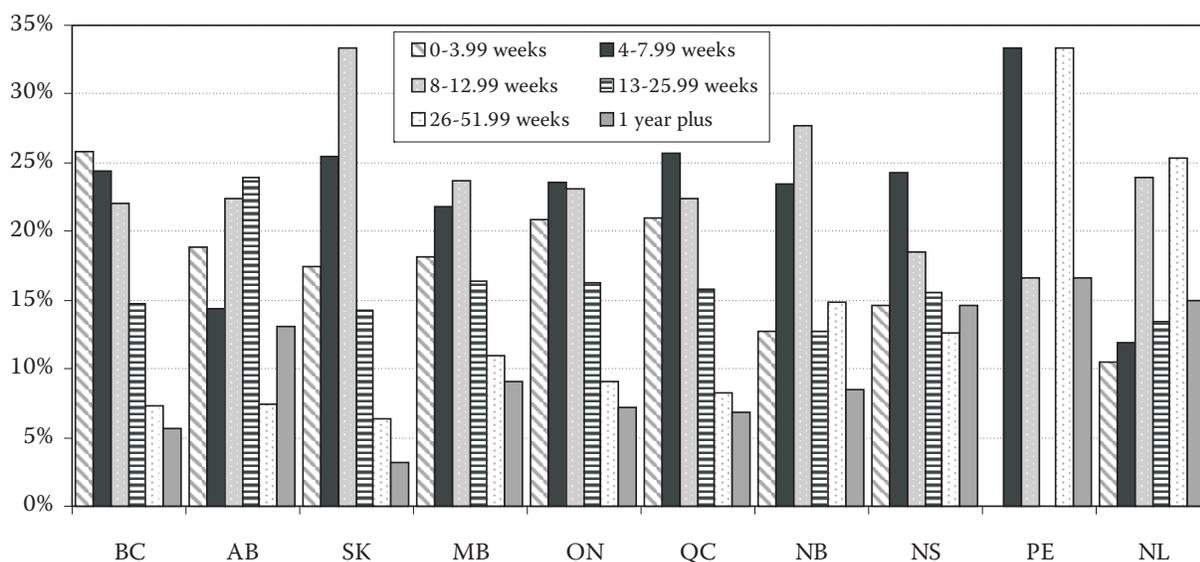
Table B2 indicates the number of weeks that patients wait for initial appointments with psychiatrists after referral from their general practitioners or from other specialists. The waiting time to see a psychiatrist on an urgent basis was 1.8 weeks in Canada, ranging from 1.0 week in Prince Edward Island to 2.0 weeks in British Columbia, Alberta, Saskatchewan, Ontario, and Nova Scotia. The waiting time for referrals on an elective basis for Canada as a whole was 7.9 weeks. The longest waiting time for elective referrals was in Saskatchewan (18.0 weeks), followed by New Brunswick, Alberta, and Newfoundland & Labrador (12.0 weeks). The shortest wait for an elective referral was in Manitoba (4.5 weeks), followed by Prince Edward Island (6.0 weeks), and Nova Scotia (6.5 weeks).

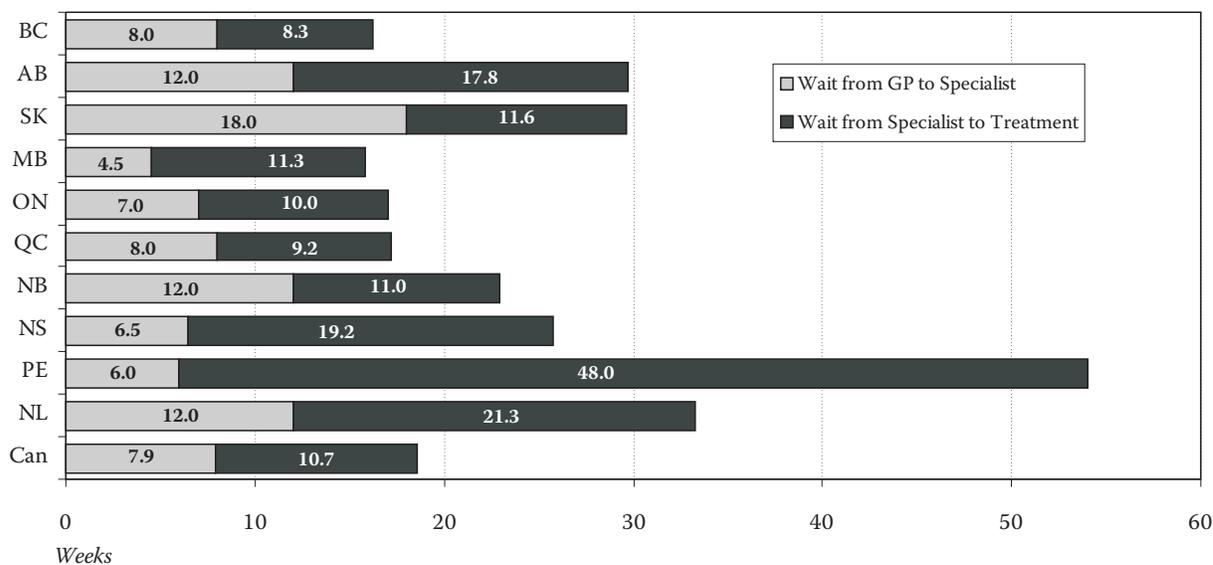
Table B3 summarizes the waiting time for certain psychiatric treatments after an appointment with a specialist. The longest waiting times for this second segment of the total waiting time were found in Prince Edward Island (48.0 weeks), Newfoundland & Labrador (21.3 weeks), and Nova Scotia (19.2 weeks), while the shortest waits were found in British Columbia (8.3 weeks), Quebec (9.2 weeks), and Ontario (10.0 weeks). Among the treatments, patients waited longest to enter a housing program (21.3 weeks) or a sleep disorders program (15.7 weeks), while the wait times were shortest for pharmacotherapy (4.2 weeks), and admission to a day program (6.6 weeks).

Graph B1 presents a frequency distribution of the survey responses by province and by region. In all provinces except PEI and Newfoundland & Labrador, the wait for the majority of treatments is less than 13 weeks. Saskatchewan performs the highest proportion of treatments within 13 weeks (76.2 percent) while British Columbia performs the highest proportion of treatments within 8 weeks (50.2%). Waits of 26 weeks or more are least frequent in Saskatchewan (9.5%) and most frequent in Prince Edward Island (50.0%).

Table B4 compares the 2007 and 2008 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 decreases in British Columbia (19%), Saskatchewan (10%), Manitoba (22%), and New Brunswick (23%). At the same time, between 2007 and 2008, the median wait increased by 13 percent in Alberta, 3 percent in Ontario, 3 percent in Quebec, 27% in Nova Scotia, 56% in Prince Edward Island, and 5% in Newfoundland & Labrador.

**Graph B1: Frequency Distribution of Survey Waiting Times from Specialist to Treatment, by Province, 2008**



**Graph B2: Weeks Waited from Referral by GP to Treatment, by Province, 2008**

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 2008 for psychiatry rose slightly from 18.5 weeks in 2007 to 18.6 weeks in 2008 (Graph B2). The shortest waiting times were recorded in Manitoba (15.8 weeks), British Columbia (16.3 weeks), and Ontario (17.0 weeks). The longest total waits were found in Prince Edward Island (54.0 weeks), Newfoundland & Labrador (33.3 weeks), and Alberta (29.8 weeks).

Finally, physicians responding to the survey are asked to provide a clinically reasonable waiting time for the various treatments. Specialists generally indicated a period of time substantially shorter than the median number of weeks patients were actually waiting for treatment (see tables B5 and B6). Table B5 summarizes the reasonable waiting times for psychiatric treatments and is based on the same methodology used to create table B3. Table B6 summarizes the differences between the median reasonable and actual waiting times across Canada, and shows that in 97 percent of cases, the actual waiting time for treatment (in table B3) is greater than the clinically reasonable median waiting time (in table B5). For the psychiatry specialty, Quebec came closest to meeting the standard of “reasonable,” in that the actual overall median specialist-to-treatment wait only exceeded the

**Table B7: Waiting for Technology: Weeks Waited to Receive Selected Diagnostic Tests in 2006, 2007, and 2008**

	CT-Scan			MRI			EEG		
	2008	2007	2006	2008	2007	2006	2008	2007	2006
British Columbia	4.0	6.0	4.0	12.0	12.0	13.0	3.0	3.0	3.0
Alberta	4.0 <sup>1</sup>	4.0	4.0	10.0 <sup>2</sup>	12.0	12.0	4.0	4.0	4.0
Saskatchewan	4.5	4.0	5.5	8.5	12.5	3.0	3.0	3.0	2.0
Manitoba	4.5 <sup>3</sup>	3.5	4.0	7.0 <sup>4</sup>	6.3	16.0	4.5	1.9	4.0
Ontario	4.0 <sup>5</sup>	5.0	5.0	10.0 <sup>6</sup>	10.0	10.0	3.5	4.0	4.0
Quebec	8.0	5.5	4.0	12.0	12.0	12.0	4.0	4.0	3.5
New Brunswick	4.0	4.5	4.0	7.0	6.0	6.0	4.0	3.0	1.8
Nova Scotia	4.0 <sup>7</sup>	2.5	5.5	3.0 <sup>8</sup>	7.0	18.0	4.5	3.0	3.0
P.E.I.	4.0 <sup>9</sup>	4.3	9.1	12.0 <sup>10</sup>	13.0	11.8	4.0	2.3	—
Newfoundland	5.3	4.5	5.0	52.0	38.0	45.0	3.5	3.0	3.0
Canada	5.0	5.0	4.5	10.9	11.0	11.7	3.7	3.7	3.7

<sup>1</sup>Alberta Health and Wellness web site reports a 1.6 week median wait time for CT scans for the 90 days ending April 30, 2008. 11,131 patients were waiting for CT scans at April 30.

<sup>2</sup>Alberta Health and Wellness web site reports a 6.0 week median wait time for MRI scans for the 90 days ending April 30, 2008. 23,929 patients were waiting for MRI scans at April 30.

<sup>3</sup>Manitoba Health web site reports a 5 week average estimated maximum wait time for CT/CAT scans for April 2008.

<sup>4</sup>Manitoba Health web site reports a 9 week average estimated maximum wait time for MRI scans for April 2008.

<sup>5</sup>Ontario Ministry of Health and Long Term Care web site reports a wait time of 47 days (6.7 weeks) for a CT scan in April-June 2008.

<sup>6</sup>Ontario Ministry of Health and Long Term Care web site reports a wait time of 98 days (14 weeks) for an MRI scan in April-June 2008.

<sup>7</sup>Nova Scotia Department of Health web site reports wait times ranging from 0 to 89 days (0 to 12.7 weeks) for CT scans in April 2008.

<sup>8</sup>Nova Scotia Department of Health web site reports wait times ranging from 26 to 219 days (3.7 to 31.3 weeks) for MRI scans in April 2008.

<sup>9</sup>PEI Ministry of Health web site reports median wait times of less than 24 hours for emergency CT scans, 1 to 3 weeks for Urgency I scans, 8 to 10 weeks for Urgency II scans, and 16 to 18 weeks for Urgency III scans as of March 2008.

<sup>10</sup>PEI Ministry of Health web site reports median wait times of less than 24 hours for emergency MRI scans, 1 to 3 weeks for Urgency I scans, 2 weeks for Urgency II scans, and 26 weeks for Urgency III scans as of March 2008.

corresponding “reasonable” value by 127 percent, a smaller gap than in the other provinces.

Finally, patients would also prefer earlier treatment, according to this year’s survey data. On average, only 4.2 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 75.0 percent (Fraser Institute, national hospital waiting list survey, 2008).

### **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 psychiatry portion of the national waiting list survey also examines the wait that mental health patients experience for various diagnostic technologies across Canada. Table B7 displays the median number of weeks patients must wait for access to a CT or MRI scanner, or an electroencephalogram (EEG). Compared to 2007, the national waiting time for MRI scans fell slightly in 2008, while the waiting time for CT scans and for EEGs was unchanged. The median wait for a CT scan across Canada was 5.0 weeks, ranging from a high of 8.0 weeks (Quebec), to a low of 4.0 weeks (British Columbia, Alberta, Ontario, New Brunswick, Nova Scotia, and Prince Edward Island). The median wait for an MRI across Canada was 10.9 weeks. Patients in Newfoundland & Labrador waited the longest (52.0 weeks), while patients in Nova Scotia waited the least amount of time (3.0 weeks). Finally, the median wait for an EEG across Canada was 3.7 weeks. Residents of British Columbia and Saskatchewan faced the shortest waits for an EEG (3.0 weeks), while residents of Manitoba and Nova Scotia waited longest (4.5 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 exceeding 4 months from a general practitioner to treatment, and with wait times from a meeting with a specialist to treatment that are nearly 170 percent longer than 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.

## **Government and Government Agency Maintained Wait List Web Sites**

British Columbia Ministry of Health

<[www.healthservices.gov.bc.ca/cpa/mediasite/waittimes.html](http://www.healthservices.gov.bc.ca/cpa/mediasite/waittimes.html)> and

<<http://www.health.gov.bc.ca/waitlist/>>

Alberta Ministry of Health and Wellness

<[www.ahw.gov.ab.ca/waitlist/](http://www.ahw.gov.ab.ca/waitlist/)>

Saskatchewan Surgical Care Network

<[www.sasksurgery.ca](http://www.sasksurgery.ca)>

Manitoba Ministry of Health

<[www.gov.mb.ca/health/waitlist/index.html](http://www.gov.mb.ca/health/waitlist/index.html)>

Ontario Ministry of Health and Long-Term Care

<[www.health.gov.on.ca/transformation/wait\\_times/wait\\_mn.html](http://www.health.gov.on.ca/transformation/wait_times/wait_mn.html)>

Cardiac Care Network of Ontario

<[www.ccn.on.ca](http://www.ccn.on.ca)>

Cancer Care Ontario—Radiation Treatment

<[www.cancercare.on.ca/index\\_waittimesRadiation.asp](http://www.cancercare.on.ca/index_waittimesRadiation.asp)>

Cancer Care Ontario—Systemic Therapy (Chemotherapy)

<[www.cancercare.on.ca/index\\_waittimessystemic.asp](http://www.cancercare.on.ca/index_waittimessystemic.asp)>

Quebec Ministry of Health and Social Services

<<http://wpp01.msss.gouv.qc.ca/appl/g74web/default.asp>>

New Brunswick Department of Health

<<http://www1.gnb.ca/0217/surgicalwaittimes/index-e.aspx>>

Nova Scotia Department of Health

<[http://www.gov.ns.ca/health/waittimes/wt\\_treatment\\_service/default.htm](http://www.gov.ns.ca/health/waittimes/wt_treatment_service/default.htm)>

## Publishing information

*Fraser Institute Digital Publications* are published from time to time by the Fraser Institute to provide, in a format easily accessible online, timely and comprehensive studies of current issues in economics and public policy.

### **Distribution**

These publications are available from <http://www.fraserinstitute.org> in Portable Document Format (PDF) and can be read with Adobe Acrobat® or with Adobe Reader®, which is available free of charge from Adobe Systems Inc. To down-load Adobe Reader, go to this link: <http://www.adobe.com/products/acrobat/readstep2.html> with your Browser. We encourage you to install the most recent version.

### **Ordering publications**

For information about ordering the Fraser Institute's printed publications, please contact the publications coordinator

- ❖ e-mail: [sales@fraserinstitute.org](mailto:sales@fraserinstitute.org); fax: 604.688.8539
- ❖ telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580

### **Media**

For media enquiries, please contact our Communications Department

- ❖ telephone: 604.714.4582; e-mail: [communications@fraserinstitute.org](mailto:communications@fraserinstitute.org)

### **Disclaimer**

The authors of this publication have worked independently and opinions expressed by them are, therefore, their own, and do not necessarily reflect the opinions of the supporters, trustees, or other staff of the Fraser Institute. This publication in no way implies that the Fraser Institute, its trustees, or staff are in favor of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

### **Copyright**

Copyright © 2008 by the Fraser Institute. All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

### **ISSN**

1918-2082 (print version); 1918-2090 (online version)

### **Date of issue**

October 2008

### **Editing, design, and production**

Kristin McCahon and Lindsey Thomas Martin

### **Cover**

Design by Bill Ray. Cover images copyright © KHZ from Fotolia (“Blood Cells”), Ddan Ionut Popescu from iStockphoto (“Heart Monitor”), Robert Byron from iStockphoto (“Blood Sample”), Emrah Turudu from iStockphoto (“Test Tube”), Andrzej Tokarski from Fotolia (“X-Ray”), and Vasiliy Yakobchuk from iStockphoto (“Brain”).

Printed and bound in Canada.

## About the Fraser Institute

Our vision is a free and prosperous world where individuals benefit from greater choice, competitive markets, and personal responsibility. Our mission is to measure, study, and communicate the impact of competitive markets and government interventions on the welfare of individuals.

Founded in 1974, we are an independent research and educational organization with locations throughout North America and international partners in over 70 countries. Our work is financed by tax-deductible contributions from thousands of individuals, organizations, and foundations. In order to protect its independence, the Institute does not accept grants from government or contracts for research.

菲沙研究所的願景乃一自由而昌盛的世界，當中每個人得以從更豐富的選擇、具競爭性的市場及自我承擔責任而獲益。我們的使命在於量度、研究並使人知悉競爭市場及政府干預對個人福祉的影響。

Nous envisageons un monde libre et prospère, où chaque personne bénéficie d'un plus grand choix, de marchés concurrentiels et de responsabilités individuelles. Notre mission consiste à mesurer, à étudier et à communiquer l'effet des marchés concurrentiels et des interventions gouvernementales sur le bien-être des individus.

تتمثل رؤيتنا في وجود عالم حر ومزدهر يستفيد فيه الأفراد من القدرة على الاختيار بشكل أكبر، والأسواق التنافسية، والمسؤولية الشخصية. أما رسالتنا فهي قياس، ودراسة، وتوصيل تأثير الأسواق التنافسية والتدخلات الحكومية المتعلقة بالرفاه الاجتماعي للأفراد.

Nuestra visión es un mundo libre y próspero donde los individuos se benefician de una mayor oferta, la competencia en los mercados y la responsabilidad individual. Nuestra misión es medir, estudiar y comunicar el impacto de la competencia en los mercados y la intervención gubernamental en el bienestar de los individuos.

## Editorial Advisory Board

Prof. Armen Alchian	Prof. James Gwartney
Prof. Terry Anderson	Prof. H.G. Johnson*
Prof. Robert Barro	Prof. Ronald W. Jones
Prof. Michael Bliss	Dr. Jerry Jordan
Prof. James M. Buchanan†	Prof. David Laidler**
Prof. Jean-Pierre Centi	Prof. Richard G. Lipsey**
Prof. Thomas J. Courchene**	Prof. Ross McKittrick
Prof. John Chant	Prof. Michael Parkin
Prof. Bev Dahlby	Prof. F.G. Penance*
Prof. Erwin Diewert	Prof. Friedrich Schneider
Prof. Stephen Easton	Prof. L.B. Smith
Prof. J.C. Herbert Emery	Prof. George Stigler* †
Prof. Jack L. Granatstein	Mr. Vito Tanzi
Prof. Herbert G. Grubel	Sir Alan Walters
Prof. Friedrich A. Hayek* †	Prof. Edwin G. West*

\* deceased; \*\* withdrawn; † Nobel Laureate