In 2016, an estimated 63,459 Canadians received non-emergency medical treatment outside Canada.

Physicians in British Columbia reported the highest proportion of patients (in a province) receiving treatment abroad (2.4%). The largest number of patients estimated to have left the country for treatment was from Ontario (26,513).

Across Canada, otolaryngologists reported the highest proportion of patients (in a specialty) travelling abroad for treatment (2.1%). The largest number of patients (in a specialty) travelled abroad for general surgeries (9,454).

One explanation for patients travelling abroad to receive medical treatment may relate to the long waiting times they are forced to endure in Canada’s health care system. In 2016, patients could expect to wait 10.6 weeks for medically necessary treatment after seeing a specialist—almost 4 weeks longer than the time physicians consider to be clinically “reasonable” (7.0 weeks).
Introduction

By estimating how many Canadians receive health care outside the country each year, and the type of care they receive, we gain some insights into the state of health care and medical tourism.

Canadians who choose to seek treatment abroad do so for several reasons, many of which may relate to their inability to access quality health care in a timely fashion within Canada's borders. Some patients may be sent out of country by the public health care system due to a lack of available resources or because some procedures or equipment are not provided in their home jurisdiction. Others may choose to leave Canada because they are concerned about quality (Walker et al., 2009) and are seeking more advanced health care facilities, state-of-the-art medical technologies, or better outcomes. Others may leave in order to avoid some of the adverse medical consequences of waiting for care, such as worsening of their condition, poorer outcomes following treatment, disability, or death (Esmail, 2009; Barua et al., 2013; Day, 2013). Some may leave simply to avoid delay and to make a quicker return to normal life.

While there is no readily available data on the number of Canadians travelling abroad for health care, it is possible to produce an estimate of these numbers from data gathered through the Fraser Institute's Waiting Your Turn survey and from the Canadian Institute for Health Information (CIHI), which tallies the numbers of procedures performed in Canada.

Table 1: Average Percentage of Patients Receiving Treatment Outside of Canada, 2016

<table>
<thead>
<tr>
<th>Specialty</th>
<th>BC</th>
<th>AB</th>
<th>SK</th>
<th>MB</th>
<th>ON</th>
<th>QC</th>
<th>NB</th>
<th>NS</th>
<th>PE</th>
<th>NL</th>
<th>CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic Surgery</td>
<td>1.6%</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.2%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>–</td>
<td>–</td>
<td>1.2%</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>3.6%</td>
<td>2.9%</td>
<td>1.2%</td>
<td>0.3%</td>
<td>1.0%</td>
<td>0.7%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>0.7%</td>
<td>0.9%</td>
<td>0.5%</td>
<td>0.3%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>1.0%</td>
<td>0.9%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>7.7%</td>
<td>0.6%</td>
<td>0.0%</td>
<td>2.0%</td>
<td>1.3%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>General Surgery</td>
<td>2.9%</td>
<td>1.7%</td>
<td>0.3%</td>
<td>0.5%</td>
<td>1.1%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>5.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>0.4%</td>
<td>3.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>3.0%</td>
<td>5.0%</td>
<td>5.0%</td>
<td>0.0%</td>
<td>–</td>
<td>–</td>
<td>1.9%</td>
</tr>
<tr>
<td>Orthopaedic Surgery</td>
<td>1.3%</td>
<td>0.9%</td>
<td>2.0%</td>
<td>4.0%</td>
<td>0.8%</td>
<td>0.1%</td>
<td>1.0%</td>
<td>1.8%</td>
<td>–</td>
<td>0.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Cardiovascular Surgery</td>
<td>0.0%</td>
<td>7.5%</td>
<td>–</td>
<td>–</td>
<td>0.0%</td>
<td>1.7%</td>
<td>1.0%</td>
<td>–</td>
<td>–</td>
<td>1.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Urology</td>
<td>1.8%</td>
<td>1.6%</td>
<td>–</td>
<td>3.5%</td>
<td>2.1%</td>
<td>0.3%</td>
<td>2.3%</td>
<td>2.0%</td>
<td>–</td>
<td>0.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>1.8%</td>
<td>2.4%</td>
<td>2.5%</td>
<td>0.5%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Radiation Oncology</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.5%</td>
<td>1.6%</td>
<td>0.3%</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>0.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Medical Oncology</td>
<td>0.5%</td>
<td>3.0%</td>
<td>–</td>
<td>–</td>
<td>1.8%</td>
<td>0.1%</td>
<td>–</td>
<td>0.5%</td>
<td>0.5%</td>
<td>2.0%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Source: Barua and Ren, 2016, table 11.
Estimating the number of patients leaving Canada for health care

Each year, the Fraser Institute conducts a survey of physicians across Canada in 12 major medical specialties: plastic surgery, gynaecology, ophthalmology, general surgery, neurosurgery, orthopaedic surgery, cardiovascular surgery, urology, internal medicine, radiation oncology, and medical oncology.¹

Included in the survey is the question: “Approximately what percentage of your patients received non-emergency medical treatment in the past 12 months outside Canada?” The answers are averaged for each of the specialties studied in Waiting Your Turn for each province, producing a table that reports the average percentage of patients receiving treatment outside Canada (Barua and Ren, 2016: table 11). These percentages are shown in table 1.

In 2016, 1.4% of patients in Canada were estimated to have received non-emergency medical treatment outside Canada, compared to 1.0% in 2015 (Barua, 2015: table 11). Physicians in British Columbia reported the highest proportion of patients (in a province) that received treatment abroad (2.4%), while at the other end of the scale physicians in Prince Edward Island

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¹ See Barua and Ren (2016) for information regarding procedures constituting each specialty.
reported that only 0.1% of their patients travelled abroad for treatment in 2016.

Across Canada, otolaryngologists reported the highest proportion of patients (in a specialty) travelling abroad for treatment (2.1%), while the lowest proportion of patients (in a specialty) travelled abroad for ophthalmology (0.8%) (see table 1).

Combining these percentages (table 1) with the number of procedures performed in each province and in each medical specialty gives an estimate of the number of Canadians who likely received treatment outside the country.

### Results

Table 2 indicates that a significant number of Canadians—an estimated 63,459 people—may have received treatment outside of the country in 2016. This is a significant increase from the 45,619 who were estimated to have travelled abroad in 2015 (Barua et al., 2016) and also higher than the 52,513 who were estimated to have travelled abroad in 2014 (Barua and Ren, 2015).

Increases between 2015 and 2016 in the estimated number of patients going outside Canada for treatment were seen in seven provinces: British Columbia (10,315 to 15,372), Alberta (4,616 to 9,067), Ontario (22,352 to 26,513), Manitoba (702 to 2,052), Quebec (3,360 to 4,603), Saskatchewan (from 712 to 1,888), and Nova Scotia (1,466 to 2,438). Conversely, in that period there was a decrease in the estimated number of patients who received treatment outside Canada in Newfoundland & Labrador (from 1,151 to 669), Prince Edward Island (52 to 7), and New Brunswick (894 to 851).

Table 2 also shows the estimated number of patients receiving treatment outside of Canada by specialty. For example, we estimate that approximately 9,454 Canadians travelled abroad in 2016 to receive general surgery. On the other hand, we estimate that only about 210 Canadians went abroad to receive radiation oncology treatment in 2016.

### Limitations

There is a temporal mismatch between the timing of the Fraser Institute’s Waiting Your Turn survey and the CIHI’s annual data release. Specifically, procedure counts data used for Waiting Your Turn are typically one year behind (e.g., the 2016 edition of Waiting Your Turn used procedure counts from 2014/2015). While the calculations above use the temporally mismatched procedure counts to provide up-to-date information, previous calculations adjusting for the temporal mismatch show that it does not appear to materially affect the trend witnessed in the overall count of Canadians. However, it does, as expected, affect the actual counts of Canadians (Esmail, 2007).4

The number of patients receiving treatment outside Canada each year produced by this methodology is likely to be an underestimate. This is the result of a few factors. Most impor-

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2 Readers should note that this calculation uses the exact values, not the rounded values that appear in table 11 in Barua and Ren (2016).

3 Data are for 2014/15 from the Discharge Abstract Database (CIHI, 2016a) and the National Ambulatory Care Reporting System (CIHI, 2016b), and the Hospital Morbidity Database (HMDB) (CIHI, 2016c). For further details see Barua and Ren (2016).

4 Specifically, the Canadian counts with the temporal mismatch for 2004, 2005, and 2006 were 49,392, 44,022, and 39,282, respectively. Accounting for the mismatch, the counts for 2004 and 2005 were 47,011 and 45,776, respectively (see Esmail, 2007).
tantly, these numbers are based on specialist responses, which means that patients who leave Canada without consulting a specialist are not likely to be included in the count shown in table 2. The counts are also based on the number of procedures estimated to have been performed in Canada, which is less than the total number of patients consulted and less than the total number of Canadians who would have required treatment, including those who left Canada to seek it.

Discussion

These numbers are not insubstantial. They point to a sizeable number of Canadians whose needs and health care demands could not be satisfied within Canada’s borders.

There are a number of possible reasons why this may have been the case. Some patients may have been sent out of country by the public health care system due to a lack of available resources or the fact that some procedures or equipment are not provided in their home jurisdiction. Others may have chosen to leave Canada in response to concerns about quality (Walker et al., 2009), seeking more advanced health care facilities, more state-of-the-art medical technologies, or better outcomes.

Another explanation may relate to the long waiting times that patients are forced endure in Canada’s health care system. For example, in 2016, patients could expect to wait 10.6 weeks for medically necessary treatment after seeing a specialist. This wait time (which does not include the 9.4 week wait to see a specialist) is almost 4 weeks longer than what physicians consider to be clinically “reasonable” (7.0 weeks).

Thus, it is possible that some patients may have left the country to avoid some of the adverse medical consequences of waiting for care, such as worsening of their condition, poorer outcomes following treatment, disability, or death (Esmail, 2009; Barua et al., 2013; Day, 2013). At the same time, others may have left simply to avoid delay and to make a quicker return to normal life.

Conclusion

In 2016, an estimated 63,459 Canadians received non-emergency medical treatment outside Canada. In some cases, these patients may have needed to leave Canada due to a lack of available resources or a lack of appropriate procedures or technologies. In others, their departure may have been driven by a desire to return more quickly to their lives, to seek out superior quality care, or perhaps to save their own lives or avoid the risk of disability.

Clearly, the number of Canadians who ultimately receive their medical care in other countries is not insignificant. That a considerable number of Canadians travelled abroad and paid to escape the well-known failings of the Canadian health care system speaks volumes about how well the system is working for them.

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5 In 2016, the national median wait time between referral by a general practitioner and consultation with a specialist was 9.4 weeks (see Barua and Ren, 2016).

6 The Fraser Institute’s Waiting Your Turn survey measures wait times for elective treatment in most specialties. For more information, see Barua and Ren, 2016.
References


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As the researchers have worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.
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