What do we know about Canadian involvement in medical tourism? A scoping review

JEREMY SNYDER, VALORIE A CROOKS, RORY JOHNSTON, PAUL KINGSBURY

ABSTRACT

Background: Medical tourism, the intentional pursuit of elective medical treatments in foreign countries, is a rapidly growing global industry. Canadians are among those crossing international borders to seek out privately purchased medical care. Given Canada’s universally accessible, single-payer domestic health care system, important implications emerge from Canadians’ private engagement in medical tourism.

Methods: A scoping review was conducted of the popular, academic, and business literature to synthesize what is currently known about Canadian involvement in medical tourism. Of the 348 sources that were reviewed either partly or in full, 113 were ultimately included in the review.

Results: The review demonstrates that there is an extreme paucity of academic, empirical literature examining medical tourism in general or the Canadian context more specifically. Canadians are engaged with the medical tourism industry not just as patients but also as investors and business people. There have been a limited number of instances of Canadians having their medical tourism expenses reimbursed by the public medicare system. Wait times are by far the most heavily cited driver of Canadians’ involvement in medical tourism. However, despite its treatment as fact, there is no empirical research to support or contradict this point.

Discussion: Although medical tourism is often discussed in the Canadian context, a paucity of data on this practice complicates our understanding of its scope and impact.

Jeremy Snyder is an Assistant Professor in the Faculty of Health Sciences, Simon Fraser University, Vancouver, British Columbia, Canada. Valorie Crooks is an Associate Professor in the Faculty of
Medical tourism (MT) is a specific form of out-of-country care that is gaining in popularity among Canadians. It has garnered public attention as stories of Canadians who have successfully gone abroad for cardiac, plastic, transplant, orthopedic, dental and other surgeries have begun to permeate the Canadian media.\(^1\)\(^-\)\(^3\) Recent attention has also been given to the potential for Canada to become a destination for international medical tourists.\(^4\)\(^-\)\(^7\) MT involves patients intentionally leaving their countries of residence to access non-emergency medical interventions abroad.\(^8\) Medical tourists are not ill vacationers or expatriates getting medical care while on visits home, nor are they medical “voluntourists” (health workers who go abroad to provide care); they are not individuals who travel abroad to access complementary or alternative therapies (although this type of travel is a form of health tourism more broadly). Although some proximal countries plan cross-border care arrangements, MT operates outside of such arranged care in that medical tourists typically arrange for their care on their own (i.e., without the help of a physician).\(^9\)

By seeking care abroad, Canadian medical tourists are thought to signal their displeasure with Canadian health care. This displeasure might arise from interactions with the Canadian health care system or from perceptions they have formed from media reports or other sources. They might be displeased with such issues as overly lengthy waiting times, the unavailability of services (because they have not been approved by regulatory bodies or are inadequately funded), and high out-of-pocket costs for care not covered by Canada’s public health insurance system, commonly called medicare (e.g., cosmetic and dental surgeries).\(^10\)\(^-\)\(^12\)
Some groups have expressed interest in positioning Canada as a host for medical tourists from abroad.\textsuperscript{4-6,13} However, it is not clear whether Canada is a viable destination for medical tourists and how the provision of care for these patients would affect the Canadian health care system. We sought to synthesize what is known about Canadian involvement in medical tourism through a scoping review of the academic (i.e., peer-reviewed) literature and media literature (i.e., articles in popular-press and business magazines and newspapers). Other reviews of medical tourism are beginning to emerge, including a general review of the state of knowledge of medical tourism,\textsuperscript{14} a scoping review of the patient’s experience of medical tourism,\textsuperscript{9} and a review of medical tourism in Europe.\textsuperscript{15} Because of the relevance of medical tourism to the health of Canadians and the Canadian health care system, we believe it is important to assess the state of knowledge on this issue. To our knowledge, this is the first country-specific synthesis of the literature on medical tourism. The two primary aims of this scoping review were to (1) determine what is known about Canadian involvement in medical tourism and (2) identify gaps in our knowledge about Canadian involvement in medical tourism.

**Methods**

To guide our review, we employed the seminal framework for scoping reviews designed by Arksey and O’Malley.\textsuperscript{16} There were 5 stages to the review process: (1) establishing the question, (2) identifying relevant literature, (3) selecting the literature, (4) charting the data and (5) collating, summarizing and reporting the results. Our focus was on travel abroad for surgical procedures other than transplantation or reproductive procedures (known as “reproductive tourism”), as these interventions have implications for persons other than the medical tourist and raise distinct legal, ethical and jurisdictional concerns that require separate consideration.

**Identifying the question.** Our first step was to select and scan a limited number of medical tourism sources to establish a review question and identify relevant keywords. To do this we searched “medical tourism” in the Web of Science database and scanned the first 20 articles in the search results to identify relevant keywords. Five categories of keywords were identified (Table 1): the first category included keywords for the overall topic of the review, and the remaining 4 categories included keywords associated with the questions what, who, why and where. Countries known to us to be destination and departure points for international patients engaging in medical tourism were used to populate the “where” category.

**Identifying relevant literature.** Our second step was to develop a search strategy, in consultation with a librarian, to scope English-language academic and media sources. Our search was limited to English-language sources to reflect the language competency of the reviewers. Eighteen databases were selected (Table 2). Different search strategies were created for databases of media reports and academic articles. Terms from separate categories of keywords were searched together using Boolean operators in academic databases. This strategy allowed us to maximize the combinations of terms scoped. In some instances, combinations of keywords generated unmanageably large numbers of results that were mostly irrelevant to the
review. In these cases the search manager (VAC) narrowed the results by eliminating the term that had produced the broadest results on the basis of a recommendation from the consulting librarian. This successfully limited the number of hits and ultimately increased the relevancy of the results. For media databases, only the terms “health tourism” and “medical tourism” were searched. Specific North American media sources that are known to cover Canadian health services issues were also searched in the LexisNexis database. All retrieved records were stored in the RefWorks bibliographic management program.

**Selecting the literature.** In the third step, all of the results were screened for inclusion. This process was iterative: after all 4 of us screened titles and abstracts, but before we screened full texts, we created eligibility criteria to guide inclusion/exclusion decisions. Of note, media reports were automatically passed to full-text review, as abstracts were not available. Articles were excluded if they had (1) no focus on medical intervention (e.g., articles dealing with health tourism more broadly), (2) an exclusive focus on reproductive tourism or transplant tourism or (3) an overly general focus on cross-border care, out-of-country care or international trade in health services.

Articles that were deemed suitable for inclusion in the review at the title and abstract review stage were next read in full by 2 readers. The reference lists of these articles were hand searched to identify additional articles that were not identified through our initial search, and these were also read in full. Disagreements about eligibility were resolved by discussion and consensus. The eligibility criteria that had been applied to the titles and abstracts were applied again, with one additional criterion: if no data (i.e., information points that contributed to answering the scoping question) could be extracted from an article it was to be excluded. Articles were assigned to readers by the search manager. To keep the review process manageable, articles were reviewed in batches. After each batch was completed, the team met to make decisions about the exclusion or inclusion of articles.

**Charting, collating and summarizing the data.** Our fourth step was to organize and chart the data extracted from the articles in a shared spreadsheet that was securely hosted online. Details about publication information, study design and sample (where relevant) and data relevant to the scoping question were entered into this spreadsheet after each article was reviewed in full by both readers assigned to the article (see Appendix A for an example). We then held a series of team meetings to identify the overarching themes that emerged from the data in the spreadsheet. The lead author then reviewed the data and determined which of these themes best characterized the evidence. As Arksey and O’Malley contend, the identification of themes emerging from sources is an important part of the charting process for scoping reviews. Next, a meeting of all reviewers was held to seek confirmation on the interpretation of the themes. After this, the lead author colour-coded the information stored in the spreadsheet according to theme; this was done to visually confirm that the themes that had been identified adequately characterized most of the data. In our final step, the review team members worked together to identify relevant knowledge gaps.
Results

Of the 348 identified articles, 113 were included in the scoping review (Fig. 1; a full list of the included articles can be obtained from the lead author). Included articles were published between 1995 and 2009 and consisted of 22 academic articles, 1 unpublished report, 12 articles in medical-sector or business-oriented magazines and 78 articles in the popular media. The academic articles included 6 essays/analyses, 1 qualitative analysis of a survey, 5 editorials/commentaries, 2 case studies, 6 reviews and 2 industry reports. Only 2 of the 113 articles presented original primary data: one was an academic article that presented data from a qualitative survey from an academic source\(^{17}\) and the other was a media report on the results of a public opinion poll.\(^{18}\) Even though the included articles yielded information on the Canadian experience of MT, their focus was not necessarily on Canada. Other countries involved in MT were also discussed in the articles, namely India (43 mentions), the United States (43 mentions), the United Kingdom (11 mentions), Thailand (13 mentions), Cuba (9 mentions), Singapore (9 mentions), Australia (4 mentions), Costa Rica (3 mentions), Malaysia (3 mentions), Mexico (3 mentions), the Philippines (3 mentions), South Africa (3 mentions), Germany (2 mentions), Israel (2 mentions), Japan (2 mentions), New Zealand (2 mentions), Russia (2 mentions), Turkey (2 mentions) and 22 other countries (1 mention each).

Four overall themes emerged: (1) drivers of and constraints on Canadian patients’ involvement in MT, (2) factors that are increasing MT awareness in Canada, (3) drivers of and constraints on the expansion of MT in Canada and (4) coverage of MT by medicare (Table 3). In the following description of the results, quotations from some of the articles have been included to illustrate the findings of the review.

**Drivers of and constraints on patients’ involvement.** Drivers of Canadian patients’ involvement in MT abroad included reduced wait times and increased treatment options.\(^{10-12,19-24}\) Constraints included concerns about the cost and quality of care abroad. Three commentaries and essays in peer-reviewed journals identified wait times as a driver of involvement in MT, and 8 media articles discussed the cost and quality of care as a constraint. Six media articles discussed increased treatment options abroad as a driver of involvement; this
topic was not mentioned in academic articles.

The most commonly cited motivation for Canadians to engage in MT is to reduce waiting time for medical care.\textsuperscript{10-12,19,20} According to some commentators, wait lists for hip replacements can stretch to as long as 1 year in Canada, whereas patients with the financial resources to pay for this procedure can have it done immediately in countries such as India and Thailand.\textsuperscript{25} One media report indicated that being able to circumvent the Canadian wait lists for certain operations, such as hip replacements, makes MT very enticing.\textsuperscript{2} Wait times associated with health conditions that leave patients in chronic pain were cited as particularly likely to motivate Canadian patients to travel for care.\textsuperscript{26} Some Canadian physicians quoted in a media article believe that wait times for medical services will increase with the aging of the baby boom generation, leading to increased interest in MT.\textsuperscript{27}

A less frequently cited driver of MT is the availability of more treatment options abroad; some procedures or treatments are not available domestically because they have not been approved in Canada or there are no specialists available in Canada to administer them.\textsuperscript{21-24} For example, Canadians may be driven abroad to access experimental treatments using new technologies such as stem cell transplantation, leading to what has been called stem cell tourism.\textsuperscript{28} Proximity to destination nations and ease of travel are also less frequently cited factors motivating Canadian medical tourists to go abroad.\textsuperscript{29}

As MT can involve significant out-of-pocket expenses, Canadians who were considering going or had decided to go abroad for care commonly cited cost as an enabling or constraining factor in their decision making.\textsuperscript{11,20,30,31} One medical tourist, for example, reported finding the cost for back surgery in the United States to be too high at US$55 000. She sought out the same surgery in Bangalore, India, for the price of Can$12 000, which included flights, tests, room and board.\textsuperscript{10} In some cases patients were able to stay longer in hospitals abroad because of the lower expense of care, thus improving their experience.\textsuperscript{32} The lower labour costs in low- and middle-income countries, in particular, can potentially lead to better service in hospitals in these countries and lower patient-to-caregiver ratios than Canadian patients may be accustomed to.\textsuperscript{33} Because of the affordability of MT and the growing affluence of some Canadians, international travel for care may become more possible and desirable.\textsuperscript{34} Even for relatively wealthy Canadians, however, the costs of treatments abroad will remain a factor in their decision-making if their expenses are not reimbursed by Canadian medicare.

A chief constraint on Canadian patients’ involvement in MT is concern about the quality of care offered abroad, particularly in low- and middle-income countries.\textsuperscript{35,36} For example, a media report quoted a Canadian patient as saying that when he announced that he was planning to seek surgery in India, his family had said, “You are out of your mind. You are going to die there all alone in a hovel.”\textsuperscript{22} Such perceptions no doubt dissuade some potential medical tourists from travelling to less developed countries for care or encourage them to pay more for care in more economically developed countries. Canadian medical tourists are particularly attracted to seeing
physicians abroad who trained in countries with advanced, high-quality health systems under the assumption that this training will ensure they receive care comparable to the care they would have received in Canada.\textsuperscript{37,38} A perception that the quality of care and service in destination hospitals is as good as or superior to Canadian care and service also encouraged Canadians to go abroad for care.\textsuperscript{39} Accreditation of MT hospitals in low- and middle-income countries has also been cited as helping to reassure patients about the quality of care in facilities in these countries.\textsuperscript{40}

**Factors that are increasing awareness of medical tourism.** The most commonly cited source of awareness of MT was facilitation companies, which specialize in making bookings for international patient travel and procedures. These companies were discussed in 3 academic articles, 1 business magazine article and many media reports. As other sources of increased awareness were cited in media reports only, their influence is less clear than that of the facilitators.

Several articles claimed that there are between 9 and 20 facilitation companies operating at present in Canada and that the number is growing.\textsuperscript{11,41-44} Some facilitators advertise to raise awareness of their services and of MT more generally.\textsuperscript{42} These advertisements include marketing materials mailed to interested parties and pricing quotes.\textsuperscript{20,45} Facilitators report receiving an increasing number of enquiries from potential Canadian customers.\textsuperscript{46,47} For example, a single facilitator claimed to receive 2500 enquiries in 2006 alone regarding cardiac and joint-replacement surgery.\textsuperscript{10} Another reported fielding 2000 enquiries in the first 2 months of operation.\textsuperscript{48} Such claims have been disputed, with other facilitators reporting more modest numbers of patient enquiries (7 or 8 per month, or fewer).\textsuperscript{49,50} Proportionally fewer medical tourists were reported to come from Ontario than from British Columbia.\textsuperscript{51}

Countries and hospitals selling MT services have hosted seminars and conferences in Canada.\textsuperscript{52} Hospitals in other countries have also advertised in Canada.\textsuperscript{39,53} It is said that negative messages about Canada’s health care, in news reports and documentaries, also prompt Canadians to look into going abroad for care.\textsuperscript{54} The exposure of Canadian patients to foreign-born and foreign-trained physicians working in Canada also serves as an indirect advertisement for MT: treatment in foreign countries is seen as less frightening or exotic and more possible to some patients.\textsuperscript{55,56} The expansion in the number of direct air routes to MT destinations (sometimes with the explicit purpose of encouraging MT) may help to familiarize Canadians with destination countries and their health services.\textsuperscript{29}

**Drivers of and constraints on the expansion of medical tourism in Canada.** Canada has been discussed as a potential destination for medical tourists in both academic and media articles. Unlike the themes examined earlier, this theme was discussed in an equal number of academic and media articles (8 of each), but most of this discussion was speculative. The articles discussed many obstacles to Canadian expansion into the provision of care for
medical tourists in addition to the advantages of hosting medical tourists from abroad.

Some Canadians have explored direct investment in MT hospitals abroad, but Canadian involvement in MT was almost exclusively discussed in terms of hosting international patients. Some private business groups and government agencies have attempted to establish Canada as a destination for medical tourists. Brian Day, a former president of the Canadian Medical Association and proponent of the privatization of Canadian health care, has argued that MT “could be one of Canada’s biggest industries.”

Limits on health services trade were cited as a constraint on the expansion of MT in Canada. The cost of medical care in Canada may also limit this country’s potential to become a large-scale provider of care for medical tourists. There is disagreement on this issue, however, as the cost of care has also been cited as strengthening Canada’s appeal as a MT destination. If Canadian prices for medical services become close to those in low- and middle-income countries, then the advantages of obtaining health care in Canada may offset the slightly higher costs in this country. Some US residents already travel to Canada to fill drug prescriptions, demonstrating the perception of Canada as a desirable destination. If more medical services become available privately in Canada, this change may spur the development of the country as a destination for medical tourists.

In some cases, the geography and culture of specific Canadian provinces may serve to encourage MT. For example, British Columbia’s coastal location, mild climate and ethnic mix may encourage MT from Asian countries. However, MT has been described as better suited for places such as Thailand and southern Mexico, which are associated with sandy beaches, rather than Canada’s cold climate.

**Coverage by medicare.** Canada’s medicare grants Canadian citizens and permanent residents access to medically necessary services. Reimbursement of MT through medicare has been limited thus far, although lobbying is taking place for increased coverage. All but 2 of the articles discussing this issue were media reports, indicating that medicare coverage of MT is the subject of ongoing domestic political debate.

Medical expenses incurred abroad are typically reimbursed by medicare only if the care is necessary and unavailable in Canada and approval is granted before the patient leaves the country. For these reasons, there is uncertainty as to whether medical tourists can and will be reimbursed by provincial health insurance plans for the costs of the care they receive abroad. There has been significant lobbying of federal and provincial politicians and health care administrators to expand medicare coverage of MT. In one case, the provincial government in Alberta fully reimbursed a Canadian medical tourist, Aruna Thurairajan, who went to India for spinal surgery. However, a class action lawsuit that sought to force Alberta to reimburse patients seeking medical treatment abroad was unsuccessful. Some Canadians have reported being reimbursed, at least in part, for the costs of
Arguments for the expansion of medicare payments for MT are repeatedly tied to wider debates about the privatization of medical care in Canada and the wait times faced by some Canadian patients. Arguments for the expansion of medicare payments for MT are repeatedly tied to wider debates about the privatization of medical care in Canada and the wait times faced by some Canadian patients.

Figure 1. Selection of study sample [view]

Table 3. Summary of terms [view]

Discussion

This scoping review has revealed the complex nature of the MT industry and the diversity of the responses of Canadians to MT. It has also revealed that discussions of MT in the Canadian context are characterized more by conjecture than by data. Despite the wide variety of views on MT that were observed, there are few statistics available on Canadians’ involvement in MT. Although a wide range of anecdotal evidence charting the motivations of Canadians’ participation in MT is available, there is a lack of robust research from credible academic sources analyzing the factors motivating patients to travel abroad for medical services. The international literature consistently suggests that avoiding having to wait for care is probably a dominant motivator for Canadian medical tourists, but no studies actually demonstrate this to be the case. Reflecting this lack of data, the discussion of the effect of wait times on motivation for MT took place exclusively in commentaries and media reports. Similarly, the discussion of cost and proximity of the destination as motivators of MT also took place entirely in commentaries and media reports, and thus the influence of these factors on Canadian medical tourists’ decision making cannot be quantified.

The level of investment by Canadians and others in the domestic MT industry is not clear. Discussion of this issue was evenly divided between academic and media articles, but it tended to focus on the degree to which a push into MT would encourage privatization rather than providing measures of actual levels of investment.

We recorded cases of Canadians seeking medicare reimbursement for MT expenses, along with reports of lobbying efforts to allow for reimbursement. These reports were exclusively in academic commentaries and media reports and were based on anecdotes rather than systematic survey data. Thus, the level of support for medicare reimbursement of MT by the Canadian public is not clear. Moreover, we do not know how many Canadians have sought medicare reimbursement for MT, how many medical tourists were dissuaded from attempting to be
reimbursed, nor how many Canadians have been dissuaded from participating in MT given inconsistencies in reimbursement for care accessed abroad.

For Canadians, domestic facilitators and international hospitals are thought to be key conduits of information about MT. We do not know, however, how many Canadians are aware of MT as a treatment option, how Canadian patients learn of MT, how they choose specific destinations, nor how or why they become comfortable with the prospect of going abroad for care. Information on Canadian decision making was located both in academic and media sources but it was entirely anecdotal. Moreover, reliable data on the numbers of Canadians engaging in MT were not provided.

Limitations. This review has 3 primary limitations. First, 80% of the articles used in this review were from media sources, including business and industry magazines, popular-press magazines and newspapers. We did not aim to measure the quality of the articles used in this review, which is a limitation inherent in the scoping review process. Moreover, many of the media reports and academic commentaries were anecdotal in nature and failed to give a valid and broad assessment of the Canadian experience of MT. Nonetheless, these articles have been useful in determining patterns of perceived experiences within Canada and in identifying knowledge gaps, and thus their inclusion in this review is important.

Second, only English-language articles were included in the review. The large volume of English-language sources reviewed indicates a very active discussion in this language. Nonetheless, as Canada is a bilingual nation, it is possible that the exclusion of French sources precluded representation of a distinctly French-Canadian perspective on MT. Moreover, it is possible that articles in languages other than English and French have been published that discuss the Canadian experience of MT in the international literature, although few articles in other languages were cited in the reviewed articles.

Third, differing definitions of MT complicated the production of this review. As we have defined it, MT is patients’ intentional travel abroad for non-emergency medical services. MT is thought to be distinct from ongoing cross-border care arrangements and raises distinct issues. For this reason any articles that clearly focused exclusively on cross-border care were excluded from this review.

Conclusion

The intent of this scoping review was to synthesize what is known about Canadian involvement in MT and identify gaps in our knowledge about Canadian involvement in MT. The most commonly cited motivation for Canadian involved in MT was to reduce waiting time for medical care. Other factors, such as cost, enhancing treatment options and the quality of care offered abroad were also noted. In terms of broader Canadian involvement in MT, the review showed that some private business groups and government agencies have sought to establish Canada as
a destination for MT.

Importantly, the review has revealed a number of pressing knowledge gaps that must be addressed if informed decision making on MT is to take place: the number of Canadians engaging in MT is not known, and the type of procedures they are seeking and the reasons they are pursuing care abroad are not known. Similar knowledge gaps have been identified in other countries. In Canada, there has been a lack of consultation with patients who have gone abroad as medical tourists and with other stakeholders in the industry. Little is known about the level of investment in MT ventures by Canadians and non-Canadians alike. The results of this review make it clear that research is needed to provide concrete evidence regarding the use of MT by Canadians and the potential for Canada to be a MT destination.

Appendix

Appendix A. Sample spreadsheet entry [view]

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