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

Introduction

The issue of accessing out-of-country health care has recently garnered significant attention within Canada. In early 2010, the Premier of Newfoundland and Labrador went to the United States for mitral valve heart surgery instead of having it done locally or elsewhere in Canada. In March 2010, the Health Minister of British Columbia announced his intention to make the province a destination for international patients seeking health care. By May, 2010, 20 Canadians had travelled to Poland to access a new experimental treatment for multiple sclerosis that had become available only abroad in late 2009.

Subsequent rallies have called on provincial health ministries to cover the costs incurred by those going abroad for this treatment.³ In August 2010, news of a multi-resistant bacterial 'superbug' (NDM-1) being spread internationally through medical tourism (MT) surfaced.⁴ Within days of this announcement, media reports documented three cases of Canadian medical tourists who had become infected with NDM-1 while undergoing surgery in India.⁵ Other pieces focused on some Canadians' resolve to still go abroad for surgery despite the risk of contracting NDM-1.⁶ Each of these occurrences involves people either leaving from or going to Canada in search of health care. These high profile events, all of which occurred after the end date of this review, have thrust the issue of out-of-country care into the spotlight, prompting significant discussion and debate by experts and citizens alike as to the role that Canadian governments should play in facilitating care abroad for citizens and also in providing care for international patients. As Canada has a public health insurance scheme, issues surrounding payment for out-of-country care are particularly contentious.⁷

Medical tourism is a specific form of out-of-country care that is gaining popularity among Canadians. As with other forms of out-of-country care, it has garnered media and public attention in recent years as the stories of Canadians who have successfully gone abroad for cardiac, plastic, transplant, orthopaedic, dental, and other surgeries have begun to permeate local and national newspapers.⁸⁻¹⁰ Medical tourism involves patients *intentionally* leaving their countries of residence to access non-emergency medical interventions abroad¹.¹¹ Medical tourists often spend part of their post-surgical recovery period abroad in tourist resorts that partner with hospitals that treat international patients.^{12,13} Countries such as India, Singapore, and Thailand are international leaders in medical tourism, attracting patients from around the world to their hospitals. Given the significant number of people internationally with inadequate access to reliable medical care, medical tourism has the potential to be an increasingly significant source of revenue for those countries positioning themselves as destinations for medical tourists. Some in the industry view Canada as one of a handful of developed nations well positioned to attract medical tourists.¹⁴⁻¹⁷

Medical tourism has the potential to impact Canada's health care system in two broad ways. First, Canadians' engagement in medical tourism is symptomatic of a perception of insufficient resources being available within the health care system. By seeking care abroad,

¹¹ Medical tourists are not people who have become injured or ill while abroad and require medical attention, expatriates getting medical care while on visits home, people traveling to access complementary or alternative, or patients who are taking part in cross-border care by established arrangements made between proximal countries; nor are they individuals who travel abroad to access complementary or alternative therapies, in that this constitutes health tourism more broadly.

Canadian medical tourists signal displeasure with perceived or experienced overly lengthy waiting times, service unavailability, and high-out-of pocket costs for care not covered by public Medicare (e.g., cosmetic and dental surgeries). 18-20 While having some patients go abroad for care may serve to solve some of these system problems by reducing demand for services, it may also reduce pressure for health system reform. 21 Second, Canada's role as a destination for medical tourists depends on the development of policies of trade liberalization and health service privatization. 7,19 These policy choices, in turn, will have a wider impact by shaping Canadian public health care infrastructure. Restrictions in health services trade and privatization have already been cited as an impediment to the development of medical tourism services in Canada. 7,20,21 Given the potential business generated for Canadian health service providers through medical tourism, and the loss of health care dollars when Canadians travel abroad for care, any increase in the perceived acceptability of medical tourism among Canadians may impact wider health policy debates.

While this article focuses on medical tourism as it relates to Canada, medical tourism is a global practice affecting many other countries. Medical tourism raises a range of concerns that will be relevant to any country participating in this trade, including: 1) The use of public resources in destination countries^{22, 23}; 2) Poor malpractice protections for patients¹⁴; 3) Exacerbation of the internal brain drain in destination countries²⁴; and 4) The creation or exacerbation of a two-tier medical system in both source and destination countries.^{12, 25} At the same time, medical tourism has been heralded as a solution to global health problems, including: 1) Limited foreign investment in host country health systems^{13, 24}; 2) The international migration of health workers^{12,26}; 3) The high cost of medical care²⁷; and 4) Wait times for medical care.^{28,29}

While Canada is only one of many countries participating in medical tourism, it is widely seen as having a successful health system that serves as an international model. Therefore, Canada's responses to medical tourism are those of a global health policy leader. An examination of medical tourism in the Canadian context will be especially relevant for other publicly administered systems, but as Canadian medical tourists must typically pay out of pocket for the care they receive, their experiences are also relevant to patients in privatized systems. Moreover, destination countries will likely look to one another for policy responses to the effects of medical tourism, making an examination of these responses to Canadian medical tourism of wider interest. Because of the increasing interest in medical tourism, researchers should start looking to specific country responses in order to help establish commonalities and differences across countries. This paper serves as a model for doing so and the research design described here can be reproduced elsewhere.

In the remainder of this article we present the findings of a scoping review intended to synthesize what is known about Canadian involvement in medical tourism. 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. In general, knowledge syntheses about medical tourism have the potential to inform the development of research and policy agendas. Other reviews of medical tourism are beginning to emerge, including a general review of the state of knowledge of medical tourism³⁰, a scoping review of the patient's experience of medical tourism³¹, and a review of medical tourism in Europe. To the best of our knowledge, this article offers the first country-specific medical tourism synthesis, and thus serves as an important contribution to scholarship on the issue. As will be discussed below, there is limited academic literature on medical tourism from the Canadian perspective. Therefore, this review makes considerable use of media reports and other grey literature sources to assess public

perspectives of medical tourism in Canada and to identify knowledge gaps. In recent years, social and health scientists have been paying increasing amounts of attention to the phenomenon of medical tourism. ^{12,23,25} The knowledge gaps identified by this scoping review can therefore be usefully taken up by social and health science researchers to inform future scholarship on medical tourism.

Methods

Scoping reviews are intended to synthesize what is known about a particular topic or issue across several types of literature in order to achieve clarity about the existing state of evidence and knowledge.³³ They are a useful form of knowledge synthesis to undertake when no prior synthesis has been conducted on the issue of focus and it is difficult to create a narrow review question.³⁴ The present scoping review meets both of these criteria. In following the widely utilized scoping review protocol set out by Arksey and O'Malley³⁴, media sources, grey literature, and academic sources were systematically compiled to address the review question: what is known about Canadian involvement in medical tourism? The scoping review process followed five principal stages: (1) identifying the question; (2) identifying relevant literature; (3) selecting the literature; (4) charting the data; and (5) collating, summarizing and reporting the results.

Identifying the Question and Relevant Literature

Our first step was to scan a limited number of medical tourism sources in order to identify a review question that would serve as a useful contribution to medical tourism research and identify relevant keywords. Five categories of keywords were identified, as shown in Table 1. Countries known to be destination and departure points for international patients engaging in medical tourism were used to populate the where category.

** insert Table 1 approximately here **

Our next step was to develop a search strategy. In consultation with a librarian, a strategy was developed to scope the English-language media, grey, and academic literatures in order to identify the breadth of sources that relate to the scoping review question. Eighteen databases were selected in which to run combinations of keywords. These databases are shown in Table 2. Different search strategies were created for media and academic databases. Terms across the categories of keywords were searched 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 results that were mostly irrelevant to the review focus. In these cases the search manager narrowed the results by eliminating the term that had the broadest results. Doing this successfully enhanced the relevance of the sources that were identified. For the media databases, only the terms 'health tourism' and 'medical tourism' were searched. Specific North American sources that are known to cover Canadian health services issues (Globe and Mail, New York Times, Associated Press, Time inc., Washington Post, magazines, Toronto Sun, Toronto Star, CBC News) were also searched in the Lexis Nexis database. Sources of all types (e.g., research articles, business briefs, newspaper editorial, industry reports) deemed relevant were retrieved from across the eighteen databases searched. The retrieved sources were stored in the Refworks bibliographic management program.

** insert Table 2 approximately here **

Selecting the Literature

After completing the database searches, we reviewed the titles and abstracts of identified sources in order to select ones to include in the scoping review. To do this we first individually reviewed all titles and abstracts and then held a series of meetings to determine which sources would be reviewed in full. *Post hoc* inclusion criteria were created to guide decisions regarding inclusion and exclusion.³⁴ Three bases for exclusion were developed, specifically that a source had: (1) no focus on medical intervention, such as those dealing with health tourism more broadly (e.g., travel to healing spas); (2) an exclusive focus on 'reproductive tourism' or 'transplant tourism', as the medical intervention (if any) in such cases is not restricted to the international patient and thus raises separate considerations; and/or (3) an overly general focus on cross-border care, out-of-country care, or international trade in health services. Any sources identified by the databases not available in English were also excluded at this point. Instances of disagreement between us regarding whether or not a source should be excluded were discussed until consensus was reached. These instances were infrequent.

Sources deemed to be included in the scoping review at the title and abstract review stage were next read in full. As abstracts were unavailable for the media sources they were all read in full. Reference lists of sources reviewed in full were hand searched to identify additional references that were not obtained through our initial search. Sources identified through hand searching were also read in full. At this stage the exclusion criteria created at the title and abstract review stage were again used, with one additional criterion: if no 'data' (i.e., information points that contributes to answering the scoping question) were extracted from a source it was to be excluded. All sources reviewed in full had two readers. The readers were assigned by the search manager. To keep the review process manageable, sources were reviewed in batches at this stage. After each batch was completed, we met to make decisions about the exclusion or inclusion of sources. Once again, the level of agreement was high. In instances of disagreement between the two reviewers the sources were discussed until all team members were in agreement.

Charting, Collating, and Summarizing the Data

To organize and chart the data extracted from the reviewed sources we created 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 source was reviewed in full. We then held a series of team meetings to discuss the data recorded in the spreadsheet. This assisted us with gaining an overall perspective on the issues emerging from the sources included in the review that had relevance to the scoping question. The lead author then determined the overall themes that best characterized the state of knowledge on Canadian involvement in medical tourism. As Arksey and O'Malley contend, the identification of themes emerging from included sources is an important part of the scoping review charting process. After this, the lead author then colour coded the extracts stored in the spreadsheet according to theme. In our final step, we worked together to identify knowledge gaps that have relevance to the scoping question stemming from the reviewed sources and identified themes.

Results

As shown in Figure 1, 291 sources were identified for review from the databases searched for this scoping review, the majority of which were media pieces (n=176). An additional 57 sources were included for review after hand searching reference lists. Of the 348 sources that were reviewed either partially (title and abstract) or in full, 108 were included in the scoping review (a full list of included sources can be obtained from the lead author). The information culled from the sources was grouped into four categories: (1) drivers and constraints of Canadian patients' involvement in medical tourism; (2) factors promoting medical tourism awareness in Canada; (3) broader Canadian involvement in trade in medical tourism; and (4) coverage of medical tourism by Medicare.

Drivers and constraints of patients' involvement

Canadians are said go abroad for medical care for a variety of reasons. By far the most commonly cited motivation is to reduce waiting time for medical care. 18-20,35,36 A medical tourism broker based in the United States (US), for example, reports that his Canadian clients are "very, very frustrated with the wait times". 37 According to some commentators, wait lists for hip replacements can stretch to as long as one year in Canada, while they are non-existent for those with the financial resources to pay for these procedures in countries such as India and Thailand. 14 It was commonly observed that these reduced waiting times for specific operations, like hip replacements, are very enticing. 38 Wait times associated with health conditions that leave patients in chronic pain were cited as particularly likely to motivate travel. 39 One medical tourist described the financial cost of engaging in medical tourism as "money well spent because now I'm pain-free and have my quality of life back". 40 Some Canadian physicians believe that wait times for medical services will increase with the ageing of the 'baby boom' generation, leading to increased interest in medical tourism as a way to alleviate pain and other symptoms. 41

Less frequently cited motivating drivers for Canadians to seek care abroad are to increase the number of treatment options available to patients and/or to undergo procedures or treatments not available domestically, either because they have not been approved by federal regulators or there are not specialists available to administer them domestically. 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. Proximity to destination nations and ease of travel are also lesser-cited factors motivating Canadian medical tourists to go abroad that shape their decision making.

As medical tourism can generate significant out-of-pocket expenses, Canadians who are considering or have decided to go abroad for care commonly cited cost as an enabling or constraining factor in their decision making. 19,36,48,49 One medical tourist reported finding the cost for back surgery in the US, for which she had been on a Canadian waiting list for 16 years, to be too high. Instead, she sought out the same surgery in Bangalore for \$12,000CAD including flights, tests, room, and board. When the actual costs for her treatment turned out to be lower than the amount she was initially quoted, she received a refund. Because of the affordability of medical tourism, the growing affluence of some Canadians may make international travel for care more possible and desirable. Even for relatively wealthy Canadians, however, the costs of these treatments will remain a factor in decision making if their expenses are not reimbursed by the public system.

In some cases the lower expense of care abroad allowed patients longer hospital stays, improving their experience and encouraging them to go abroad for care. After a three-day hospital stay in Mexico, one patient reported that "Here in Canada, a facelift is considered day

surgery, and I don't think I would have had that level of care". ⁵¹ The lower labour costs in LMICs, in particular, can potentially lead to better service in these hospitals and lower patient to caregiver ratios than Canadian patients may be accustomed to in their own communities. ⁵² Lower costs for care in low and middle income (LMICs) have also been attributed to weaker malpractice protections, which may increase burdens on patients in the case of medical malpractice by their caregivers. ⁵²

A chief constraint to Canadian patients' involvement in medical tourism is concern about the quality of care offered abroad, particularly in LMICs.^{53,54} Canadian medical tourists are cited as being particularly attracted to seeing physicians who trained in countries with advanced, high-quality health systems under the assumption that this training will ensure care comparable to that received in Canada.^{55,56} A perception that the quality of care and service at the patient's destination is as good as or superior to that available in Canada also encouraged Canadians to go abroad for care.³⁷ Accreditation of medical tourism hospitals in LMICs has also been cited as helping to reassure patients of high quality care in these facilities.⁵⁷

Hospitals in LMICs have to counter the often initially negative perceptions of patients and their families. Upon announcing that he was planning to seek surgery in India, one Canadian patient reported that his friends and family responded: "You are out of your mind. You are going to die there all alone in a hovel". Said another patient, "The noise, the crowds, the smells were too much. I thought, 'What am I doing here?'". Even an economically developed country like Singapore can face a perception problem from Canadian patients. Said one patient, "I was expecting slums, street people and lots of pollution. But they're ultra-modern. The hospital was super-clean, efficient and they treat you like family, not a patient". Given these perceptions, both before and even upon travel to LMICs for care, many potential medical tourists are no doubt dissuaded from travelling for care or choose to pay more for care in more economically developed countries.

Factors promoting awareness

Canadians' increased familiarity with medical tourism is driven in part by the presence and expansion of medical tourism brokers – agents who specialize in making bookings for international patient travel and procedures – in Canada. While the exact number of medical tourism brokers presently operating in Canada is unclear, several sources claimed that there are between nine and twenty companies operating at present and that the number of brokers is growing. ^{19,58-61} Some brokers advertise to raise awareness of their services and of medical tourism more generally. ⁵⁹ These advertisements include marketing materials mailed to interested parties and pricing quotes. ^{36,62} Brokers report receiving an increasing number of enquiries from potential Canadian customers. ^{63,64} For example, a single broker noted receiving 2500 enquiries in 2006 alone regarding cardiac and joint replacement surgery. ¹⁸ Another fielded 2000 enquiries in the first two months of operation. ⁶⁵ These claims of significant outreach to brokers have been disputed, with other brokers reporting more modest enquiries, at a rate of seven to eight patients per month or fewer. ^{66,67} These discrepancies reflect regional differences in the popularity of medical tourism, with proportionately fewer reported to come from the province of Ontario relative to British Columbia. ⁶⁸

Awareness of medical tourism among Canadians is promoted through multiple means. Countries and hospitals selling medical tourism services have hosted seminars and conferences in Canada. Hospitals have also advertised directly within Canada. It is said that having exposure to negative messages about Canada's health care, via news reports and documentary

coverage, also prompts Canadians to look into going abroad for care.⁷¹ The commonness of foreign born and trained physicians in Canada also serves as an indirect advertisement for medical tourism. As more Canadians are exposed to foreign born and foreign trained physicians, treatment in foreign countries is seen as less frightening or exotic and more possible to some patients.^{72,73} The expansion of direct air routes to medical tourism destinations (sometimes with the explicit purpose of encouraging medical tourism) may help make Canadians even more familiar with destination countries and their health services.⁴⁷

Broader Canadian involvement

There is potential for Canadians to become more involved in the business of medical tourism by investing both at home and abroad. Already, some private business groups and government agencies have attempted to establish Canada as a destination for medical tourists. ^{14-16,74} For example, a group of Albertan doctors and business people leased two hospitals with the aim of providing care for US patients. ⁷⁵ Brian Day, a former president of the Canadian Medical Association and proponent of Canadian health care privatization, has argued that medical tourism "could be one of Canada's biggest industries". ⁷ Some Canadians have explored direct investment in medical tourism hospitals abroad, and some LMICs looking into positioning themselves as medical tourism destinations have used the Canadian health care system as a model for their own health care systems. ⁷⁶

Factors specific to Canada both impede and promote businesses' involvement in medical tourism domestically. Limits on health services trade are and will remain a constraint on the expansion of medical tourism. Within North American Free Trade Act countries (i.e., Canada, US, Mexico), the failure to harmonize health systems serves as an impediment to the expansion of medical tourism across them. Should medical services in Canada become more privatized, this change may spur the development of the country as a destination for medical tourists.

The cost of medical care in Canada may limit its potential to become a large scale destination 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 medical tourism destination. In the international market, Brian Day argued that "we [Canadian health care providers] can come within a few thousand dollars of those Indian prices that the was not clear whether this price quote included the entire cost of the treatment. If Canadian prices for medical services become close to those in LMICs, then the advantages of obtaining health care in Canada may make up for slightly higher costs. Already, many US residents travel to Canada to fill drug prescriptions, which exhibits some comfort with foreign travel for medical services and the perception of Canada as a desirable destination. Some US states and insurance plans may reimburse travel to Canada for medical care in the future.

In some cases, the geography and culture of specific Canadian provinces may serve to encourage medical tourism. For example, British Columbia's coastal location, mild climate, and ethnic mix may encourage medical tourism from Asian countries. ²² Nonetheless, Canada faces a problem of perception if it is to become a major destination for international patients as medical tourism is often coupled with relaxation on beaches in tropical destinations rather than a colder environment. As the resident of a proposed site for medical facilities targeting medical tourists in British Columbia put it, medical tourism is better suited for places such as Thailand and southern Mexico, "places with nice white sandy beaches". ⁷⁹

Coverage by Medicare

Public health insurance regulated through the Canada Health Act, commonly referred to as Medicare, grants Canadian citizens and permanent residents access to medically necessary services that are organized and delivered provincially. Medical expenses incurred abroad are typically reimbursed only if the care is necessary, unavailable in Canada, and approval is granted prior to leaving the country.⁸⁰ For these reasons, there is uncertainty as to whether medical tourism can and will be reimbursed by provincial health insurance plans, though individual medical tourists have already started to seek reimbursement for their care abroad. ^{18,46,53,81} In one case, the provincial government in Alberta reimbursed a Canadian medical tourist, Aruna Thurairajan, who went to India for spinal surgery. ^{18,80} Thurairajan's surgery provided relief from her back pain at the cost of "\$3,000 Canadian for nine days of food, accommodation, all nursing, doctor and specialist fees. Everything was covered for that. Later, Alberta Healthcare paid me most of it back for out-of-country treatment". ⁸¹ Other Canadians have also reported being reimbursed, at least partially, for the costs of medical tourism. ^{23,46} Others still have been denied reimbursement. ³⁸

There has been significant lobbying of federal and provincial politicians and health care administrators with the aim of expanding Medicare coverage of medical tourism. ^{72,81,82} In the province of Alberta, an unsuccessful class action lawsuit sought to force the province to reimburse patients seeking medical treatment abroad. ⁴⁹ Arguments for the expansion of Medicare payments for medical tourism are repeatedly tied to wider debates over the privatization of medical care in Canada and the wait times faced by some Canadian patients. ^{7,20} It is argued the factor driving Canadians' involvement in medical tourism, particularly long wait times for certain procedures, should be addressed as the practice of going abroad for care results in an outflow of health funding to other national jurisdictions. ⁸³

Interpretation

The sources reviewed for this scoping exercise have revealed the complex nature of the medical tourism industry and diverse responses Canadians have to its existence. These lessons are applicable not only in the Canadian context but in other countries engaging in medical tourism as both source and destination countries alike. Of course, discussions of medical tourism must be understood within the context of wider, ongoing debates regarding the role of privatization in health care systems globally. In Canada, while some patients will be willing to pay out of pocket for care abroad, the popularity of medical tourism will be limited by the willingness of provincial health care systems to reimburse patients for this care. Policies regarding reimbursement, in turn, will hinge on debates at both the provincial and federal level on health care reform, including the possibility of increased privatization. Ongoing debates regarding two-tier care for Canadians are also relevant to the 'national conversation' about medical tourism. A primary cause for concern is that medical tourism raises the prospect of establishing or expanding two-tier health care. Under a two-tier system, wealthy persons will pay out of pocket for access to care abroad while others will remain within the domestic system.⁸³ If medical tourism creates a second tier of care for the wealthiest Canadians, then political pressure for increased funding of health care domestically may be reduced, undermining equity in the Canadian health care system. ²¹ Defenders of the industry claim that this is not the case: "We are not jumping any Canadian queues and we're not putting any Canadian patients in position ahead of other Canadians". 63 Such a position suggests that medical tourism by Canadians can be framed as not disadvantaging those remaining on domestic wait lists for care.46

Medical tourism is most often framed as an opportunity to reduce wait times within Canada and other public systems for both necessary and elective procedures. The prospect of it doing so is seen both positively and negatively and the Canadian experience with using medical tourism as a solution to wait times is applicable elsewhere. From an ethical perspective, the perceived need by some Canadians to travel abroad for necessary care has been cited as a moral failing of the public system. From a political perspective, the prospect of greater reliance on medical tourism to reduce wait times for surgeries is recognized as a controversial issue. For example, one official whose job was to reduce wait times in a regional health authority was told that sending patients abroad was impossible "because politically it would be unpopular". From a resource distribution perspective, a concern is that, upon their return home, medical tourists will necessarily avail themselves of public services. According to one Member of Parliament from British Columbia, medical tourists "will fall back on the public system if there's a problem, so I think there is a cost to the overall medical system for this kind of program". This concern is particularly acute if the quality of care abroad is low, leading to the need for extensive follow up care provided at public expense.

As is the case in other potential destination countries for medical tourists, Canada's potential as a destination country will be determined by wider debates about the role of the private sector in the domestic provision of care. Medical tourism can serve as an opportunity for economic development, but establishment of the industry may come at the cost of the identity of the Canadian health care system as an equitable, publicly funded institution. The prospect that Canada might become a major destination for medical tourists is also tied to larger debates over funding levels for the health care system, wait times for surgeries, and the prospect of increased privatization of the medical system. Proponents of establishing Canada as a medical tourism destination see reducing wait times for surgeries as a necessary precondition which, in turn, may rely on greater privatization of the system. Medical tourism may further promote additional privatization given that foreign patients will be paying out of pocket for care. Meanwhile, critics see such discussion as diverting attention away from identifying and addressing existing system challenges. As one critic asks, "Do we really want the administrators in our system spending their time luring Americans? Or do we want them to fix the problems faced by Canadians?". Or do we want them to fix the problems faced by Canadians?

Knowledge Gaps

Our review has shown that discussions of medical tourism in the Canadian context are characterized more by conjecture than hard data. Despite the wide variety of views on the state of medical tourism that were observed, there are few statistics available on Canadians' involvement in medical tourism. While a wide range of anecdotal evidence charting the motivations of Canadians' participation in medical tourism is available, systematic data from interviews or other sources recording the factors that motivate them to travel abroad for medical services is lacking. The international literature consistently suggests that avoiding waiting times plays a dominant role in motivating Canadian medical tourists, but no studies actually demonstrate this to be the case. It is also not clear as to the degree to which other motivational factors that this review identified, including cost and proximity of the destination, weigh on Canadian medical tourists' decision making.

The levels of investment by Canadians in medical tourism ventures abroad and by Canadians and others in the domestic industry are not clear from this review. While trade liberalization and privatization within the Canadian health sector may make Canada a more viable destination for medical tourists, it is unclear whether costs for medical services will be

competitive with leading destination countries such as India and Thailand. Given that the financial benefits of medical tourism may be used as an argument for greater privatization of the Canadian health care system, this lack of data on Canada's potential as a destination is problematic.

We recorded anecdotal cases of Canadians seeking Medicare reimbursement for medical tourism expenses, along with reports of lobbying efforts to allow for reimbursement. However, it is not clear what level of support for Medicare reimbursement of medical tourism exists among the Canadian public at large. Moreover, we do not know how many Canadians have sought Medicare reimbursement for medical tourism, how many medical tourists were dissuaded from attempting to be reimbursed, nor how many Canadians have been dissuaded from participating in medical tourism given inconsistencies in reimbursement for care accessed abroad.

Within Canada, medical tourism brokers and hospitals are thought to be key conduits of information. We do not know, however, how many Canadians are aware of medical tourism as a treatment option, how Canadian patients learn of medical tourism, how they decide to pursue specific destinations, nor how or why they become comfortable with the prospect of going abroad for care. These gaps in our knowledge are troubling given the potential impact of this practice on the Canadian health care system. Without knowing how many Canadians are engaging in medical tourism and why they are doing so, we will not be able to determine if their engagement signals deep dissatisfaction with the Canadian health care system and a drift toward a two tier system. These knowledge gaps will create difficulties in coping with other repercussions of medical tourism for Canadian public health. For example, while public health officials need to undertake surveillance to anticipate necessary interventions, we know little about the clinical outcomes of Canadians' procedures abroad, making intervention planning difficult. Moreover, the lack of consultation with Canadian clinicians makes it difficult to know the kinds of public health interventions that may assist them most with helping patients interested in medical tourism.

Limitations

This review faces two primary limitations. First, only English language articles were included in the review. Non-English language articles on medical tourism do exist, though few were cited in the reviewed articles. The large volume of English language sources reviewed indicates a very active discussion in the language. Nonetheless, as Canada is a bi-lingual nation, it is possible that non-inclusion of French sources precluded representation of a distinctly French-Canadian perspective on medical tourism. Second, differing definitions of medical tourism have complicated the production of this review. As we have defined it, medical tourism is intentional travel abroad for non-emergency medical services. Medical tourism is thought to be distinct from ongoing cross-border care arrangements, and raises issues distinct from cross-border care. Because a large portion of the Canadian population lives in close proximity to the US border and cross-border care arrangements with US hospitals and clinics are common in some Canadian provinces, it is possible that some discussions of medical tourism herein could be better labelled as cross-border care. As described in the methods section, however, any sources with a clearly exclusive focus on cross-border care were excluded from this review.

Conclusion

The findings of a scoping review intended to synthesize what is known about Canadian involvement in medical tourism have been presented in this article. This synthesis has revealed

that on the issue of what drives of patients' involvement, the most commonly cited motivation is to reduce waiting time for medical care. Other factors such as cost, enhancing treatment options, and quality of care offered abroad were also noted. In terms of broader Canadian involvement in medical tourism, sources showed that some private business groups and government agencies have sought to establish Canada as a destination for medical tourism. In terms of Canadians seeking health care abroad, the issue of coverage by Medicare is important because there is uncertainty as to whether such care will be reimbursed by provincial health insurance plans. Notably, some federal and provincial officials have begun to lobby for expanding Medicare coverage of medical tourism. These findings are likely to be replicated in other publicly funded systems and by patients who must pay out of pocket for health care abroad. Therefore, these findings are of interest outside of a purely Canadian context.

Medical tourism is frequently regarded as an opportunity to reduce wait times for necessary and elective procedures in Canada and elsewhere. A cause for concern, however, is the prospect of establishing or expanding a two-tier health care system. Whether or not this takes place will be decided by the outcomes of debates about the role of the private sector in the domestic provision of care. These debates concern funding levels of the health care system, wait times for surgeries, and the potential of increased privatization of the medical system. Importantly, the review has revealed a number of pressing knowledge gaps that must be filled if health care policy-makers and administrators are to make effective decisions about issues central to these debates. In Canada and, we suspect, other countries as well, there is a lack of consultation with patients who have gone abroad as medical tourists along with other stakeholders in the industry. Little is known about the level of investment in medical tourism ventures by Canadians and non-Canadians alike. This lack of data means that arguments for greater privatization of public health care systems because of the financial benefits of medical tourism are problematic due to a lack of evidence. Knowledge gaps and debates aside, medical tourism is seen as a viable option of accessing affordable, timely, and/or unavailable care for some patients throughout the world in need of treatment, and is likely to continue to be viewed in such a way into the foreseeable future. If medical tourism is to continue to influence discussions on the future of health care systems globally, then it is urgent that new research replace conjecture in these debates.

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Table 1 - Keyword Search Strategy

Focus	What	Who	Why	Where
Medical tourism Health tourism	Surger* Elective surger* Surgical Procedure* Hospital* Clinic*	Patient Tourist	Decision making Factors Decision Attitudes Motivation Destination choice Tour* Travel Vacation* Adventur* Wait time Wait list Queue Speed Value* Ethic* Privat* Effects Two tier Cost savings Affordability Savings Cost Motivat* Perspective* Distance Quality	Destination Brazil India Thailand South Africa Indonesia Cuba Mexico Philippines Singapore United States Canada

Table 2 - Databases Searched

Database Type	Database	Temporal Period Covered
Academic	Academic Search Premier	1984 - 20/08/2009
	Ageline	1978 - 10/08/2009
	Biomed Central	no recorded start date - 10/08/2009
	Business Source Complete	no recorded start date - 20/08/2009
	Canada Research Index	1982 - 21/07/2009
	CINAHL	1982 - 20/07/2009
	CPI.Q	1988 - 22/10/2009
	EconLit	1969 - 9/08/2009
	Geobase	1980 - 9/08/2009
	Global Health	1973 - 10/08/2009
	Medline	1950 - 9/08/2009
	PAIS International	1972 - 9/08/2009
	PsycINFO	1887 - 10/08/2009
	Sociological Abstracts	1963 - 20/08/2009
	Web of Science	1900 - 10/08/2009
Media	Alternative Press Index	1991 - 20/07/2009
	CBCA Current Events	1982 - 21/07/2009
	Canadian Newstand	1985 - 22/10/2009
	Lexis Nexis	no recorded start date- 22/10/2009

Figure 1 - Search strategy

DETERMINATION OF SCOPING REVIEW QUESTION & SEARCH KEYWORDS SEARCH 18 DATABASES USING KEYWORDS IDENTIFICATION OF ARTICLES FOR TITLE AND ABSTRACT REVIEW 115 articles and reports and 176 media pieces sourced from 18 databases (minus duplicates) INDEPENDENT REVIEW OF TITLES AND ABSTRACTS TITLE AND ABSTRACT REVIEW MEETINGS 91 articles and reports and 176 media pieces selected for full review INDEPENDENT ARTICLE REVIEW IDENTIFICATION OF ADDITIONAL ARTICLES THROUGH HAND SEARCHING 57 new pieces reviewed in full INDEPENDENT ARTICLE REVIEW ARTICLE REVIEW MEETINGS OUTCOME 108 sources accepted for review