

# Wait times for prostate cancer treatment and patient perceptions of care in Canada: a mixed-methods report

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## **ABSTRACT**

**Background** Access to cancer care is a significant concern for Canadians. Prolonged delays between cancer diagnosis and treatment have been associated with anxiety, stress, and perceived powerlessness for patients and their family members. Longer wait times can also be associated with poorer prognosis, although the evidence is inconclusive. Here, we report national wait times for radiation therapy and surgery for localized prostate cancer (Pca) and the effect of wait time on patient perceptions of their care.

**Results** Treatment wait times showed substantial interprovincial variation. The longest 90th percentile wait times for radiation therapy and surgery were, respectively, 40 days and 105 days. In all provinces, waits for radiation therapy were longer for PCa patients than for patients with breast, colorectal, or lung cancer.

In the focus groups and interviews conducted with 47 men treated for PCa, many participants did not perceive that wait times for treatment were prolonged. Those who experienced delays between diagnosis and treatment voiced issues with a lack of communication about when they would receive treatment and a lack of support or information to make an informed decision about treatment. Minimizing treatment delays was an aspect of the cancer journey that participants would like to change because of the stress it caused.

**Conclusions** Although wait time statistics are useful, a review of cancer control in Canada cannot be considered complete unless an effort is made to give voice to the experiences of individuals with cancer. The findings presented here are intended to provide a snapshot of national care delivery for localized PCa and to identify opportunities for improvement in clinical practice.

**Key Words** Prostate cancer, treatment, surgery, radiation therapy, access to health care, qualitative research

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# **INTRODUCTION**

Prostate cancer (PCa) is the most common cancer in Canadian men. It is estimated that, in 2015, 24,000 Canadian men will be diagnosed with PCa, and 4100 men will die from the disease<sup>1</sup>. Depending on risk category, management options for men with localized PCa can include active surveillance, surgery (radical prostatectomy), or radiation therapy (external-beam radiation therapy or brachytherapy), with or without androgen deprivation therapy<sup>2</sup>.

Since the 1990s, an intensive—and appropriate—focus has been placed on the measurement and reporting of quality indicators for cancer care delivery. A commonly used

framework for measurement is based on the Donabedian model for assessing quality of care. The model is based on three key elements: structure, process, and outcomes<sup>3</sup>. Cancer care wait time has become a visible and potentially contentious quality indicator because it is a complex proxy of both structure- and process-related factors<sup>4,5</sup>. However, it can provide useful information when variations across institutions and jurisdictions are studied.

Recognizing the need to address wait time, federal and provincial governments in Canada have dedicated significant resources to wait time reduction. However, studies have demonstrated that wait times for treatment (for example, between the decision to treat and the start

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of treatment) continue to be longer for men with PCa than for individuals with other cancers in Canada's universal health care system<sup>6-11</sup>. Prolonged delays between cancer diagnosis and treatment have been associated with anxiety, stress, and perceived powerlessness for patients and their family members<sup>12-14</sup>. Longer wait times might also be associated with poorer prognosis, although the evidence is inconclusive<sup>14</sup>. Examination of wait times for cancer care across Canada is therefore an ongoing need.

The present report focuses on wait times for radiation therapy and surgery for PCa. Although wait time statistics are useful, a review of cancer care delivery in Canada cannot be considered complete unless an effort is made to give voice to the experiences of individuals with cancer. Specifically, understanding patient experiences enables a deeper understanding of the results obtained from system-level performance reporting. Thus, to complement quantitative data describing wait times for PCa treatment, we also report on relevant findings from focus groups and interviews held across Canada with men treated for PCa.

# **METHODS**

# **Provincial Cancer Registries**

Adult men (≥18 years of age) who received radiation therapy (external-beam radiation therapy or brachytherapy) for PCa in 2013 were identified in each of the provincial cancer registries; registry data were linked to hospital data. Data and analyses of adult men who received surgery to treat PCa in 2014 were provided by the Canadian Institute for Health Information<sup>15</sup>.

Descriptive statistics were generated. Median and 90th percentile wait times are reported. Results for some of the provinces have not been included because of deviations from the data specifications affecting comparability with other provinces.

#### **Focus Groups and Interviews**

Participants included men previously diagnosed and treated for PCa. Eight focus groups and eight semi-structured interviews were conducted to understand the experiences of PCa patients and survivors during their cancer journey. Depending on the interviewer, participants were recruited either through cancer clinics or cancer centres, Prostate Cancer Canada support groups, or Ipsos Reid recruitment panels. In total, 47 men who had been treated for PCa participated. Research ethics board approval was obtained where applicable.

Participants resided in British Columbia, Manitoba, Ontario, Quebec, New Brunswick, and Nova Scotia; most lived in urban centres. Almost all the participants (96%) were between 45 and 80 years of age. The treatment received by most participants was surgery or radiation therapy. Although a few of the participants indicated that they had initially been managed with active surveillance, all eventually underwent definitive treatment. Of the participants, 24% had been treated within the preceding 1–3 years, and 42% had been treated within the preceding 4–6 years.

Interviewers had expertise in any one or a combination of qualitative research, psychosocial research,

patient-centred care, and patient experience in the area of cancer care. All interviewers collaborated on their approach to interviewing participants and used a script of semi-structured, open-ended questions for consistency in data collection. The interview script was prepared based on the phases of the cancer journey (for example, treatment). The main points of each discussion session were reviewed with the participants.

Thematic analysis was conducted on the focus group and interview transcripts. That process identified themes pertaining to the cancer journey and to specific cancer control domains (for example, early detection, diagnosis, treatment, and post-treatment). The subset of the data reported here describes men's experiences with PCa treatment wait times.

## **RESULTS**

Across Canada, wait times for surgery and radiation therapy for PCa patients varied widely. The 90th percentile wait times for PCa surgery—defined as the number of days elapsed until 90% of men had received treatment (from booking date to date of surgery)—ranged from a low of 59 days in New Brunswick to 105 days in Saskatchewan (Figure 1). In general, wait times for surgery were longer than wait times for radiation therapy.

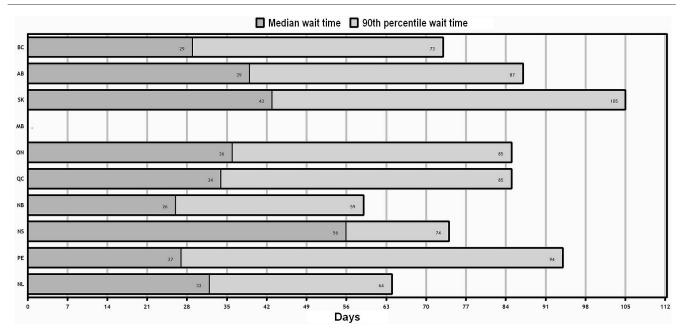
The 90th percentile wait times for radiation therapy (from ready-to-treat to date of treatment) ranged from 18 days in Ontario to 40 days in British Columbia (Figure 2). Only 3 of 8 reporting provinces achieved the target of 90% of patients receiving radiation therapy within the national wait time benchmark of 28 days from ready-to-treat. On average, the wait for radiation therapy was longer for PCa patients than for patients with breast, colorectal, and lung cancers.

In the focus groups and interviews, many participants did not perceive delays in their access to treatment. Participants who experienced a prolonged wait time between diagnosis and treatment voiced issues with a lack of communication about when they would receive treatment and a lack of support or information to make an informed decision about their treatment. Minimizing treatment delays was an aspect of the cancer journey that participants would like to change because of the stress associated with waiting longer for treatment.

The stress of receiving a cancer diagnosis extended beyond wait time concerns; many men discussed how important it was to be supported as they dealt with the emotional impact of the diagnosis and longer-term outcomes (for example, fear of recurrence). However, many men said they had not been made aware of any formal services that could help them deal effectively with the negative emotional effects of having cancer.

## **DISCUSSION AND CONCLUSIONS**

This snapshot of PCa treatment wait times and patient perceptions of their care is intended to further the ongoing discussion about the complex care associated with localized PCa across Canada. Our findings suggest that, interprovincially and interdisciplinarily, treatment wait



**FIGURE 1** Median and 90th percentile surgery wait times for prostate cancer, by province, 2014. Data not available for Manitoba. Alberta data include biopsy as a sole procedure, patient unavailable days, and neoadjuvant therapy. Saskatchewan data include radical prostatectomy cases only. Ontario data include endoscopic cases. In Quebec data, "start date" is the date the surgeon signs the surgical request. Prince Edward Island data include emergency cases and days when the patient was unavailable. Newfoundland and Labrador data exclude suspected cases. Data source: Canadian Institute for Health Information.

times vary substantially for men with PCa. Although some of the reported variation could reflect differences in measurement, the scale of the variations likely reflects actual differences in clinical practice between provinces.

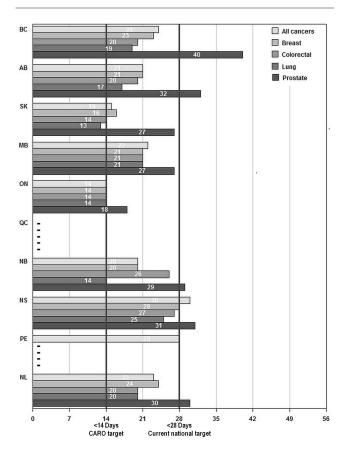
It is apparent that some men experience a significant wait to undergo radical prostatectomy in Canada. In general, wait times for radical prostatectomy were substantially longer than wait times for radiation therapy. Furthermore, waits for radiation therapy were longer for patients with PCa than for patients with breast, colorectal, and lung cancers. Longer wait times might be expected because of the nature of PCa; in many men, PCa is slow-growing, so treatment might be considered less urgent for PCa than for other cancers.

To ensure that Canadians are able to access the same level of health care regardless of where they live, efforts must be made to understand the reasons for interprovincial variations in wait times. Wait times are highly dependent on various disease- and patient-related variables, including risk stratification and patient-driven delays. However those factors would not be expected to vary substantially between provinces. Most interprovincial variation in treatment wait times is likely related to differences in systemicand process-related factors (for example, the number of urologists, availability and triaging of hospital resources).

In the focus groups and interviews, many participants did not perceive delays between diagnosis and treatment. The men who did express concern over prolonged wait times also voiced concerns with the lack of communication about when they would receive treatment. If that finding is further validated in other work, it could represent a very practical and measureable quality initiative to mitigate the stress associated with a prolonged wait time.

Some focus group participants described a lack of awareness of formal services that could help them deal effectively with the negative emotional effects of treatment. That observation is also reflected in findings from the Ambulatory Oncology Patient Satisfaction Survey—a tool developed and administered by the National Research Corporation Canada that assesses the overall experience of cancer patients who receive cancer care services in an outpatient setting at participating cancer centres or hospitals. Survey responses from more than 2000 men diagnosed with Pca in 7 provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Nova Scotia, and Prince Edward Island) suggest that men with Pca are not always provided with timely referrals to providers for support with anxieties and fears. Among respondents who had experienced anxieties and fears16, more than 50% reported having received no referral for further support in the 6 months preceding survey completion. Those findings suggest a gap in the level of awareness of and a perceived lack of referrals to programs and providers that can help with the effective management of the negative emotional effects of cancer and treatment<sup>16</sup>.

The present report has several limitations. The wait time indicators do not measure the appropriateness of care for individual patients; urgency and the need for treatment for each patient must be taken into account to determine if appropriate care was provided. The experiences of participants in the focus groups and interviews are self-reported and thus subject to recall bias. Additionally, convenience sampling from PCa support groups and networks might have led to overrepresentation of men who are comfortable with sharing their thoughts in a group setting, mostly in a positive and constructive manner.



**FIGURE 2** 90th Percentile radiation therapy wait times for prostate cancer, by province, 2013 treatment year. Data not available for Quebec. Individual cancer site data not available for Prince Edward Island. Wait time is from ready-to-treat to start of radiation. CARO = Canadian Association of Radiation Oncology. Data source: Provincial cancer agencies.

In conclusion, treatment wait times, especially for radical prostatectomy, showed substantial interprovincial variation across Canada. From the time they were deemed ready for treatment, patients with PCa in all provinces experienced longer wait times for radiation therapy than did patients with breast, colorectal, and lung cancers. The findings presented here are intended to provide a snapshot of national health care delivery for localized PCa and to identify opportunities for optimization of clinical practice.

More information about the System Performance Initiative indicators and data can be found at the Canadian Partnership Against Cancer's Cancer System Performance Web app (http://www.systemperformance.ca/).

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#### **CONFLICT OF INTEREST DISCLOSURES**

We have read and understood *Current Oncology*'s policy on disclosing conflicts of interest, and we declare that we have none.

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