

# Regional variations in access to orthopaedic care in BC

A study of wait times for a pathologically and geographically diverse group of patients found that the average journey from referral to surgery was worryingly long at 59.5 weeks, and that more regional variation existed for consultation wait times than for surgery wait times.

## ABSTRACT

**Background:** There has been long-standing concern among orthopaedic surgeons regarding timely access to consultation and, if warranted, surgery. On behalf of the British Columbia Orthopaedic Association, we sought to measure aspects of the patient journey from referral to surgery, and to consider regional variations in access.

**Methods:** Currently, 49 orthopaedic surgeons from five BC health authorities contribute anonymized scheduling data to a secure server that aggregates information about key time points: the date a patient is referred for surgical consultation, the date consultation occurs, the date a decision is made regarding surgery, and the date of surgery. Data collected for consultations and surgeries occurring between 1 May and 31 July 2017 were analyzed to establish wait times for patients seen or treated in this 3-month period.

**Results:** Consultations were completed for 4100 patients and surgeries were completed for 1129 patients during the study period. Patients waited 19.5 weeks on average for consultation, with significant regional variation. All health authorities had difficulties with long waits for consultation, with 10% of patients identified as long waiters. Patients waited 34.1 weeks on average for surgery after consent. Less regional variation was seen for average surgery wait times (between 29.4 and 36.3 weeks) than for average consultation wait times (between 15.7 and 31.0). Among patients who had surgery, the average time from referral to surgery was 59.5 weeks, with regional variation between 49.5 and 66.5 weeks.

**Conclusions:** All health authorities in BC have on average long waits for consultation and surgery. Regional variation in access to orthopaedic consultation exists in BC, and the average journey from referral to surgery is worryingly long. Lower wait times for consultation in Island Health, Interior Health,

and Vancouver Coastal Health may be attributed to surgeon-led multidisciplinary clinics that utilize centralized intake and “first available surgeon” strategies to reduce wait times. We believe that standardized recording of patient unavailability dates would help us better understand the situation of patients who experience very long waits, and we remain committed to improving patient access to orthopaedic care by promoting best practices that match the right patient with the right surgeon at the right time. Greater focus on the experience of patients accessing orthopaedic care is required in all regions of BC.

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## Background

British Columbia, like other provinces in Canada, continues to struggle with poor access to orthopaedic care as a result of rationing in the publicly funded health care system.<sup>1-6</sup> Moreover, it is difficult to obtain accurate information regarding access to orthopaedic consultation and surgery in BC. Although a review of the Ministry of Health's surgical patient registry website (<https://swt.hlth.gov.bc.ca>) would suggest access to surgery in BC takes only a few weeks, the British Columbia Orthopaedic Association (BCOA) has long known that patients can wait up to 1 year for nonemergency access to orthopaedic consultation and care.

On behalf of the BCOA, we sought to quantify wait times for consultation and surgery in BC, paying special attention to regional variations in access to care. Data analyzed were from a BCOA wait times initiative (<http://bcoa.ca/information-for-patients/wait-times-for-surgery/>) that began after a detailed privacy impact assessment was performed in collaboration with Doctors of BC and the Specialist Services Committee.

## Methods

Currently, 49 orthopaedic surgeons from five BC health authorities contribute anonymized scheduling data from their electronic medical record (EMR) systems to a secure server that aggregates information about wait times. These surgeons represent approximately 25% of all the full-time orthopaedists in the province. Key time points in the data they contribute are the date a patient is referred for surgical consultation, the date consultation occurs, the date a decision is made regarding surgery, and the date of surgery. A high level of accuracy is assured with the automated extraction of scheduling dates

from the EMR systems of participating surgeons.

Using the anonymized data, we quantified wait times for patients who were either seen in consultation or received surgery between 1 May and 31 July 2017. Patients who waited less than 42 days for consultation or

During the study period, surgeons performed 1129 surgeries. Patients waited 34.1 weeks on average after providing consent for surgery. Less regional variation was noted for the average wait from consent to surgery than for consultation, with a range between 29.4 and 36.3 weeks.

## **BC, like other provinces in Canada, continues to struggle with poor access to orthopaedic care as a result of rationing in the publicly funded health care system.**

surgery were excluded in order to avoid analyzing data for patients seen rapidly after urgent referral from the emergency department while a surgeon was on call.

## Results

During the study period, surgeons completed consultations with 4100 patients seen on a nonemergency basis. Patients waited 19.5 weeks on average for consultation. There was significant regional variation, with a low of 15.7 weeks in Island Health and a high of 31.0 weeks in Northern Health.

All health authorities had difficulties with long waits for consultation, with 10% of patients identified as "long waiters." The wait for consultation in this group was 59.6 weeks on average. Regional variation was also significant, with a range between 38.1 and 84.5 weeks.

Once again however, each region had difficulty with long waiters from consent to surgery with 10% of patients waiting between 68.0 and 95.1 weeks for surgery.

For patients who had surgery during the study period, the time from referral to surgery was 59.5 weeks on average, with regional variation between 49.5 and 66.5 weeks.

## Conclusions

To obtain evidence regarding wait times for consultation and surgery, the BCOA executive determined they would need the accurate and nuanced data available in the EMR systems surgeons use to manage their wait lists and book patients. A data-collection initiative for measuring wait times was originally funded by the Specialist Services Committee and is now funded solely by the BCOA on behalf of its surgeon membership.

We believe that the relatively low wait time of 15.7 weeks on average for consultation in Island Health can be largely attributed to the positive effect of the RebalanceMD clinic in Victoria. We note that both Interior Health, with a consultation wait time of 17.8 weeks, and Vancouver Coastal Health, with a consultation wait time

nonemergency orthopaedic surgery, and have every reason to believe that patients are sustaining mental, physical, and financial harm as a result of these lengthy waits.<sup>7-13</sup> The BCOA also believes that wait time reporting should be more transparent in all health authorities, and that more patient-focused research is required to

fracture and the patient who has waited 2 years for an ankle replacement. In this study we attempted to avoid blending data for two very different patient populations by excluding all patients who received consultations in less than 42 days.

**The BCOA remains very concerned that British Columbians are waiting 59.5 weeks on average for nonemergency orthopaedic surgery... Patients are sustaining mental, physical, and financial harm as a result of these lengthy waits.**

of 25.2 weeks, also have surgeon-led multidisciplinary clinics that utilize centralized intake and “first available surgeon” strategies to reduce wait times for consultation.

Less variation was noted between regions from the time consent was provided for surgery to the date of surgery. We note with interest that despite having the lowest wait times for consultation, Island Health had the highest wait times for surgery. It is our understanding that Island Health is bringing significantly increased surgical capacity on line to deal with this backlog of surgical cases. Improved real-time and cost-effective collaboration between the office of the nonhospital-based surgeon and the hospital surgical booking office is clearly desirable.

The BCOA remains very concerned that British Columbians are waiting 59.5 weeks on average for

better quantify patient experience.

In the United Kingdom, the National Health Service has set a wait-time target of 18 weeks from general practice referral to surgery for 92% of patients. In BC, hospitals try to have patients treated within 1 year of the date the surgeon’s office submits the surgical booking card to the hospital. However, we have observed that when this 1-year target for surgical care is missed, only the patient feels the negative repercussions.

Orthopaedic surgeons provide both urgent care at the request of an emergency room physician, and non-emergency care, most commonly at the request of a patient’s family physician. For example, hip fracture patients are commonly treated within 48 hours of admission. Wait list findings for both consultation and surgery can be confused by EMR-based data that capture both the patient who has a hip

**Impact of wait times**

This study captured wait times for a pathologically and geographically diverse group of patients, including patients waiting for hip replacement in Prince George, knee surgery in Trail, or shoulder surgery in New Westminster. For orthopaedic patients, long wait times can have a significant impact on quality of life and mental and emotional well-being.<sup>1,7-9,11</sup> The literature suggests that the impact of waiting varies by condition. For cancer and conditions involving the circulatory system, including the heart, long wait times can lead to sudden adverse events, disability, or death.<sup>14-16</sup> Our daily hospital experience indicates that many other procedural specialties are significantly affected by long wait times for care.

**Study limitations**

The limitations of this study are those inherent to any study that attempts to quantify the experience of an entire provincial population while sampling only a portion of it. We believe this to be especially true for Fraser Health, where our sampling rate was the lowest. We anticipate that the BCOA will have more surgeons participating in this data collection and analytic process in the near future.

We believe that standardized recording of patient unavailability dates would help us better understand the situation of patients who experience very long waits.

The BCOA remains committed to improving patient access to orthopaedic care by reporting on wait times

and promoting best practices that will help match the right patient with the right surgeon at the right time.

## Summary

Regional variations in access to orthopaedic consultation exist in BC. While there is less variation in wait times for surgery than for consultation, the average journey from referral to surgery is worryingly long at 59.5 weeks. Greater focus on the experience of patients accessing orthopaedic care is required in all regions. [BMJ](#)

## Competing interests

None declared.

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## Regional variations in access to orthopaedic consultation exist in BC.