



BC SURGICAL PATIENT REGISTRY

Provincial Health
Services Authority



BC Surgical Patient Registry (SPR)

BACKGROUND

May 2020

Mission Statement

To collect and standardize quality provincial surgical data for use by surgeons, hospitals, regional health authorities, and the Ministry of Health to enable informed decision-making and to improve clinical outcomes for patients.

What is the SPR?

The SPR is a province-wide system collecting data on patients waiting for surgery in BC. Patient information and procedure-related data are uploaded from the hospital operating room booking systems into the web-based registry and used to evaluate, monitor, and manage surgical wait times across regional health authorities (HAs).



The focus of the SPR is to gather information on all surgical and endoscopy patients, both adult and paediatric, to support surgical decision-making.

Managing waitlists and reliable reporting is of importance to patients, family physicians, surgeons, HAs, provincial clinical services, and the Ministry of Health (MOH). The SPR provides a consistent approach for prioritizing patients on wait lists, as well as the ability to monitor a patient's place on a surgical wait list, and compare services across jurisdictions. Wait time data is also collected on performed cases.

The ultimate goal is a provincial standardized repository of patient case data with a focus on transparency, consistency, and fairness. The data captured by the system provides a basis for ongoing improvement toward this goal.

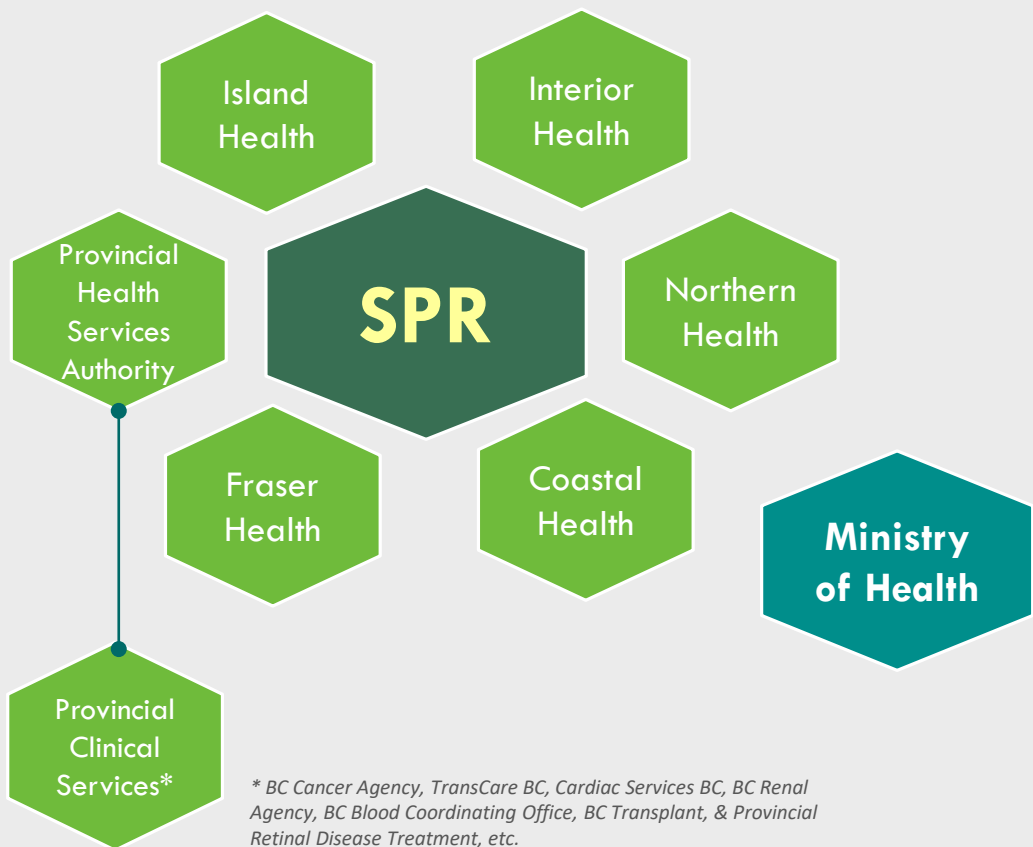
Benefits of SPR Data:

- ❖ Centralized repository of provincial surgical case data
- ❖ Surgical data reported within 24 hours
- ❖ Provincial ly standardized definitions and targets
- ❖ System generated notifications for patients waiting for surgery
- ❖ Custom comprehensive and timely reports
- ❖ Provincially standardized data quality
- ❖ Provincial hip and knee replacement prosthesis library

Partnerships

Collaborating with the Ministry of Health (MOH) and all regional health authorities in BC are core components to:

- ✓ Developing province-wide standardized solutions
- ✓ Identifying opportunities for future improvements



825 *health care professionals*
currently use the SPR

(this includes health authority management, data analysts, OR booking offices, surgeons, and the Ministry of Health)

Standardization of Provincial Surgical Data



The SPR creates a high level of surgical data quality and serves as an important function to ensure feedback processes are standardized in BC.

Diagnosis-based Prioritization Codes

- New provincial code set was implemented in 2010 to standardize surgical wait times for both adult and pediatric patients
- Triage surgical interventions based on clinical diagnoses rather than procedures
- Sets provincial benchmark for wait times
- Comparable across HAs and specialties
- Promotes surgeon autonomy and clinical need for surgical interventions

Procedure Codes and Groupings

- Each HA procedure code is mapped to a standardized provincial SPR code
- SPR codes allow reporting across HAs on similar procedures
- SPR procedures can be grouped for MOH and provincial program reporting

National Canadian Classification of Health Interventions (CCI) Codes

- National code set that classifies a broad range of health care interventions
- Each HA procedure code is mapped to a CCI code
- Groups are based on body area and approach
- Provides more granularity for analysis and reporting

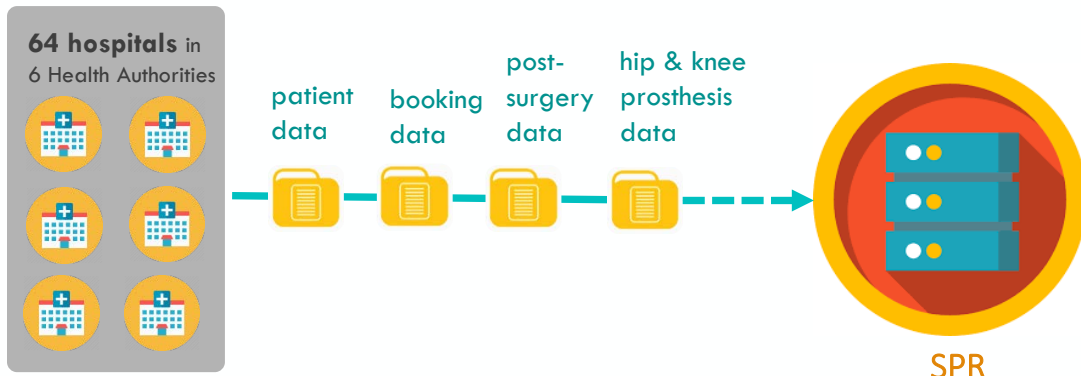
Attributes

- Allows for identification of procedures by procedure group (eg: all cancer procedures)
- Invaluable tool for reporting and data validation
- Best method to distinguish between surgical and non-surgical procedures (prior to endoscopy collection, all procedures were assumed to be surgical).

DATA SUBMISSION

100% of all hospitals performing surgery in BC submit data to the SPR. Booking details for each patient, including post-operative information, is submitted daily to the SPR.

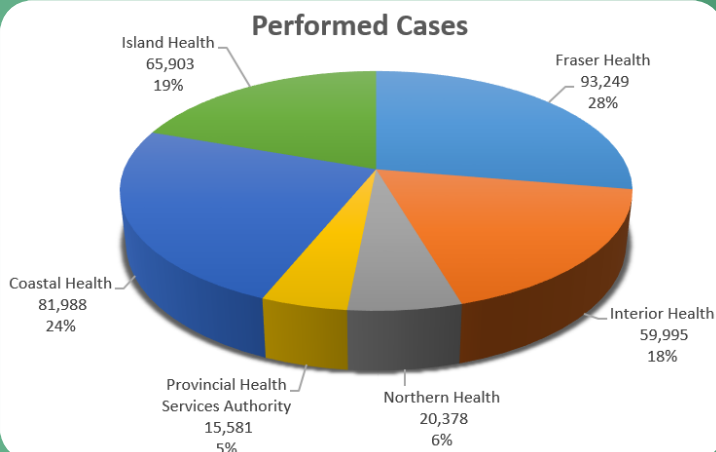
Health Authorities upload patient and procedure data daily to the SPR



Incoming data is validated with a set of validation rules and a feedback process for error correction. The error maintenance module in SPR provides users the ability to report, query, and analyze any outstanding errors identified by the daily validation process.

377,094

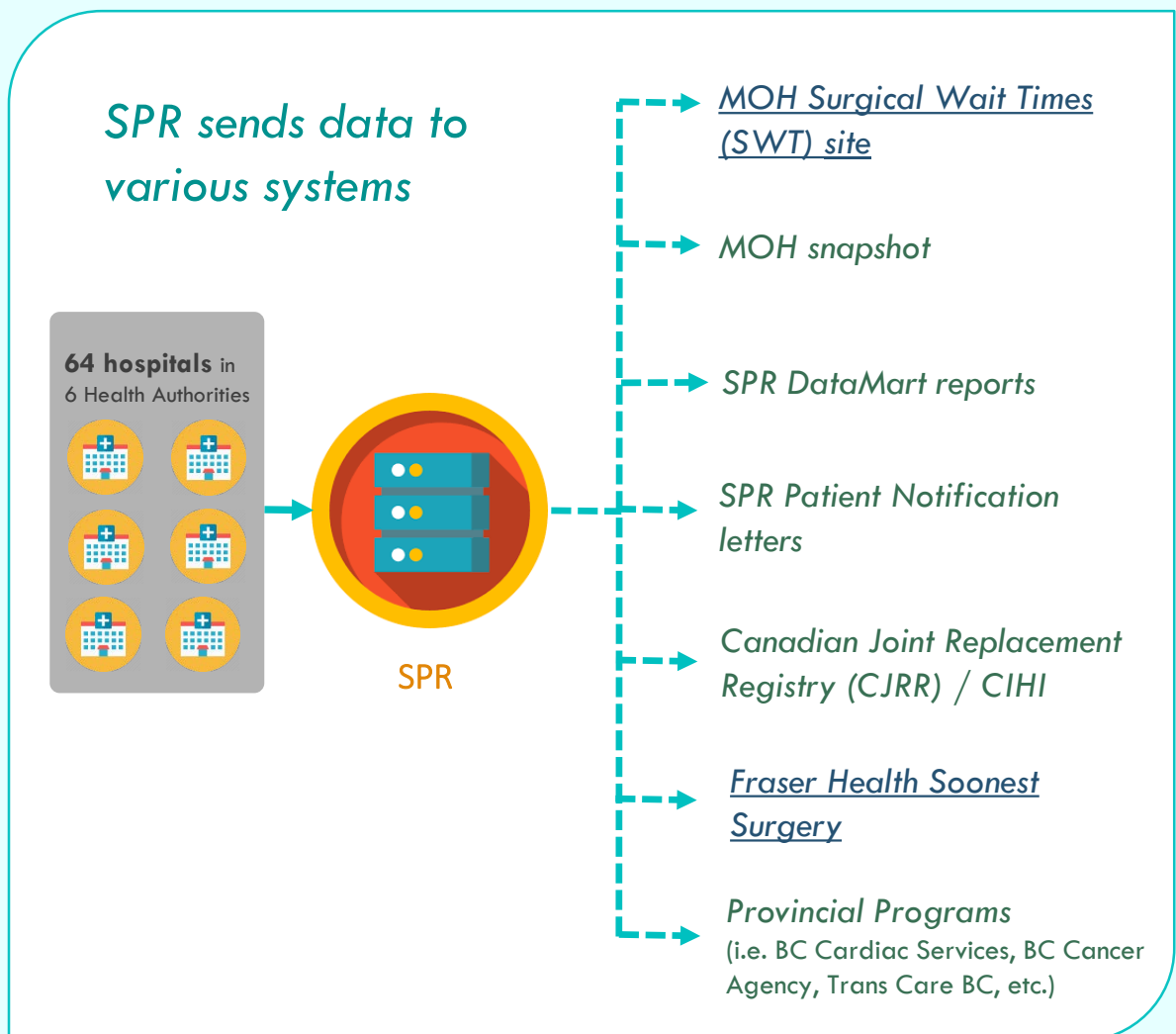
**performed
surgical cases**
were reported to the
SPR between April
2019 and March
2020.



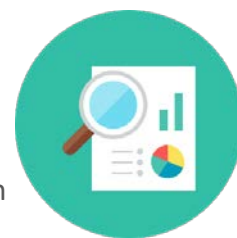
DATA USAGE

The SPR delivers standardized surgical data to various provincial and national systems through the web application, scheduled extracts and the SPR DataMart reporting site.

SPR data is used to populate the [MOH Surgical Wait Time \(SWT\) public website](#). The data available on the SWT website provides patients with information on scheduled wait times for a particular procedure, by surgeon and surgeon specialty, in each HA in the province. The website is updated bi-monthly with data from the SPR.



Reporting Data



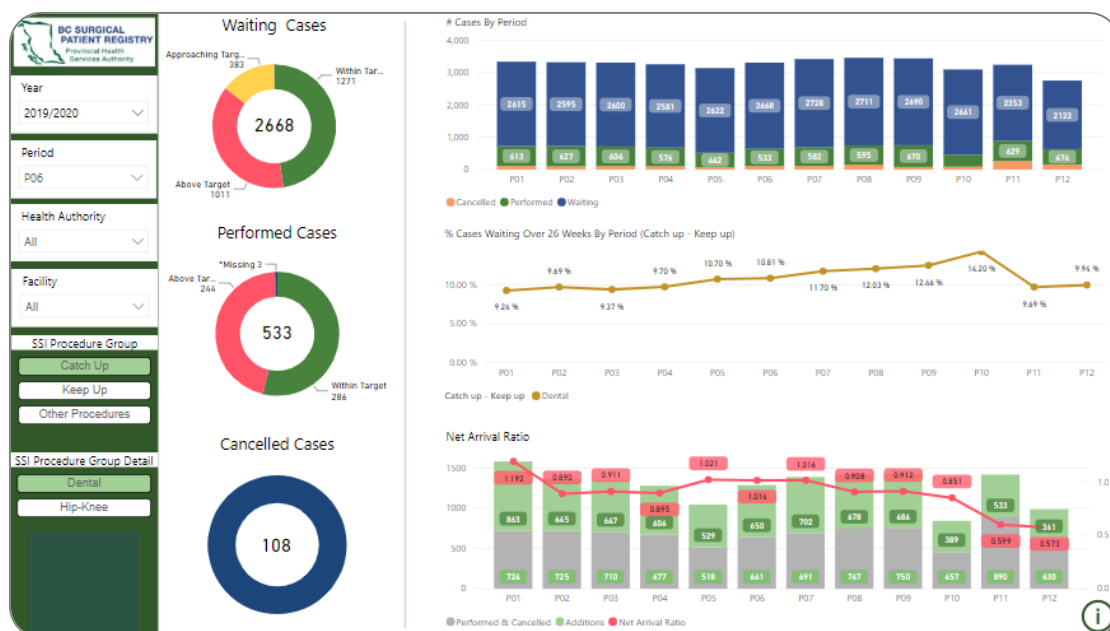
The SPR provides several reporting options for use by regional health authorities, surgeons, and the Ministry of Health.

SPR data is available for reporting purposes between 24 and 48 hours after entry of patient data into the operating room booking system.

Benefits of SPR Reporting:

- ❖ Provincial summary data
- ❖ Health Authority detailed patient data
- ❖ Custom reports with parameters for user selection
- ❖ Regularly scheduled quality assurance reports
- ❖ Customized surgeon-specific reports
- ❖ Customized dashboards to report on provincial initiatives

SPR dashboards offer a dynamic, interactive display of data



Key Milestones



❖ GI Endoscopy Data Collection

The need was identified to move GI Endoscopy data collection from a time-consuming manual process of aggregate data, to record-level collection in a central repository. MOH and HAS supported using the SPR for GI Endoscopy data collection to streamline the process and resolve data gaps. SPR developed and implemented new validation and the ability to report this data provincially in March 2020.

❖ Patient Notification Project

In August 2018, the SPR implemented the MOH-mandated patient notification initiative across BC. The objective of this initiative has been to improve the patient experience towards their scheduled surgery by providing better patient-centered communication. This notification informs the patient they have been placed on the surgeon's surgical wait list and provides a health authority point of contact should they have questions or concerns. The notification may also include the estimated wait time for the patient. The HAS use the SPR to manage and maintain letter distribution to patients.

The SPR Central Office, in collaboration with a provincial working group, developed the methodology to calculate the patient's estimated wait time using a weekly snapshot based on historical data, for a particular surgeon, by procedure and facility.



14,700 *patient notifications*
were sent in Feb 2020



❖ Hip & Knee Surgery Reporting



In October 2012, the SPR together with the MOH and HAs implemented collection of hip and knee prosthesis data in the SPR.

The SPR sends provincial prosthesis data to the Canadian Joint Replacement Registry (CJRR) on a quarterly basis. CJRR serves as the country's leading source of information on hip and knee replacement surgery. The Canadian Institute for Health Information (CIHI) uses CJRR and other data sources to understand aspects of joint replacement such as hospitalizations, patient demographics, clinical issues, wait times and outcomes.

The SPR developed a provincial prosthesis library to support the process for submitting and validating prosthetic device information from the HAs. Currently, the prosthesis library contains hip and knee prosthesis data, but could be expanded to include other prosthetic devices, such as pacemakers and lenses.

As a centralized repository of surgical case data (including implants), the SPR is ideally situated to track implant usage. This data is available to be utilized by other program areas and purchasing departments for various financial and inventory tracking requirements.



CONTACT



[SPR Website](#)



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