BC Surgical Patient Registry

(SPR)

BACKGROUNDER

Mission Statement

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

What is the SPR?

The Surgical Patient Registry (SPR) is a province-wide system collecting surgical and gastrointestinal (GI) endoscopy data for patients in British Columbia (BC).

Adult and pediatric surgical and GI endoscopy procedures performed in publicly funded facilities, scheduled or unscheduled, are collected by the SPR.
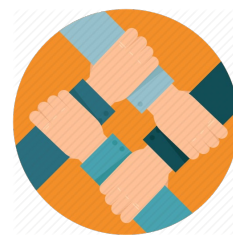
The SPR ensures high quality standardized data based on wait time targets with a focus on transparency and equity for patients, care providers, and the Ministry of Health (MOH).

Benefits of SPR Data:

- ❖ Centralized data warehouse of BC surgical data
- ❖ Data uploads are electronically transferred every 24 hours
- ❖ Provincial standardization of data, definitions and wait time targets from 6 health authorities
- ❖ Alignment with MOH Surgical Wait List Management Policy
- ❖ System generated notifications for patients waiting for surgery
- ❖ Custom comprehensive and timely reports
- ❖ Provincial hip and knee prosthesis library

Partnerships

The SPR is a provincial program within Provincial Health Services Authority (PHSA) collaborating with the Ministry of Health, health authorities and provincial clinical programs to report on BC surgical data.

BC Surgical Patient Registry

- Fraser Health
- Interior Health
- Northern Health
- Ministry of Health
- Provincial Health Services
- Provincial Clinical Programs
- Island Health
- Coastal Health

925 health care professionals currently use the SPR
(this includes health authority management, data analysts, OR booking offices, care providers, and the Ministry of Health)

Standardization of Provincial Surgical Data

The SPR is instrumental in ensuring data and processes are consistent in BC.

Diagnosis-based Prioritization Codes

- Wait time targets are set by a patient's need for surgery (diagnosis) rather than by procedure.
- Standardized wait times ensure equitable access to surgery across BC.
- Adult wait time targets are maintained by the SPR and ensures a provincial consistency.

- Pediatric wait times are aligned with the national pediatric Canadian Access to Surgery (PCATS).
- Clinical subject matter experts review and approve diagnoses and associated wait time targets.

Procedure Codes and Groupings

- Each health authority procedure code is mapped to a standardized provincial code to ensure consistent reporting.
- Provincial procedure codes can be further grouped for population-based reporting such as cancer, cardiac, or gender affirming procedures.

Attributes

- Attributes are an additional layer of information assigned to an health authority procedure code.
- Identifies health authority procedures for GI endoscopy, hip and knee, and cancer cases.

- Valuable tool for reporting and data validation.

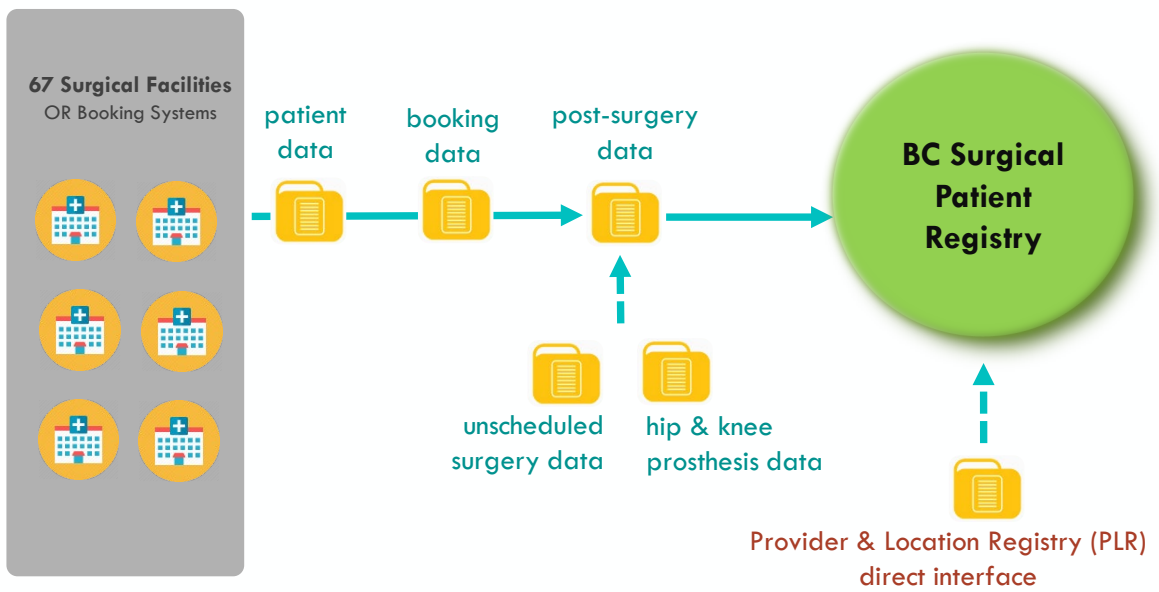## National Canadian Classification of Health Interventions (CCI) Codes

- Each health authority procedure code is mapped to a CCI code.
- CCI code mapping allows for data comparison by body area or intervention reporting.

Data Submission

Publicly funded surgical facilities in BC submit data to the SPR in compliance with the MOH Surgical and GI Endoscopy Wait List Management Policies.

Scheduled and unscheduled surgical data is submitted daily to the SPR.

Electronic data transfers occur nightly through a batch upload from operating room booking systems to the SPR application.

67 Surgical Facilities
OR Booking Systems

patient data

booking data

post-surgery data

unscheduled surgery data

hip & knee prosthesis data

Provider & Location Registry (PLR) direct interface

BC Surgical Patient Registry

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

The SPR maintains a direct interface with the MOH Provider and Location Registry (PLR) to obtain current and accurate information on care providers.
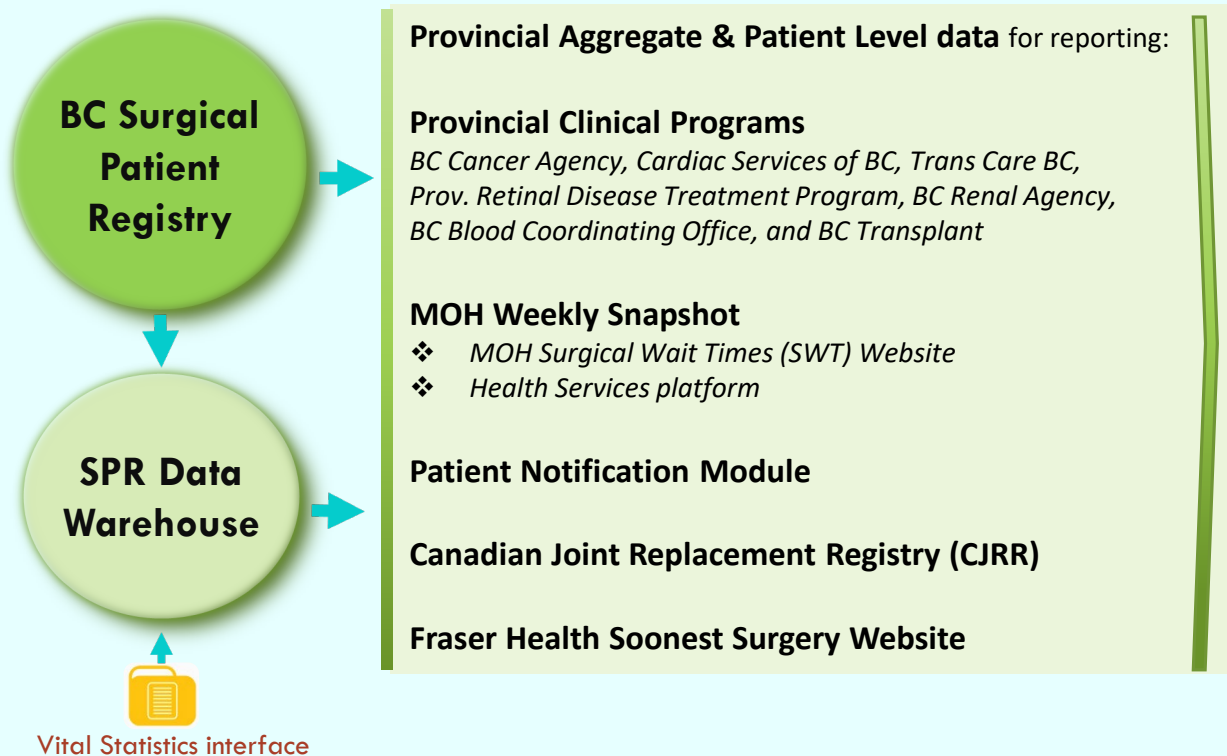
Data Usage

The SPR data is utilized by a variety of provincial and national programs to support:

> ❖ Waitlist management policies
> ❖ Public surgical wait time reporting
> ❖ Data modeling
> ❖ Funding and resource allocation
> ❖ OR utilization
> ❖ Pandemic response planning and projections

The SPR application electronically transmits data to the SPR data warehouse every 24 hours.

The SPR data warehouse interfaces with Vital Statistics daily to allow SPR users to audit active wait lists for potentially deceased patients.

BC Surgical Patient Registry

SPR Data Warehouse

Vital Statistics interface

Provincial Aggregate & Patient Level data for reporting:

Provincial Clinical Programs
BC Cancer Agency, Cardiac Services of BC, Trans Care BC, Prov. Retinal Disease Treatment Program, BC Renal Agency, BC Blood Coordinating Office, and BC Transplant

MOH Weekly Snapshot
❖ *MOH Surgical Wait Times (SWT) Website*
❖ *Health Services platform*

Patient Notification Module

Canadian Joint Replacement Registry (CJRR)

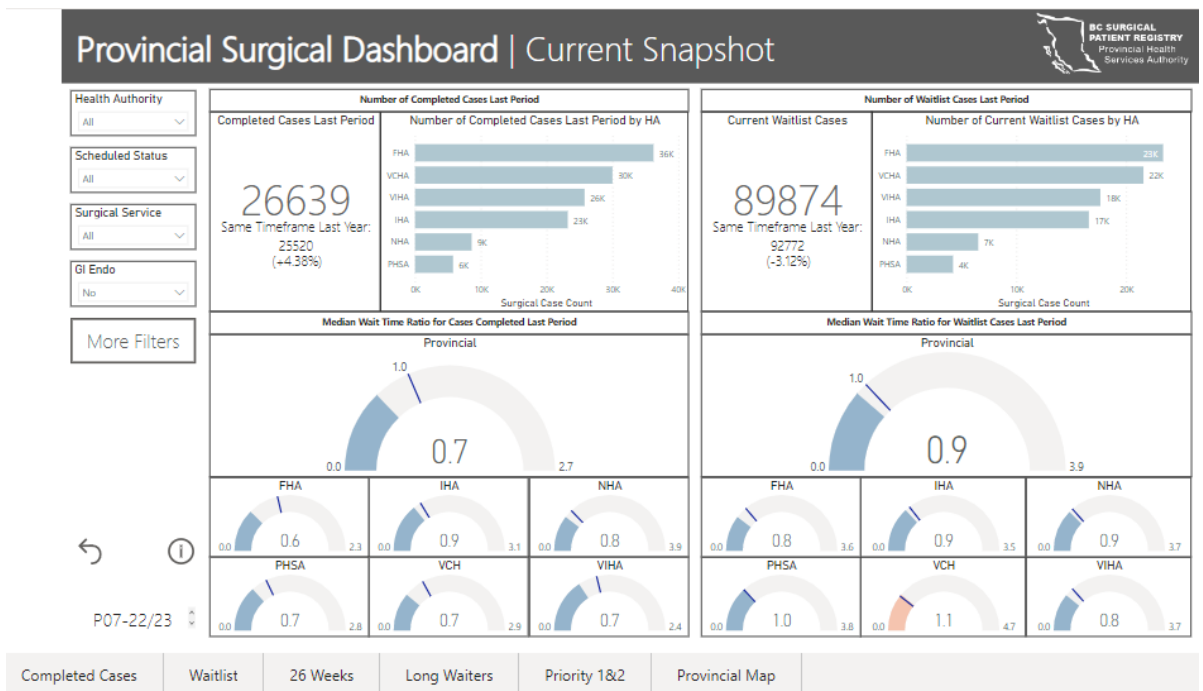**Fraser Health Soonest Surgery Website**

SPR Data Warehouse

The SPR data warehouse provides cloud-based reporting for health authorities, care providers, and the Ministry of Health.

Data is available 24 to 48 hours after entry of patient data into the operating room booking system.

Benefits of SPR Reporting:

- ❖ Provincial summary data
- ❖ Detailed case data
- ❖ Customizable reports
- ❖ Regularly scheduled quality assurance reports
- ❖ Interactive provincial dashboards

Dashboards offer a dynamic, interactive display of data

Provincial Surgical Dashboard | Current Snapshot

Highlights

❖ Patient Notification

In 2018, the SPR implemented the patient notification module to support the MOH Surgical Wait List Management Policy. This initiative has improved the patient experience by providing an estimated wait time based on surgeon data along with a health authority point of contact for questions or concerns. The HAs use the patient notification module in the SPR web application to manage patient communications, letter distribution, and to audit wait lists for patients waiting over target or deceased.

❖ GI Endoscopy Data Collection

To support the MOH GI Endoscopy Wait List Policy, in March 2020, the SPR developed and implemented new functionality and validation to report case-level GI endoscopy data provincially. This eliminated a time-consuming manual process to streamline reporting and resolved data gaps.

23,200 **patient notifications** *were sent in Sept 2022*

❖ Hip & Knee Surgery Reporting

On a quarterly basis, the SPR sends provincial hip and knee prosthesis data to the Canadian Joint Replacement Registry (CJRR). CJRR serves as Canada'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, outcomes, and prosthesis recalls.

The SPR developed a provincial prosthesis library to support the process for submitting and validating prosthesis device information provincially. The reporting and validation structure remains one of the highest in Canada.

The prosthesis library can be expanded to include other prosthesis, such as implants, lenses and cardiac devices, to improve and guide provincial purchasing and patient outcomes.

CONTACT

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