



Using Technology to Enable BC's COVID-19 Immunization Response and Beyond

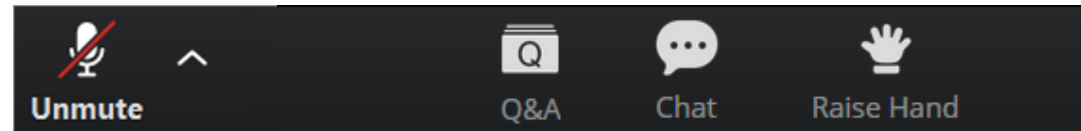
Nov 16, 2022

Housekeeping

Control Panel:

By default the control panel is set to auto-hide.

By moving your cursor to the bottom of the screen the control panel will appear. The control panel includes the mute, chat, raise hand and Q&A functions.



Mute: By default, you will be put on Mute when you join the Webinar.

Video: By default, your video will be off when you join the Webinar.

Chat: If you have any technical questions or need assistance, please let us know in the chat box.

Q&A: You can submit questions in the Q&A box. Please upvote questions that you find interesting! As time permits, the moderator may review the Q&A box to influence the conversation or ask a particularly burning question.

Land Acknowledgement



***HIMSS is a global advisor and thought leader
supporting the transformation of the health
ecosystem through information and technology.***

As a mission-driven non-profit, HIMSS offers a unique depth and breadth of expertise in health innovation, public policy, workforce development, research and analytics to advise global leaders, stakeholders and influencers on best practices in health information and technology.

With more than 350 employees, HIMSS has operations in:

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Vision

To realize the full health potential of every human, everywhere.

Mission

Reform the global health ecosystem through the power of information and technology.

BCHIMSS Mission:

Promote understanding for the efficient exchange and effective utilization of information and information technologies within BC's healthcare environment.



Organizational Affiliate Members

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First Nations Health Authority
Health through wellness



Interior Health



Provincial Health
Services Authority



*Thank you to
Digital Health
Week Partners
and our 2022
Visionary
Sponsors*



Welcome!

- **May Tuason** - RN, BScN, MBA - Director, Clinical Architecture and Innovation, Digital Health Strategy Office, Provincial Digital Health Team
- **Elizabeth Lee**, RN, BScN - Director, Clinical Informatics, Public Health Information Systems
- **Greg Saxon**, BCS, Director, Consulting Expert | BC Health Sector, Western Business Unit | CGI
- **Renaldo Scalabrino**, MEng, Senior Enterprise Architect / Manager – Application Architecture

PROVINCIAL DIGITAL HEALTH
MINISTRY OF HEALTH | PROVINCIAL HEALTH SERVICES AUTHORITY



ImmsBC: BC's COVID-19 Vaccine Digital Platform

May Tuason, Digital Health Strategy Office



*We gratefully acknowledge that we are gathered on the
traditional and ancestral lands of the x^wməθk^wəyəm
(Musqueam), Sk̓wx̓wú7mesh (Squamish), and səlilwətał (Tsleil-
Waututh) Nations
in this place currently known as Vancouver
where my family and I live, work, and play.
First Nations have been responsible for stewarding
this land since time immemorial and we give thanks
as uninvited guests on these lands.*



Provincial Health
Services Authority

Disclosure

- I have nothing to disclose

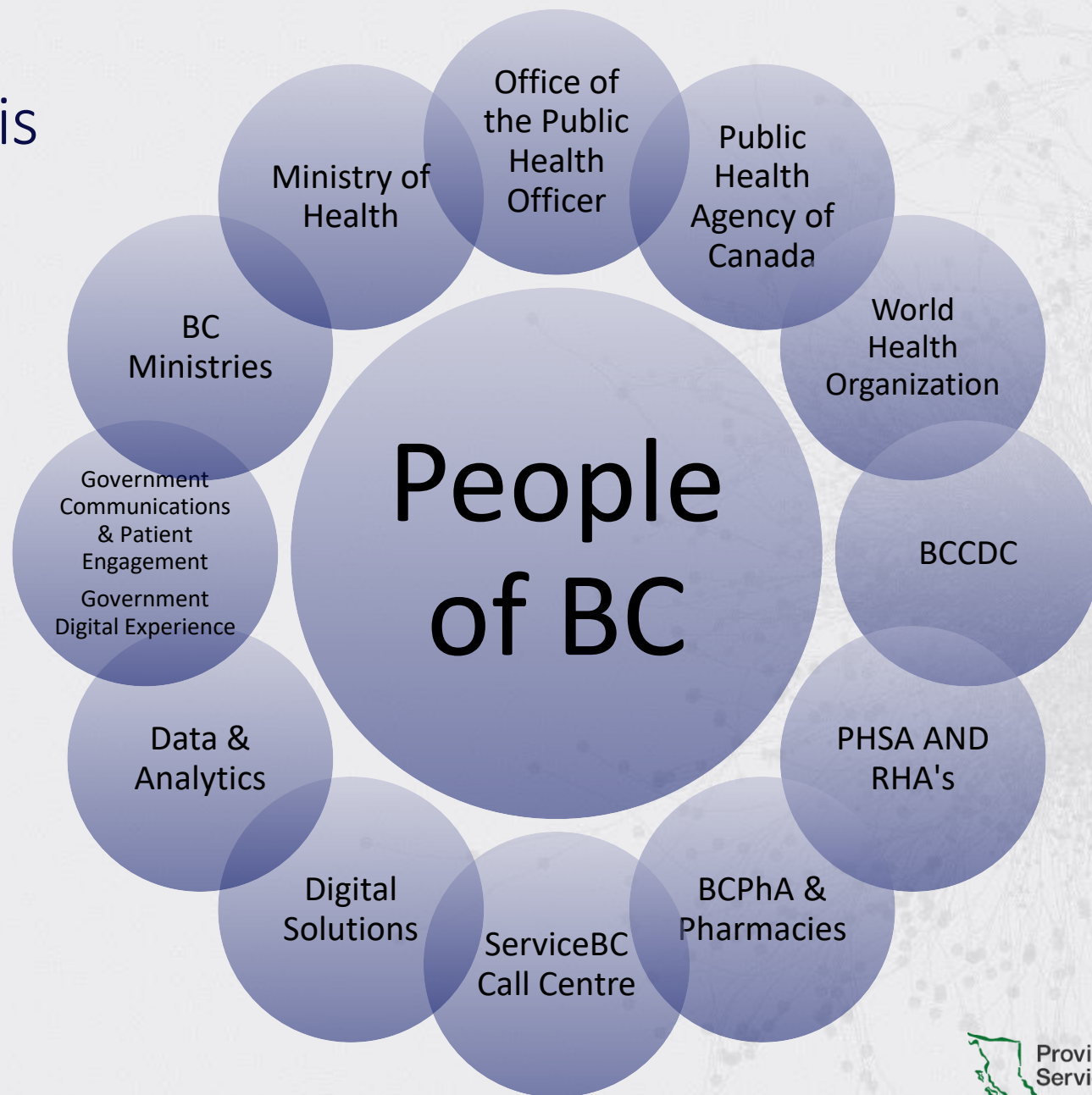
Well-Being

- Mental health and anxiety support: www.bouncebackbc.ca
Or: www.anxietycanada.com
Or: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/mental-well-being-during-covid-19>
Or: <https://www2.gov.bc.ca/gov/content/health/managing-your-health/mental-health-substance-use/virtual-supports-covid-19>



BRITISH
COLUMBIA

We're All In This Together!





Hear an encouraging message from Malia to her cousin about getting her COVID-19 vaccine.

because it painful.





[Home](#) > [COVID-19](#) > [Vaccination, immunization and treatments](#) >

How to get vaccinated for COVID-19



Getting vaccinated is easy and safe. Spread the word and help your friends and family get vaccinated.

[English](#) | [繁體中文](#) | [简体中文](#) | [Français](#) | [ਪੰਜਾਬੀ](#) | [فارسی](#) | [Tagalog](#) | [한국어](#) | [Español](#) | [عربی](#) | [Tiếng Việt](#) | [日本語](#) | [हिंदी](#)

Last updated: **April 21, 2022**

Getting vaccinated is easy

Be prepared and get help



ImmsBC Vaccine Management Digital Platform



Citizen Registration, Notifications & Reminders

- Multi-Channel Registration (On-line, Phone, Walk-in)
- 140 languages supported through a contact centre translation service
- Low barrier “expression of interest” and notification to book appointment
- Reminders to book



Provincial Call Centre Appointment Booking

- Multi-Channel appointment booking (On-line, Phone, Walk-in)
- 140 languages supported through a contact centre translation service
- Solution enables the loading and management of clinic locations, hours and appointment schedules
- Solution “builds” the mass imms event clinic list
- Appointment reminders



Inventory Supply Console

Enables tracking of inventory including:

- Loading and management of vaccine inventory
- Transfers
- Received
- Wastage



Clinician Experience

Enables the clinic workflow and streamlined citizen experience including:

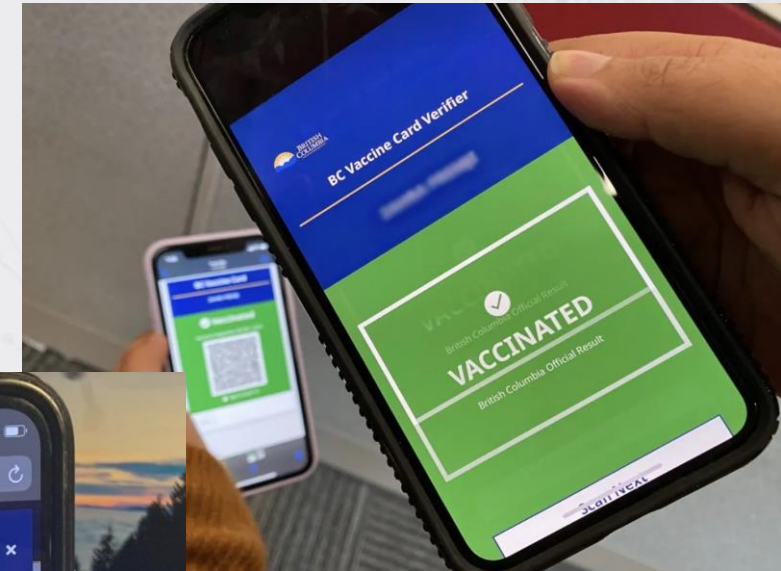
- Loading and management of vaccine inventory
- Appointment check-in validation of client identity
- Vaccine administration
- In alignment with clinical documentation standards



Reporting & Analytics

Supports Federal, Provincial and Health Authority Reporting for each component, for example:

- Clinic Operations
- Inventory management
- Daily doses administered
- Integrates with Pharmanet To support billing processes



Register and book with the Get Vaccinated system

You can register yourself or someone else, like a parent, grandparent or child. We will never ask you for your SIN, driver's licence number or credit card details.

Once you've registered, you'll be able to book an appointment using your confirmation number. Booking an appointment online or by phone convenient and guarantees your vaccination at a community pharmacy or vaccination clinic near you.

If needed, you can [easily reschedule your appointment online](#).

Fastest option: Online

To register online, you **must** provide:

- First and last name
- Date of birth
- Postal code
- Personal Health Number (PHN)
- An email address that gets checked regularly **or** a phone number that can receive text messages

Find your PHN on the back of your B.C. driver's licence, BC Services Card or CareCard.

[Register online](#) **It takes 2 minutes**

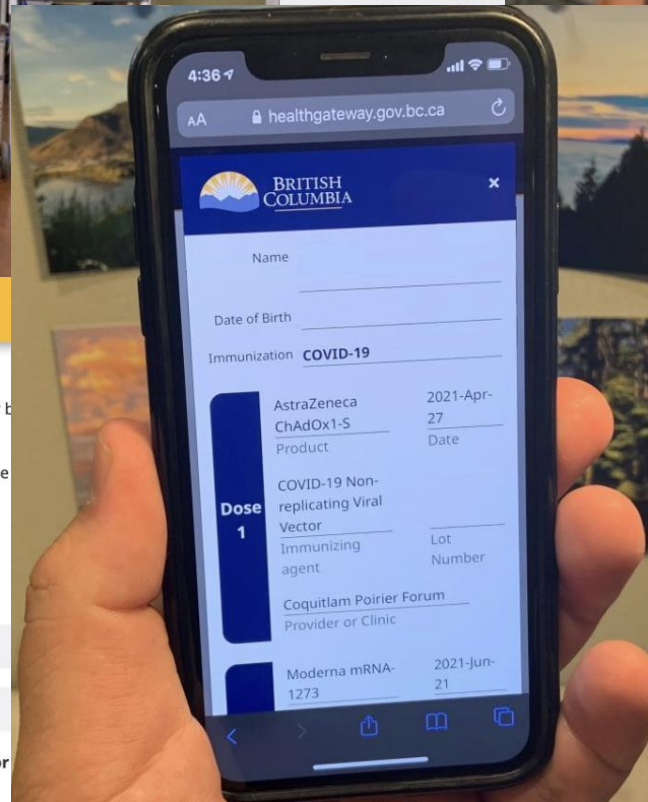
Other registration and booking options

By phone – Pick this option if you don't have a PHN

At a Service BC office

Everyone can get vaccinated, even if you don't have a PHN or documentation.

It doesn't matter if you are a Canadian citizen or not. Register even if you have already received dose 1 in another location. All of your information will be kept private and will never be shared with other agencies or parts of government.



Submit my COVID-19 immunization record

- 01 Vaccination Document
- 02 Vaccination Information
- 03 Personal Information
- 04 Submit Form

Vaccination document

If you don't have all the information below, you need to register by phone.
Call: [1-833-838-2323](tel:1-833-838-2323) | Translators are available
Seven days a week, 7 am to 7 pm (PDT)
Telephone for the Deaf: [711](tel:711)

Personal Health Number

Find your Personal Health Number on the back of your B.C. driver's licence, BC Services Card or CareCard

Upload your official immunization record

- Please upload all documents you will be submitting. For example, an immunization card or record from a physician's office.

ImmsBC By The Numbers

**> 4.5 MILLION
CITIZENS
REGISTERED**

**~ 14 MILLION
VACCINATIONS
DOCUMENTED**

**> 70 MILLION
SMS
NOTIFICATIONS**

**> 36 MILLION
EMAIL
MESSAGES**

**> 18 MILLION
BOOKED
APPOINTMENTS**

**> 1.4 MILLION
FEDERAL PROOF OF
VACCINATION
RECORDS
DOWNLOADED**

**> 4 MILLION
VACCINE CARDS
DOWNLOADED**

**Record-breaking
vaccinations in first
week of Influenza
Campaign 2022!!**

97%
PATIENT
SATISFACTION

87%
PROVIDER
SATISFACTION

90%
VACCINATION
COVERAGE


COST PER
CAPITA

Defining Our Program Success Factors

What did our success look like? What do we aim for if we want to *'IMMSBC'* future provincial projects?



**Better experience for
British Columbians**



**Better access to information
for all**



**Clear leadership and
governance**



**Agile response to program
and public needs**



Positive Provider Experience



**Integrated operations,
systems & communications**



Innovative service delivery



**Effective use of
communications resources**



**Agile & practical technical
design**



**Simplified inventory,
supply chain and logistics**



**Protected population, better
population health**



**Regular research and
feedback from the public**



**Outcomes-based program
planning**



**Everyone's expertise was
recognized**



**Responsive decision-
making & funding support**

Top 5 Best Practice Recommendations

Agile Business
Processes
(decisions,
funding,
coordination)

Clear Vision
&
Citizen-
Centered Goal

Agile
Technical
Delivery
Beginning
with MVP

Clear
Leadership
&
Accountability

Become a
true Learning
System with
real-time use
of data

BC HIMSS Digital Health Week

Using Technology to Enable BC's COVID-19 Immunization Response and Beyond

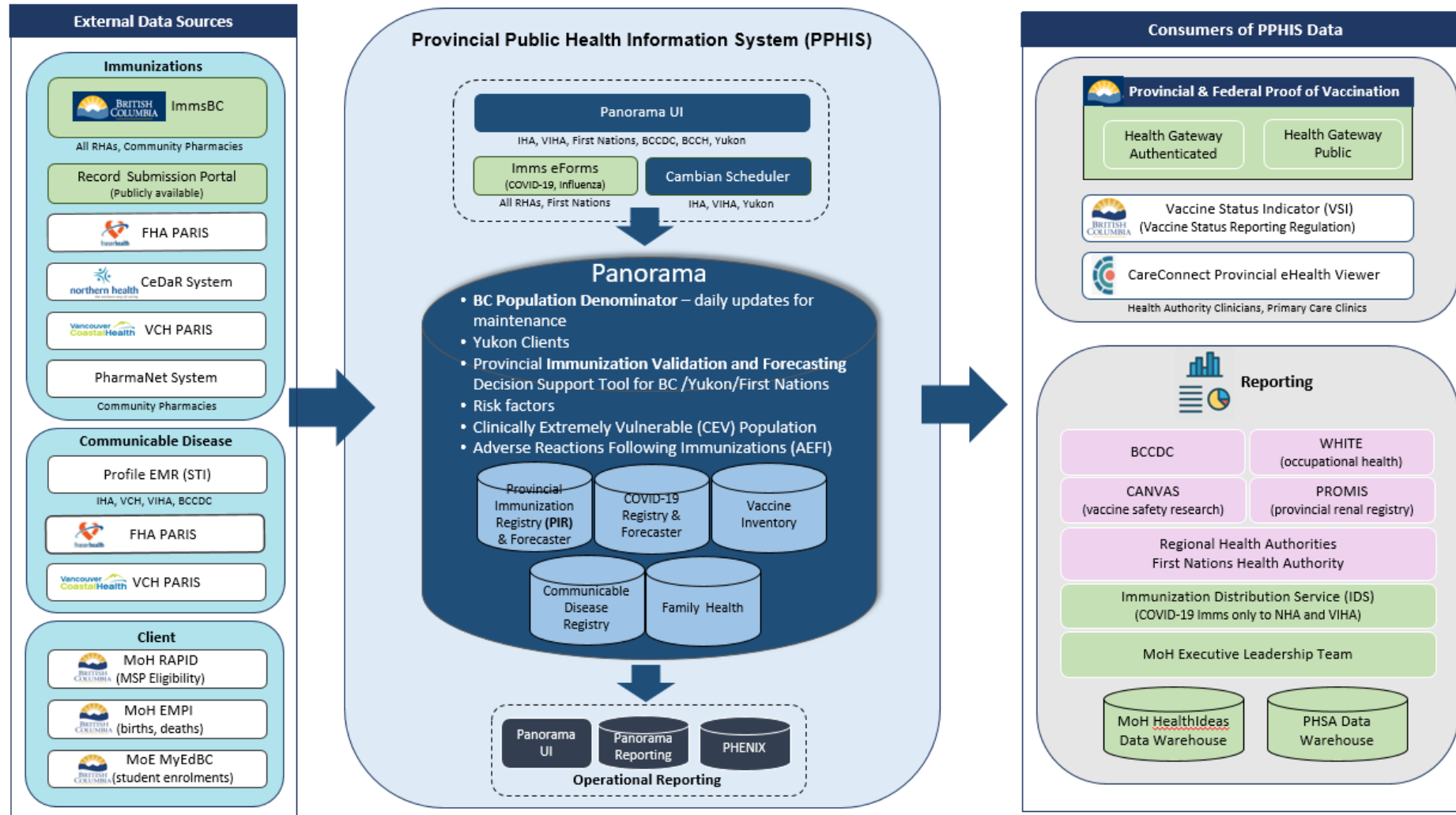
Elizabeth Lee, Director Clinical Informatics PHSA

November 16, 2022



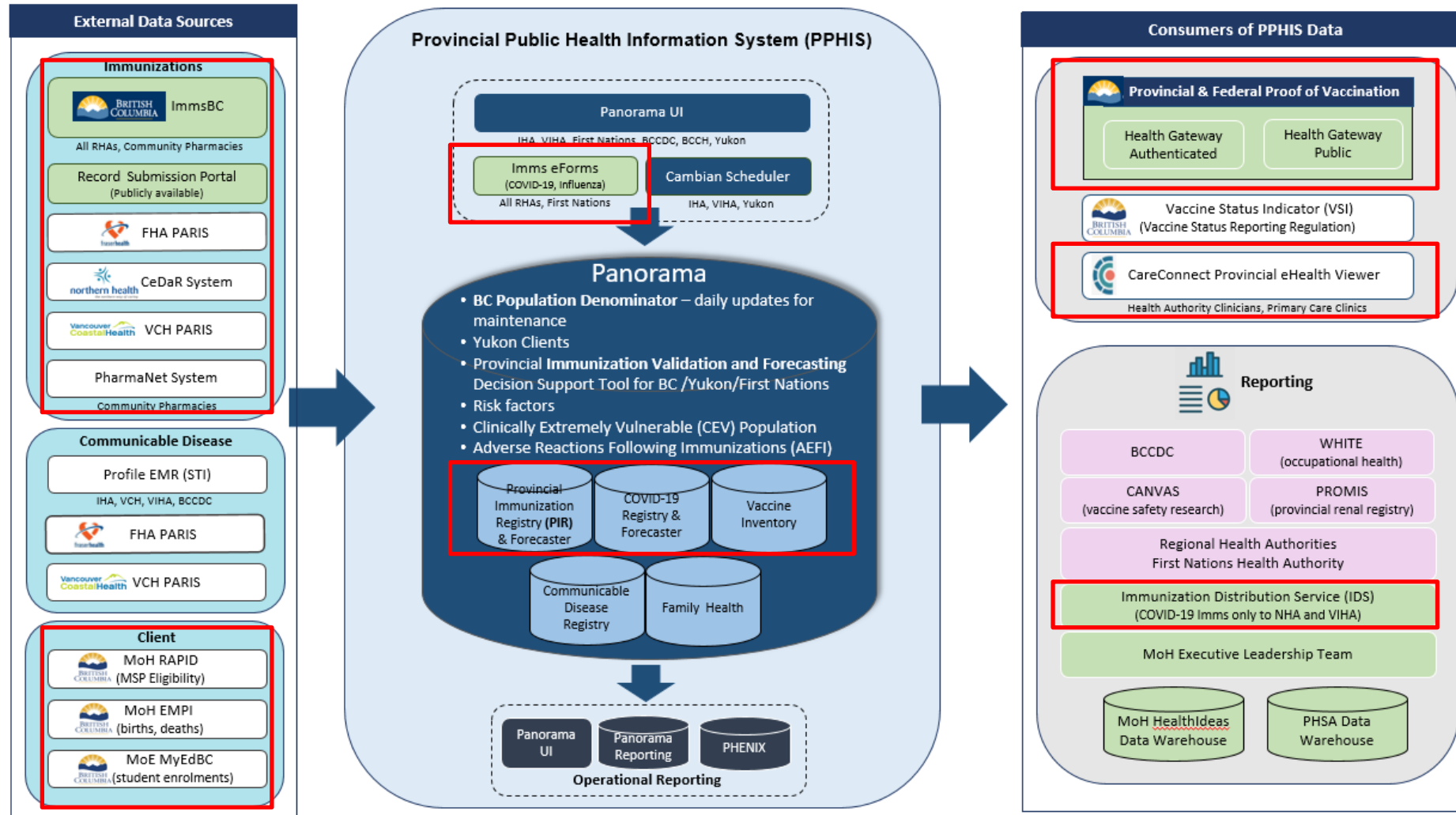
Provincial Public Health Information System

Integrated End-to-End



Provincial Public Health Information System

Integrated End-to-End



Provincial Immunization Registry (PIR)

Functionality

Immunization Documentation



Immunization Validation & Forecaster



Adverse Event Following Immunization



Contraindications & Exemptions



Mass Immunization



Risk Factors



Consent Management



Cohort Management



Search Provincial Client Registry



Reporting and Analytics



Vaccine Inventory Management



Established in PIR



- BC population denominator (EMPI); updates in near real-time
- Historical data loads from all RHA public health systems and PharmaNet



- Immunization records for all ages (child primary series vaccines, school aged vaccines, adults, influenza, COVID-19) from early 1990s to present



- Due and Overdue forecasts for all vaccines across ages 0-19



- School and grade enrolments from the provincial MyEdBC system accounting for >90% BC students



- Special populations (Clinical Extremely Vulnerable, immunocompromised, whole communities)



- Clinical practice standards; documentation standards; clinical record review
- Client identification management
- Connection to CareConnect and Health Gateway



How PIR Supported BC COVID-19 Response

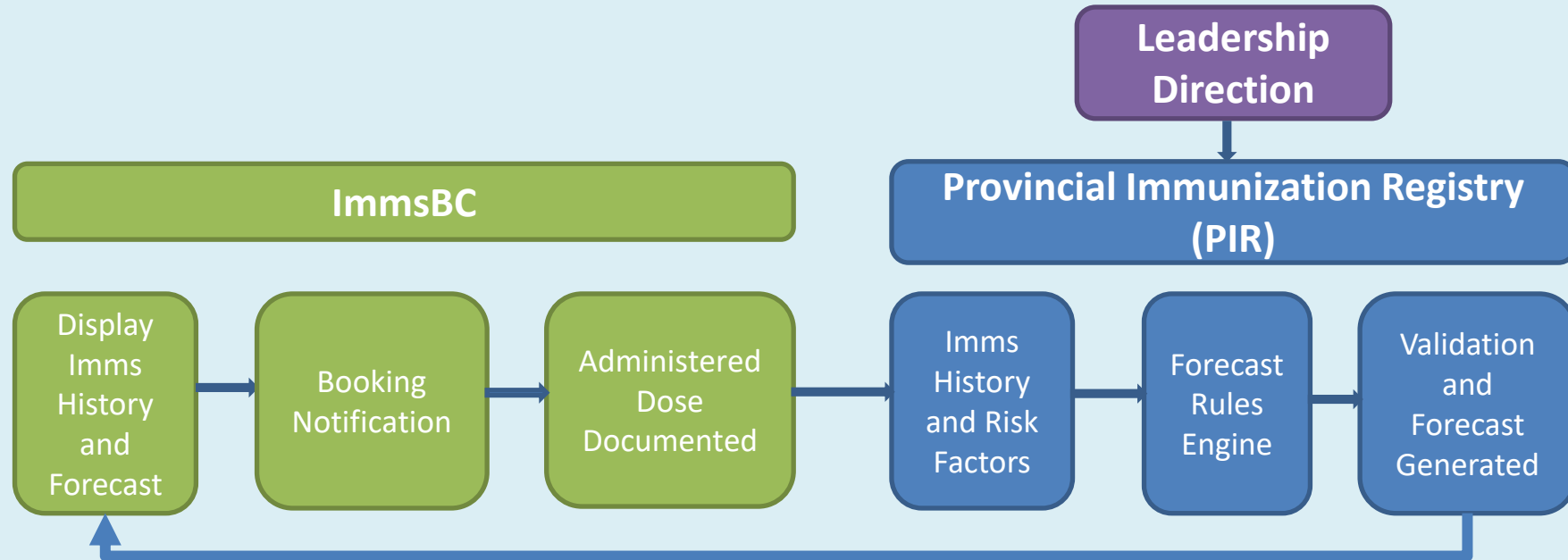
- Initial dose gated based on age, community etc.
- Subsequent doses relied on forecast
- eForm for Indigenous communities to submit COVID-19 immunizations
- Ability to use population denominator, addresses (for community prioritization), self-identity Indigenous, high risk clients, CEV risk factors
- Only time all RHAs using one system to manage vaccine inventory
- Enabled at the minute reporting for leadership to make decisions on eligibility, clinic capacity based on vaccine availability, clinic management, vaccine waste management, cold chain incidents
- Fraudulent record investigations through Record Submission Portal



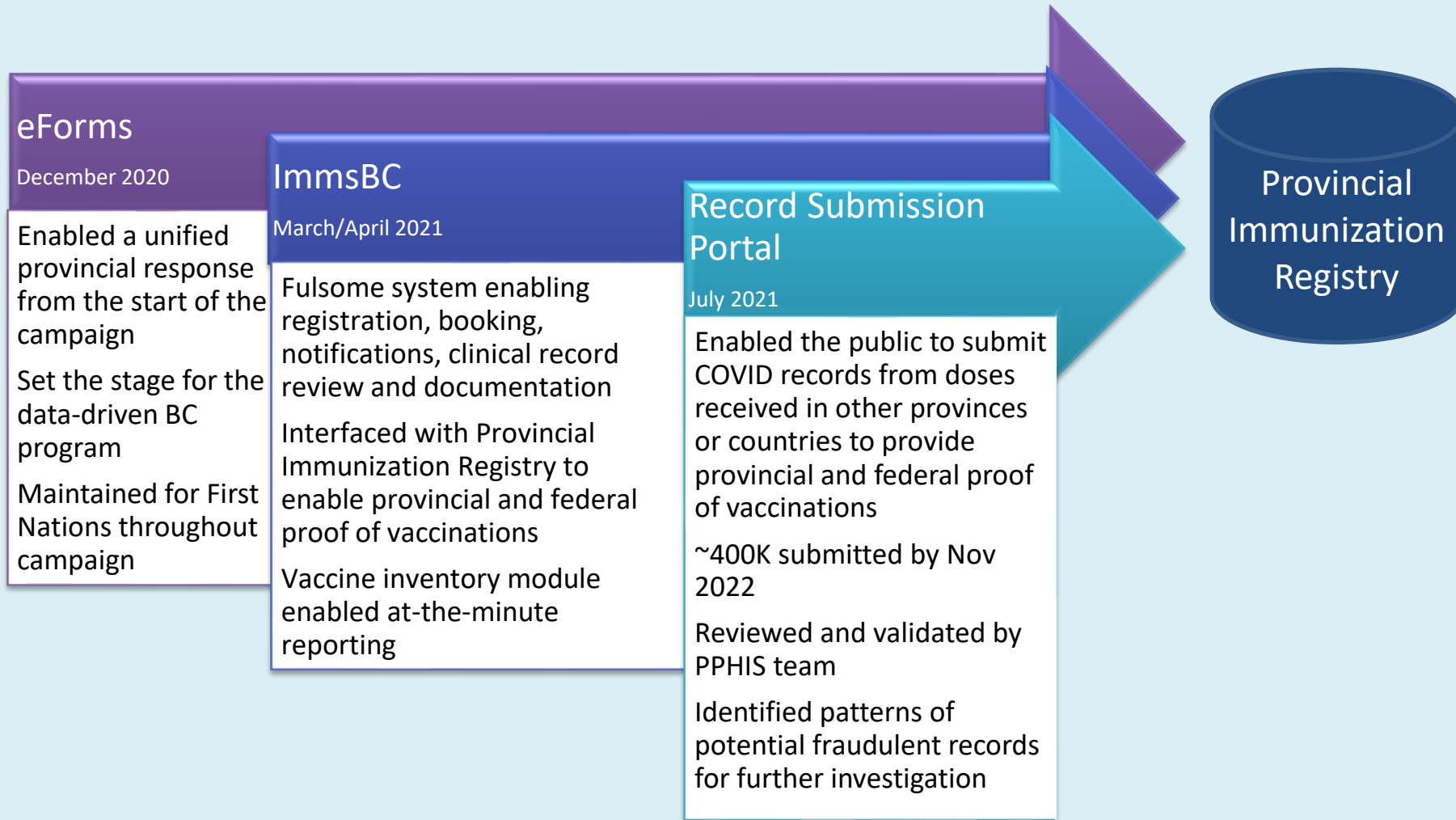
Data Flows to ImmsBC

- Daily feed of COVID-19 vaccine history and forecast to ImmsBC
- On-demand pull of COVID-19 forecast from PIR to ImmsBC
- Daily feed of AEFI, COVID-19 risk factors, alerts to ImmsBC
- Updated demographics, client identity data from EMPI distribution updates
- Push of vaccine inventory catalogue data changes to ImmsBC

Forecasting COVID-19 Immunizations



Timeline of Tools Developed for COVID Imms



BC HIMSS Digital Health Week

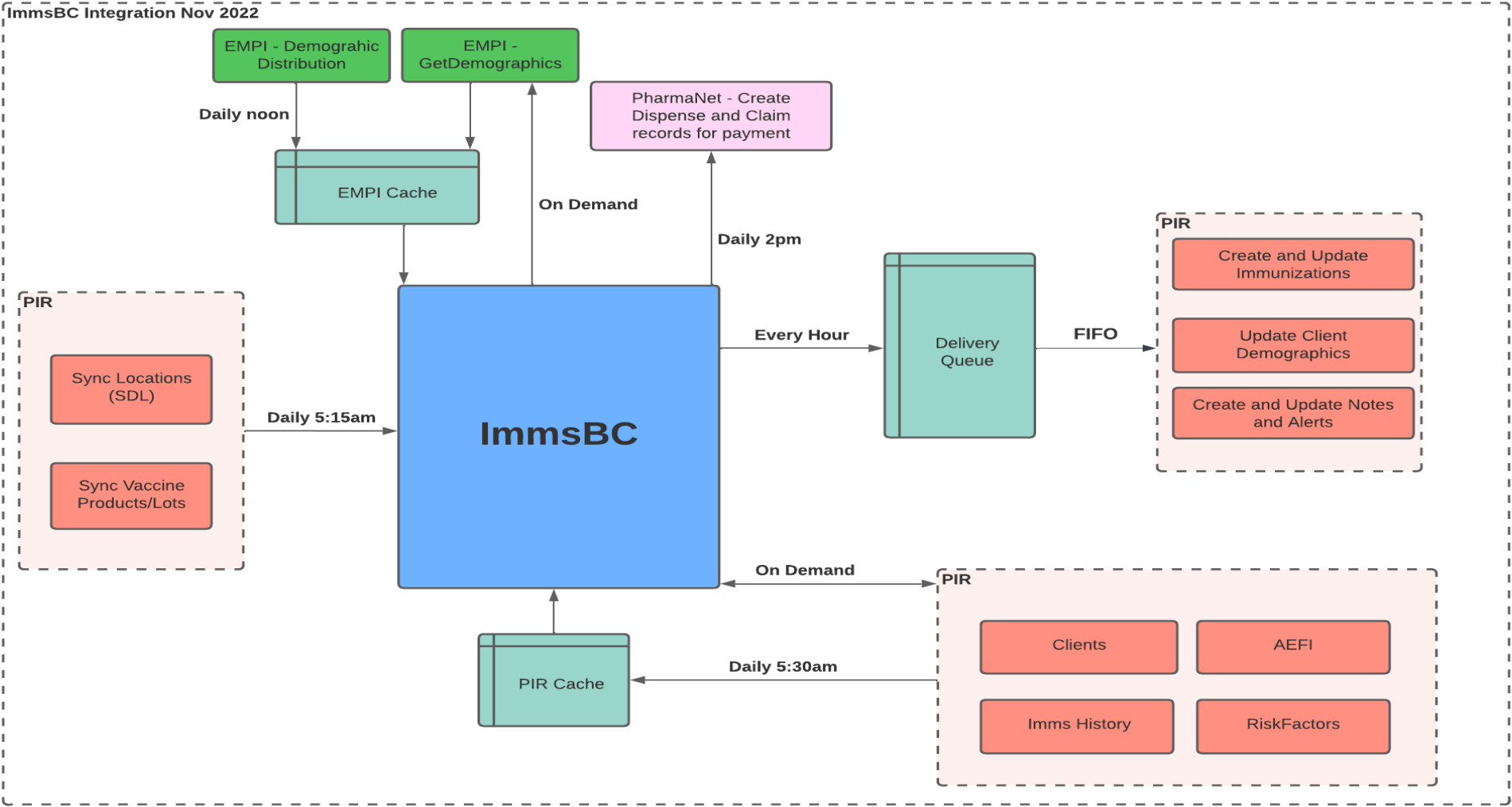
Integrations

Greg Saxon, Director, CGI

November 16, 2022



ImmsBC Integration Details and Timings



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User Access

Renaldo Scalabrino

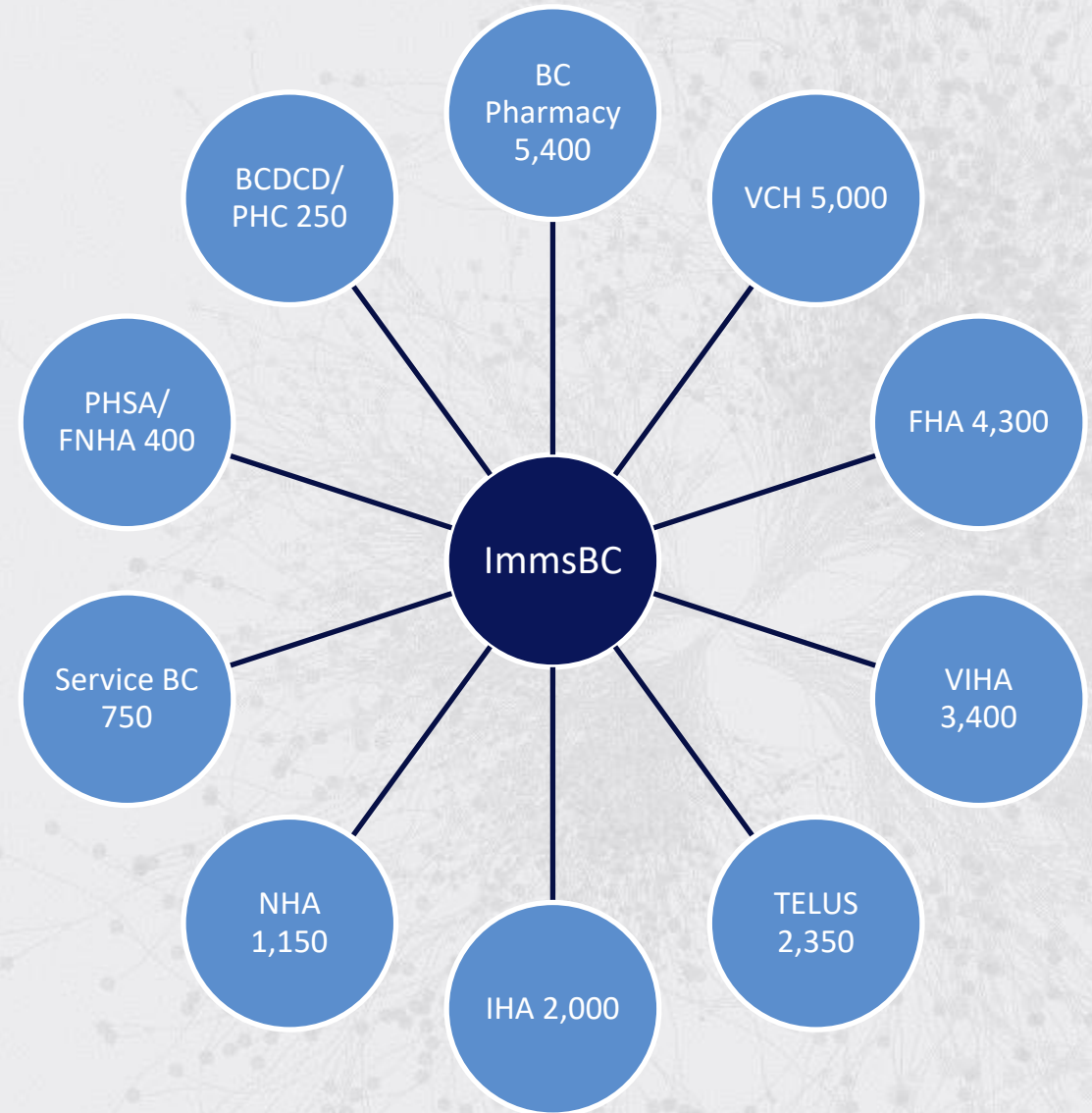
Senior Enterprise Architect

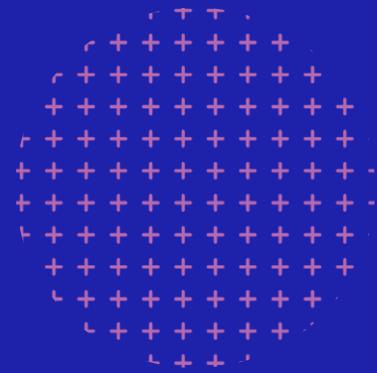
Digital Health Strategy Office, PHSA



Managing Access to ImmsBC

- Up to **25,000** accounts granted access between April 2021– Oct 2022
- Delegated Access Management to Health Authorities and BC Pharmacy Association
- Multi Factor Authorization enforces
- Automated Salesforce Account Provisioning and De-Provisioning
- **Role level access** for:
 - **Service Agents** (TELUS and Service BC)
 - **Clerks** (Check-in and document Imms)
 - **Clinicians** (Access to clinical conditions, collect consent and document immunization)
 - **Imms Admin** (Manage Schedule and Inventory)
 - **BCCDC Admin** (Data Quality and Inventory supply)
- Full Audit and Access logging
- Multi layer Access threat detection automated account lockout





Thank you

To our speaker, sponsors and participants!

Together, we make our events successful!

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Visit <https://www.himss.org/membership-types/individual> to learn more about different individual options for taking part in the HIMSS British Columbia Chapter!

HIMSS Organizational Affiliate Program: If you're a **healthcare provider or agency**, or a **college or university with a health information and technology program**, you can join HIMSS as an **Organizational Affiliate**. *Give your staff or students the resources they need to transform global health and wellness through information and technology.*

For more information on the Organizational Affiliate Program, contact us at britishcolumbia.info@himsschapter.org



Join us for the
BCHIMSS AGM
and stay for
drinks, food and
networking!



SCAN ME

HIMSS BRITISH COLUMBIA CHAPTER **AGM & Fall Social**



Wednesday,
November 23rd
5:00-8:00 pm PST
St. Regis Bar & Grill
608 Dunsmuir Street
Vancouver, BC

BCHIMSS Mentorship Program

Are you an experienced Digital Health professional who has the desire to give back to the community?

Are you just starting out in your career or are you looking for a change and would like to be mentored by someone?

Visit the [BCHIMSS Mentorship page](#) for more information on how to sign up as a mentor or mentee!





Post-Event Survey

Your feedback helps us create the events you want to see.

Once you leave the webinar, Zoom will launch a short post-event survey in your browser.

The results of our post-event surveys directly impact future BCHIMSS event planning, and we hope you'll take a minute to share your thoughts with us!

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CHAPTER

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