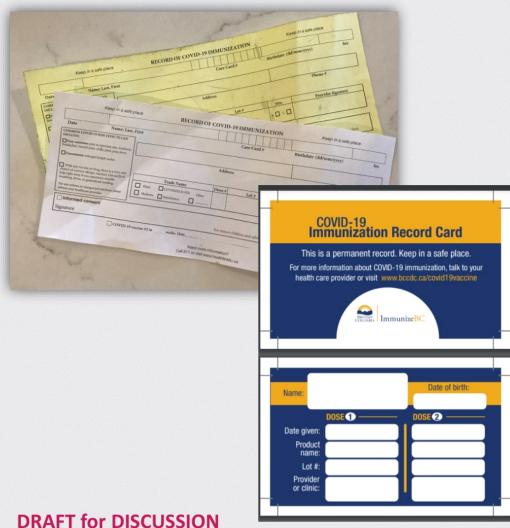


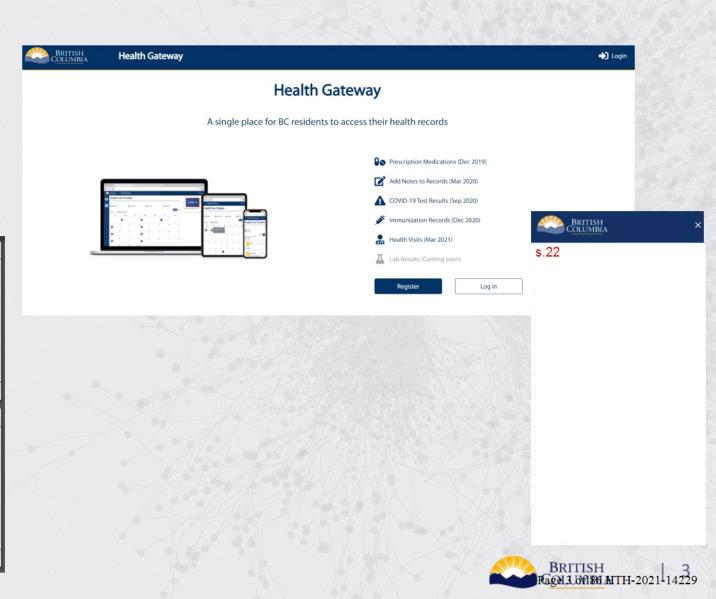
## Context

- BC residents are increasingly wanting/needing proof of their COVID-19 vaccine status and/or their COVID-19 immunization record
- Local public health units are being overwhelmed with rapidly increasing citizen queries/requests as this becomes a
  growing requirement
- The options need to consider:
  - Ease of access and use
  - Reasonable implementation timelines (within the month of August)
  - Acceptance that the proof is from a trusted/provincially recognized source
  - Timely resolution of citizen identified data issues (e.g. missing or incorrect COVID-19 immunization information)
  - Supporting communications and education (e.g. vaccine status vs. immunization status, mis-use)
  - Both digital and non-digital pathways that can be incrementally advanced/enhanced



# **Current Options**





# Proof of Vaccine Status/Immunization Record – Paper Options

Proof of Vaccine	Source	Ease of Use Considerations	Challenges
Paper Option 1: COVID-19 Immunization Record Card	Paper record provided at time of immunization	Already in place	<ul> <li>Paper copy can be damaged, lost and/or duplicated</li> </ul>
Paper Option 2: COVID-19 Printout/Mailout of Immunization Record	<ul> <li>Phone call or in person request to ServiceBC Contact Center post- immunization requesting printout/mailout of COVID-19 immunization record</li> <li>ServiceBC provisioned with secure access to Health Gateway to print and mailout the requested COVID-19 immunization record only (no other health information will be available)</li> </ul>	<ul> <li>Available as of August 12, 2021</li> <li>Contact Centre has translators and supporting processes already in place for citizen experience</li> <li>Contact Centre will be using Health Gateway which is already a communicated and known option for citizens to access their COVID-19 immunization record</li> <li>Health Gateway and Contact Centre printed/mailout output will have the same look and feel</li> <li>Contact Centre mailouts will be sent via BC gov envelopes</li> <li>Undeliverable mail will be returned to BC gov and destroyed</li> </ul>	<ul> <li>As with any mailout there is risk of information being mailed to an incorrect address</li> <li>May not address time sensitive circumstances where proof is needed immediately/within 1-2 days</li> <li>Paper copy can be damaged, lost and/or duplicated</li> </ul>



# Proof of Vaccine Status/Immunization Record – Digital Options

Proof of Vaccine	Source	Ease of Use Considerations	Challenges
Digital Option 1: Health Gateway COVID-19 Immunization Record  HG – 400K users BC Services Card – 700K	<ul> <li>Health Gateway via PIR</li> <li>Digital equivalent of the paper immunization record card that is handed out at (the majority of) clinics</li> <li>Option for HG users to download and save the digital equivalent of their card as a PDF</li> </ul>	<ul> <li>Already in place</li> <li>Secure (privacy and security approved) access in place via BCSC</li> <li>Proven ability to meet provincial demand</li> <li>Opportunity to incrementally add in additional proof options as they become defined provincially and/or federally</li> </ul>	<ul> <li>Requires a BC Services Card and a mobile phone (the non-mobile/non-app option is no longer available)</li> </ul>
Digital Option 2: Health Gateway Super Lite (Vaccine Status Visual Indicator Only)	Health Gateway via PIR	<ul> <li>Provides a when needed/on demand visual indicator of COVID-19 vaccine status</li> <li>No BCSC requirement</li> <li>Minimal entry criteria, but enough to meet privacy requirements and match PIR with confidence</li> <li>Display visual indicator only of COVID-19 status (no other information to be provided)</li> </ul>	<ul> <li>Support for records needing correction, missing records</li> <li>Privacy endorsement</li> </ul>
Digital Option 3: ImmunizeBC Vaccine Status Checker (Vaccine Status Visual Indicator Only)	<ul> <li>ImmunizeBC via PIR</li> <li>Originally in place for children's vaccination status</li> <li>Expanded for COVID-19</li> </ul>	<ul> <li>Visual verification only</li> <li>Soft-launched on ImmunizeBC</li> </ul>	<ul> <li>Privacy endorsement</li> <li>Need to validate ability to meet provincial demand</li> <li>Website can be replicated/spoofed</li> <li>Not fully communicated and potential for citizen (and business) confusion</li> <li>Support for records needing correction, missing records</li> </ul>



# Summary

**Objectives** – Quickly establish options with minimal barriers for citizens and businesses to confirm proof of vaccine

**Approach** – Provide options to obtain proof of vaccine and support easy visual verification by a business

#### **Considerations:**

- Utilize the vaccine cards that many people already have/are familiar with
- Convenient access via digital, phone and in person channels
- No infrastructure or tools required by businesses to implement
- Potential/risk for mis-use of visual indicator
- Support both digital and non-digital pathways that can be incrementally advanced/enhanced

#### **Options to Obtain Vaccine Proof\*:**

- **1. Paper Record:** at time of vaccination available now
- 2. Health Gateway: digital or PDF option available now
- 3. ServiceBC Contact Centre (phone/in person): have a copy of your vaccine record printed/mailed to you August 12
- **4. Health Gateway Super Lite:** visual indicator only August 23 (pending privacy endorsement)
- **5. Vaccine Status Indicator:** visual indicator only available now (tbc)
- \*Additional/Future Work In Progress:
- Federal Vaccine Passport/Verifiable Credentials



MINISTRY OF HEALTH | DIGITAL HEALTH INITIATIVE

# Health Gateway & ServiceBC Paper Option 2: Print/Mailout

August 2021



### Overview

# **START**

Citizen requests COVID 19 vaccine record by:

**Calling Get Vaccinated line** 

OR

**Visiting Service BC office** 

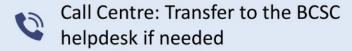
SBC agent confirms if citizen has a BC Services Card and a mobile device

Yes

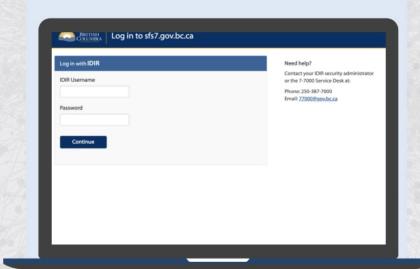
Encourage use of Health Gateway:



In person: Support registration as needed



SBC agent launches Health Gateway admin portal and logs in with IDIR account





# Process Overview Continued...

SBC agent confirms if citizen is requesting record for self or another person.

4

SBC agent enters citizen's Personal Health Number (PHN)

5

SBC agent verifies citizen's identity against the information returned on the screen.



In person: Confirm whether citizen has a representation agreement

C) C

Call centre: Confirm explicit authorization from the individual

Error? Send to healthgateway@gov.bc.ca or Complex Cases Team to have Client Registries resolve.

A 5-point match is required from the following:

a.Legal Given Name(s)

b.Legal Last Name

c.Date of Birth

d.Personal Health Number

AND one of the following:

- Address
- Date of vaccination
- Clinic Name

If unable to obtain 5 point match, the agent validates the email/phone on the citizen's ImmsBC profile.



# **Process Overview End**

Validate information on COVID immunization record with citizen

Prepare COVID immunization record for citizen

**END** 

Citizen receives their COVID vaccination record



Missing record or corrections needed?

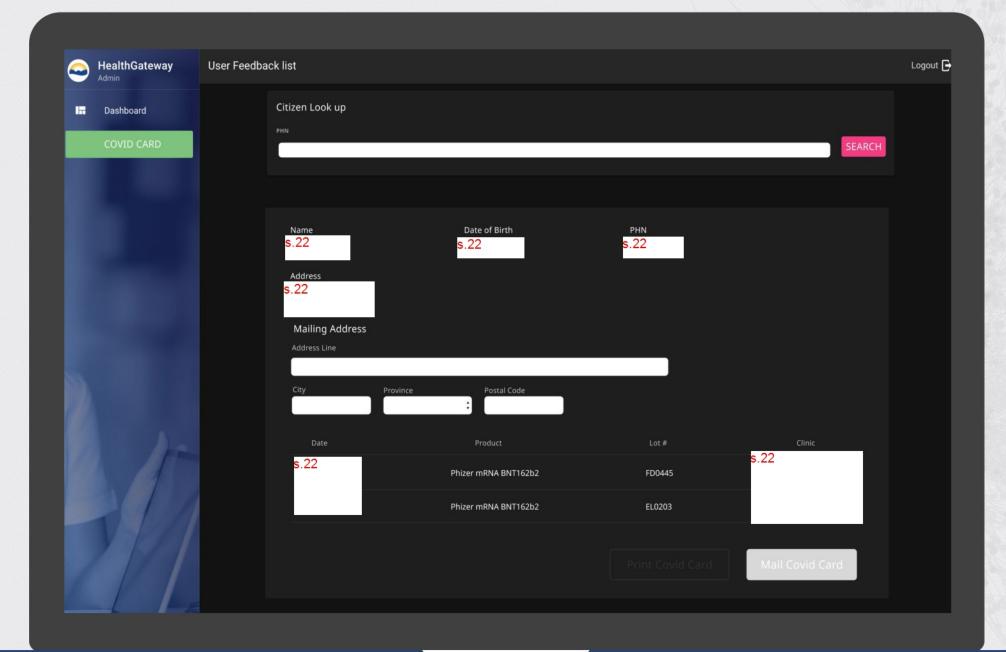
- In person: Assist the citizen in completing the form at www.immunizationrecord.gov.bc.ca
- Call centre: For corrections, follow complex cases work instructions. For missing records, have the citizen contact the location they received their vaccination.

- In person: Download PDF and print record for citizen
- Call centre: click 'Mailout' button

- In person: Printed PDF
- Call centre: Letter in the mail containing a cover letter and printed PDF



# Example of Health Gateway Admin screen:

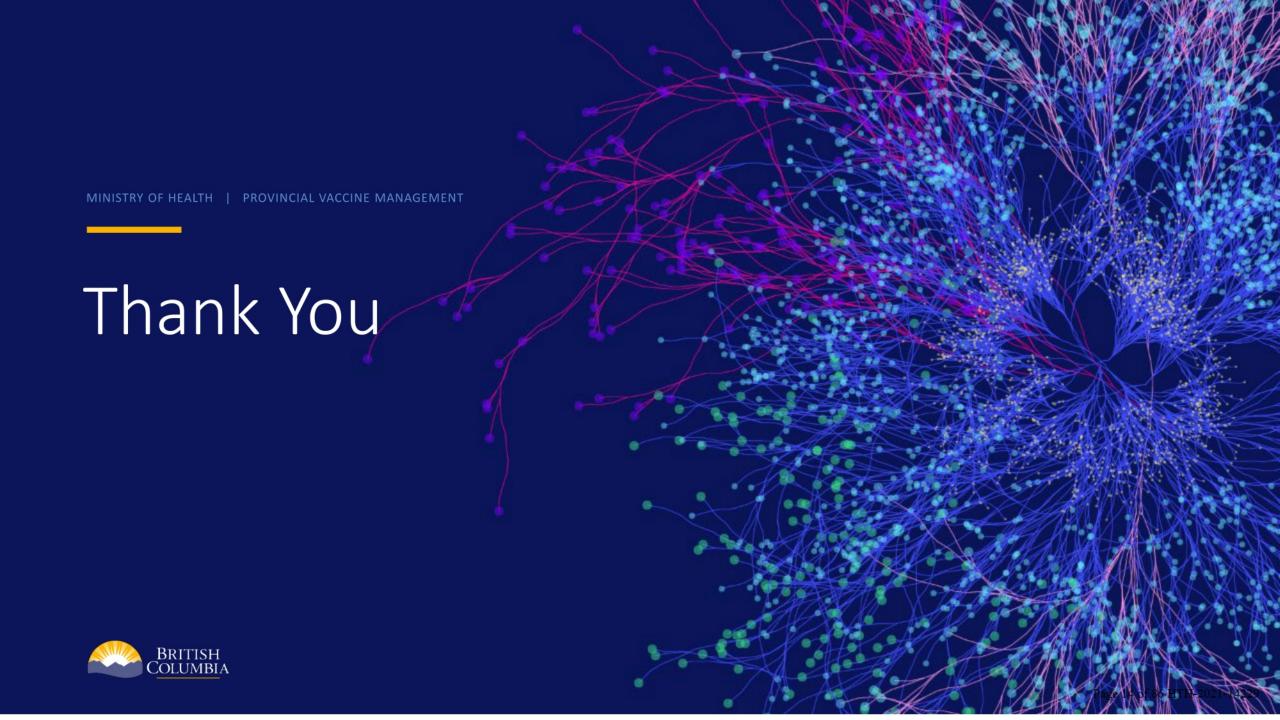


DIGITAL HEALTH INITIATIVE MINISTRY OF HEALTH Health Gateway BC Services Card Improvements



# User Feedback and Response

- User experience feedback
  - Back-and-forth between BCSC mobile app and Health Gateway website
  - o Confusion between purpose of BCSC app vs. accessing the Health Gateway service
  - Switching between mobile app and browser
  - Number of steps to log in
- July 24<sup>th</sup> Enhancements Complete
  - Streamlined login flow
  - Improved access to Health Gateway
  - Help with understanding BCSC app purpose
- September 25<sup>th</sup> Enhancements Upcoming
  - Improved user experience for returning users with streamlined login and faster access to Health Gateway



From: Barclay, Corrie A HLTH:EX
To: XT:Malovec, Shannon HLTH:IN

Subject: FW: Follow up on Vaccine Certification/ImmsBC

**Date:** August 23, 2021 10:29:17 AM

s.13

From: Westoby, Kevin <kwestoby@deloitte.ca>

Sent: August 23, 2021 10:27 AM

To: Barclay, Corrie A HLTH:EX <Corrie.Barclay@gov.bc.ca>

Cc: Budgell, Jason < jbudgell@deloitte.ca>

Subject: Follow up on Vaccine Certification/ImmsBC

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Corrie,

I talked to Jason and have some follow up information from your discussion:

s.13

•

•

- We currently have 3.8M active profile records in ImmsBC. s.13
- ImmsBC retrieves the physical address associated with a participant as part of the EMPI verification process. If an address is updated it is sent through to PIR as part of the overall record of Immunization submission

Also wanted to flag one additional question that came up with Jason:

s.13

Thanks,

Kevin

#### **Kevin Westoby**

s.22 | <u>kwestoby@deloitte.ca</u> | **Deloitte Digital** | <u>deloittedigital.ca</u>

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From: Barclay, Corrie A HLTH:EX
To: XT:Malovec, Shannon HLTH:IN

Subject: FW: PVC Project

**Date:** August 23, 2021 10:29:38 AM

Attachments: Proof of vaccination 2021 08 22 2007H MC.pptx

s.22

This is what Mary did

From: Mary Conibear <mconibear@callastrategies.com>

Sent: August 23, 2021 10:27 AM

To: Barclay, Corrie A HLTH:EX <Corrie.Barclay@gov.bc.ca>

Subject: PVC Project

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Mary Conibear Principal, Calla Strategies 778-919-7441

#### Somner, Kurstie HLTH:EX

Barclay, Corrie A HLTH:EX From: Sent: August 23, 2021 10:58 AM To: Brown, Stephen R HLTH:EX Subject: Progress towards Sept 7

Hi Stephen,

s.13 I am meeting with team at 11 again to confirm if we can be ready.

s.13

Business' will be required to download QR reader software on a phone, tablet or scanner. Province will provide direction on this and can work with communications to support getting this information made available.

s.13

Corrie

#### **Vaccine Status Checker - Implementation Dates**

	Considerations	Sept 7	Sept 14
	Technology		
1	Enter in PHN and DOB	Yes	Yes
2	s.13		
3	QR Code with added digital security	Business to download QR reader software/ QR reader can be a phone, tablet or scanner	Business to download QR reader software/ QR reader can be a phone, tablet or scanner
	Other Considerations		
4	Citizen accessibility	Requires access to computer, tablet, mobile phone	Requires access to computer, tablet, mobile phone
5	Citizen issues/questions/challenges	Call the Provincial Vaccine Call centre for support, to print vaccine status/QR code; e 13 s.13	Call the Provincial Vaccine Call centre for support, to print vaccine status/QR code; s. 13 s. 13

#### **COVID-19 IN BC**

Corrie Barclay ADM, Health Sector IMIT Divison Ministry of Health, Province of British Columbia M:s.17

# COVID-19 IN BC

# Proof of vaccination certificate considerations

August 22, 2021



Stay Informed Via These Resources:

gov.bc.ca/Covid-19 | bccdc.ca | 1-888-COVID19

Symptom Self-Assessment: covid19.thrive.health



## Scope: proof of vaccination certificate (PVC) Project

- Deconstruct pathway of different groups to getting a PVC
  - Website + print option required for those without smartphones or having privacy concerns with personal data on phone

- Ensure access to PVC for all vaccinated population (D1 or D2) from within BC, outside BC or combination of both
  - Note: Fully vaccinated defined as D1/ D2 even if D3 is introduced in the future



# Current and proposed options for PVC – Paper and Digital

	OPTION	LOCATION	BY DATE	BASIC	VERIFIED
	CURRENT				
1	Paper records	Individual	Existing	✓ + ID?	
2	COVID vaccination status indicator (CVSI)	https://immunizebc.ca/covid- vaccination-status-indicator	Existing (Digital)	<b>~</b>	
3	Health Gateway via BC Services Card	https://www.healthgateway.gov.bc.c a/	Existing (Digital)		<b>✓</b>
	PROPOSED				

s.13

COVID-19 IN BC

Systems/processes involved in digital PVC

_							
	SYSTEM	DATA USED FOR PVC	CONSIDERATIONS FOR PVC				
	BASIC						
1	COVID vaccination status indicator (CVSI)s.13	PIR record access	s.13				
2	COVID vaccination record submission https://www.immunizationrecord.gov.bc .ca/	Upload of out of province vax records Review by trained staff					
3	PIR	Vax records					
4	Call Centre 1-833 (TELUS & SBC)	Inquiries & new PHNs					
5	Complex Case Management (SBC)	Resolve tech issues with records, data remediation					
6	Websites (gov.bc.ca/COVID + HAs)	Info on PVC program					
	VERIFIED (same as above plus revision of #1 above)						

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#### Somner, Kurstie HLTH:EX

Sent:	August 19, 2021 6:05 PM
To:	XT:Malovec, Shannon HLTH:IN; Smith, Pam K HLTH:EX; XT:Music, Serge HLTH:IN;
	XT:Tuason, May HLTH:IN; Olorunojowon, Zachy HLTH:EX

Proof of Vaccine and Medical Exemptions - meeting at 8:30

Hi team, just a quick summary of what we will be discussing at our call in the morning:

Barclay, Corrie A HLTH:EX

- A proof of vaccine is needed for those vaccinated in BC
- Options will include the accessing the Health Gateway or the new vaccine status indicator
- Both options will include a QR code along with your vaccine status (fully, partially, no record found)
- s.13

From:

Subject:

- •
- •
- •
- •

Look forward to brainstorming this business problem! Corrie

Corrie Barclay

ADM, Health Sector IMIT Divison

Ministry of Health, Province of British Columbia

M: s. 17



#### Context

- BC's is reporting a significant increase in average daily cases of COVID-19
- The seven-day average daily case count continues to climb, suggesting the province is in the early stages of a fourth wave of infection
- Current vaccine coverage will not be enough to counter the Delta variant and emerging fourth wave
- Vaccines are the best weapon against the spread of COVID-19
- To suppress the spread, BC is considering an additional measure that would require a
  proof of vaccine to access higher risk transmission areas such as gyms, bars,
  restaurants, team sports, arts and entertainment, festivals, stadium events, etc.
- Approach needs to consider the ease of implementation along with ensuring trust in the verification process

**DRAFT for DISCUSSION** 



# Proof of Vaccine – Options and considerations

Proof of Vaccine	Citizen Considerations	Business Considerations	Fidelity
Paper - COVID-19 Immunization Record Card	•s.13 •		
Digital – COVID-19 Immunization Record HGW – 400K users Service Card – 700K	•		
s.13	•		1
BC Vaccine Passport - via HGW,s.13	•		
s.13			

**DRAFT for DISCUSSION** 



# Proposed Phased Approach – Phase 1 of 2

# Phase 1 – by August 23 Visual Verification of Vaccine Proof

**Objectives** – Quickly establish an approach with minimal barriers for citizens and businesses to confirm proof of vaccine.

**Approach** – Provide all who have been vaccinated options to obtain proof of their vaccine that can be visually verified by a business.

s.13

#### **Options to Obtain Proof of Vaccine**

 Health Gateway – PDF or option to add to digital wallet – August 23

- Vaccine Status Indicator not a record but shows the status – in use now
- Provincial call centre to have a copy of your vaccine record mailed to you – August 12
- Service BC in person to have a copy of your vaccine record printed for you - TBC



# Proposed Phased Approach – Phase 2

Phase 2 – Pilot August 27; full roll-out start September 15 Scan a QR code to verify Vaccine Proof (Vaccine Passport)

**Objectives** – Strengthen the trust, credibility and accuracy of vaccine status verification and minimize fraud.

s.13

s.13

#### **Options to Obtain Vaccine Passport**

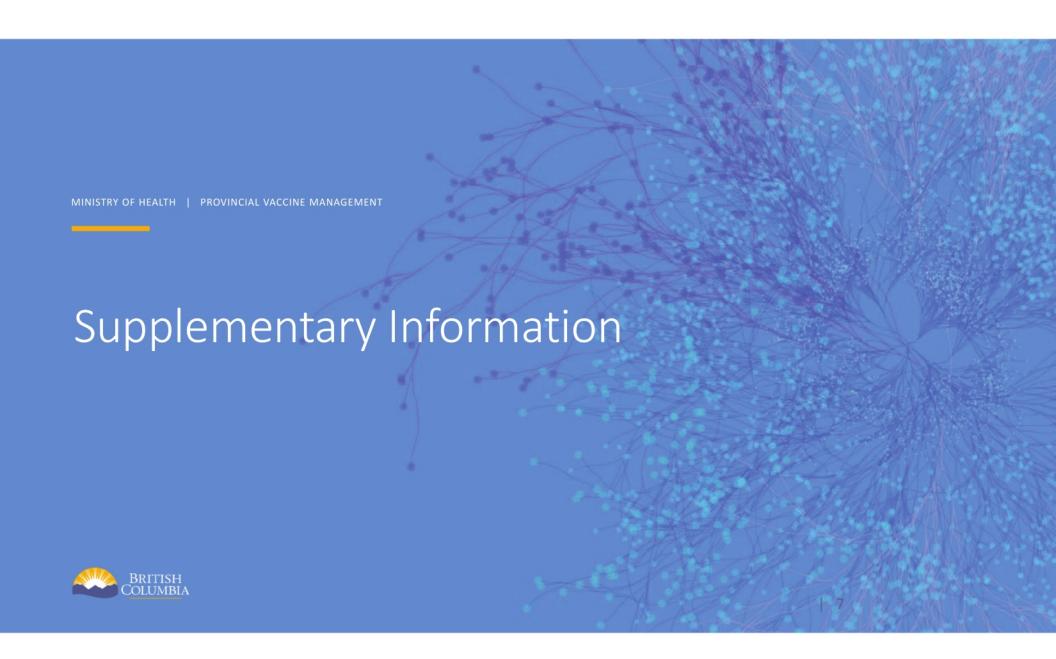
 Health Gateway – Add to digital wallet or print PDF – pilot ready Aug 27<sup>th</sup>

- Provincial call centre Support clients and business operators - tbc
- Service BC in person Support clients and business operators - tbc



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s.13; s.16

# Health Gateway<sup>s.13</sup> BC Service Card

- Reaching those without mobile devices or a

- Health Gateway currently provides BC residents 12 and older access to their health records, including COVID vaccine records using the BC Services Card mobile app for L3 identity assurance
- Those without mobile devices or BC Services Cards cannot access the Health Gateway.
  - An estimated 3% of British Columbians do not have access to a mobile device (tablet or phone) but have a BC Services Card
  - Foreign and temporary residents may not have BC Services Cards, but were vaccinated in BC

**DRAFT for DISCUSSION** 



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# **Options Comparison**

s.13

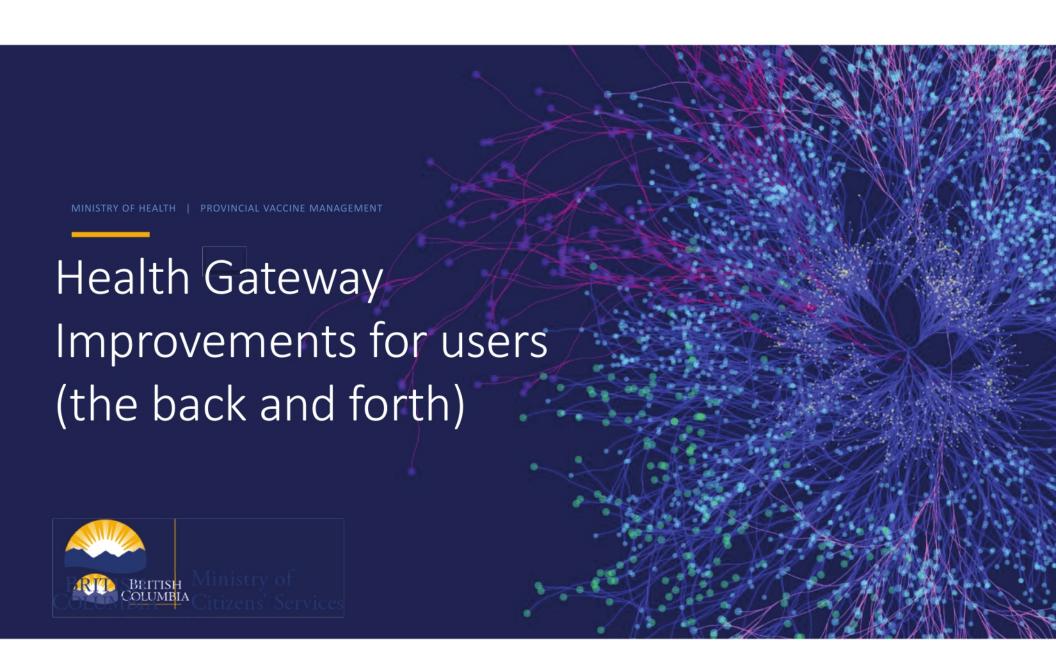
#### OPTION 1 Health Gateway

Allows people to view and print their vaccination information today using their digital BC Services Card to login to the Health Gateway. There are currently almost 700K BCSC activations and 400K HGW users.

s.13

BRITISH COLUMBIA

**DRAFT for DISCUSSION** 



# User feedback and response

# Concern for user experience

- Back-and-forth between mobile app and website
- Confusion

#### Problem areas

- Switching between mobile app and browser
- Number of steps to log in
- o Purpose of app vs. accessing the service
- Enhancements July 24
  - o Streamline login flow
  - Faster access to Health Gateway
  - Help with understanding app purpose
- More enhancements September 25
  - o More streamlined login, faster access to Health Gateway



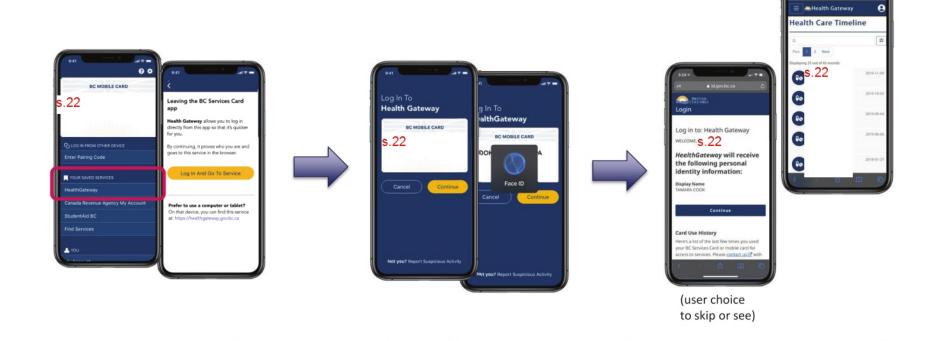
# September 25 - Quick login to Health Gateway

- For returning mobile users only
- Allow to start in mobile app to login to get to Health Gateway
  - Reduce back-and-forth
  - Fewer steps
- Requires new technical interactions



## For Sept 25 release

# Returning user login to Health Gateway through BC Services Card app



SBC

**GDX** 

**RPD** 

**PSD** 

OCIO

ES

OCIO

CIRMO

OCIO

OCIO

CONN

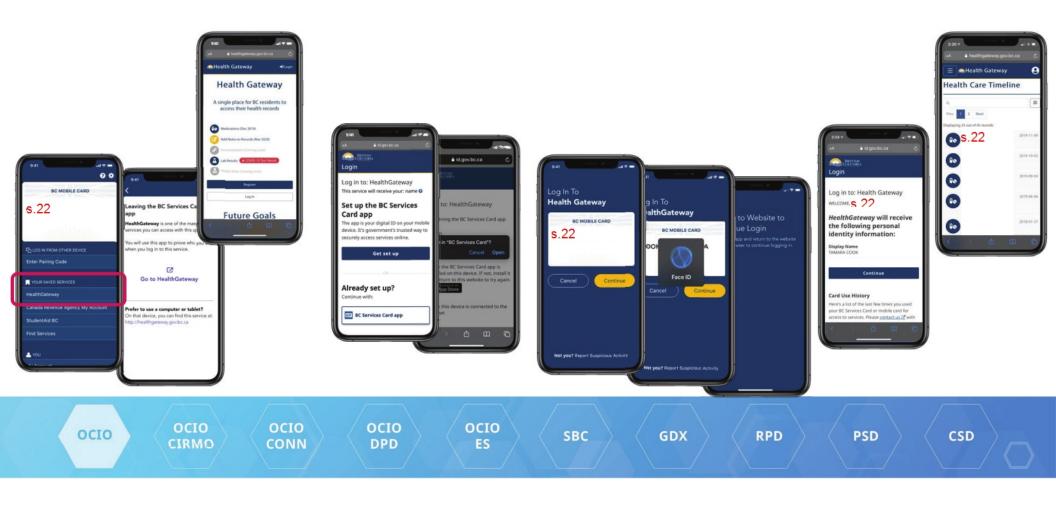
OCIO

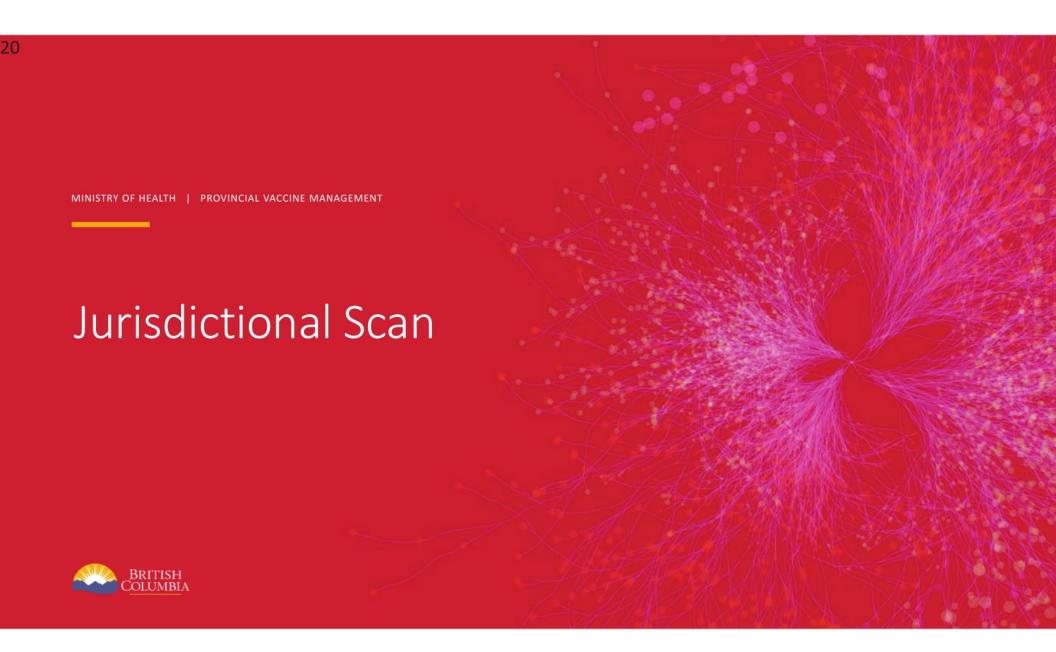
DPD

**CSD** 

### Delivered in July 24 release

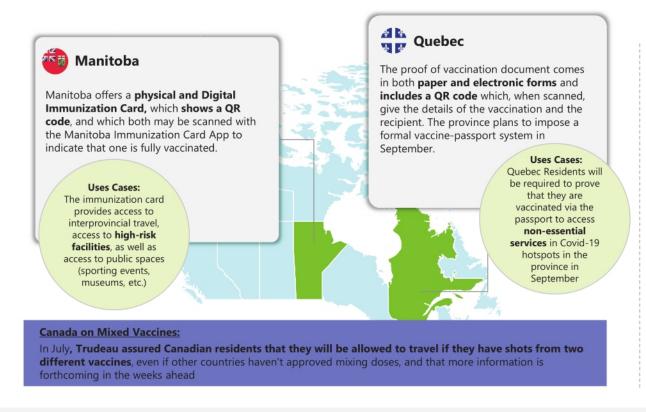
# First time user login to Health Gateway





DOMESTIC & INTERNATIONAL USE CASES FOR CREDENTIALS

# **Canadian Vaccine Credential Programs**



# Canadian Private Sector Organizations that Require Proof-of-Vaccination and/or Testing

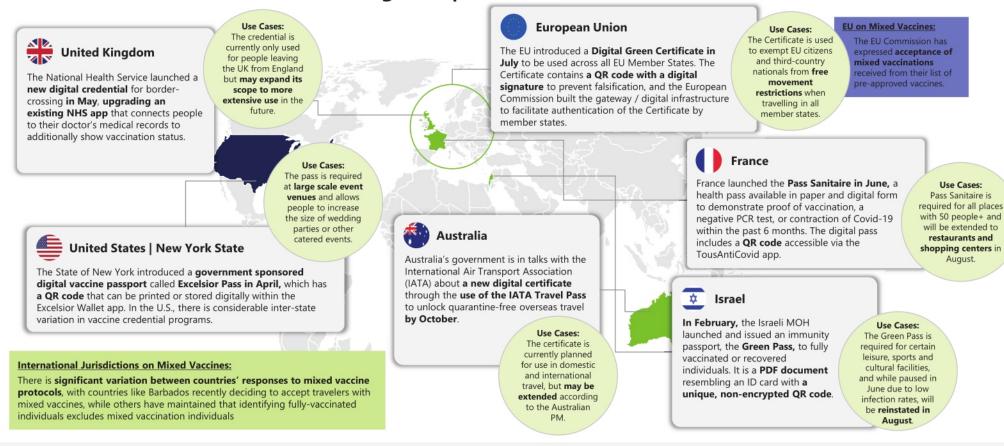
Organization	Requirement	Timeline
University Health Network (UHN)	All staff working at each of its hospitals is required to disclose their vaccination status	June 2021
Calgary Stampede Organizers	People who wish to enter the Nashville North venue had to provide proof of vaccination or receive a free rapid test	July 2021
Select restaurants & entertainment venues	Some small businesses are requiring proof-of-vaccination to accommodate in-person seating or events	July 2021
Seneca College	Access on campus will be restricted to those who are fully immunized or those with medical or religious exemptions	September 2021
Western University, UofT, Trent University, York University	Students staying in residence must have at least one dose of the vaccine	Fall 2021

In Canada, there is currently a **limited number** of private sector players and employers mandating proof-of-vaccination as it poses concerns of **conflict with human rights and disability legislations**. According to WorkSafeNB, employers do not have the right to demand proof of vaccination of employees.

Note: For both Manitoba and Quebec, citizens can access their digital credentials through the provinces' respective health portals

DOMESTIC & INTERNATIONAL USE CASES FOR CREDENTIALS

## **International Vaccine Credential Programs | Overview**



Globally, there has been **variation in the adoption of proof-of-vaccination** for private sector players and employers. Countries outlined above have chosen to implement policies around mandatory domestic use cases, which has also instigated **mixed reactions** from citizens and various stakeholders.

## **Announced Digital Health Credential Initiatives**

Governments and organizations around the world are currently assessing digital health and travel credentials as mechanisms to accelerate the safe reopening of borders, travel and economies. Additional initiatives are being announced daily.

#### **AMERICAS**

- Aruba: Aruba Health App
- · Bahamas: Travel Health Visa
- Canada: Assessing vaccine credentials for international travel with the Arrive CAN app
- Panama: IATA Travel Pass
- USA:
  - State of New York Excelsior Pass (IBM)\*
  - State of Hawaii Common Pass vaccine / health passport app
  - Puerto Rico airport-exit QR code

#### INTERNATIONAL ORGS

- IATA: Travel Pass is being trialed by several airlines
- ICAO: Released standards for a digital travel credential WEF: Co-founder of the Common Trust Network / the Commons Project
- WHO: No active endorsements or partnerships but has worked with Estonia's Digital Vaccine Passport

#### **EUROPE**

- · Denmark: Coronapas Vaccine Passport
- Estonia: CovClear
- EU: EU Green Pass with QR Code (27 EU and 4 non-EU countries are technically ready to connect to the EU Digital COVID Certificate Gateway, while 9 countries are effectively connected and issuing, or verifying credentials)
- France: Tous AntiCOVID App
- Germany: CovPass
- · Italy: Immuni App
- · Lithuania: Feedom ID
- Norway: Korona Pass
- Netherlands: CoronaCheck
- Sweden: Vaccine Passport
- United Kingdom: NHS Digital Credential

#### ASLA

- Bahrain: Be Aware App
- · Brunei: BruHealth
- China: International Travel Health Certificate (ITHC), Alipay Health Code
- · India: DIVOC
- · Israel: Green Pass
- · Japan: Digital Vaccine Passport
- Malaysia: Immunitee Health Passport (Affinidi)
- Oman: Oman Air IATA Travel Pass
- · Saudi Arabia: Tawakkalna
- · Singapore: Health Certs
- UAE: Alhosn

#### **PACIFIC**

- Australia: Qantas CommonPass for repatriation flights
- New Zealand: New Zealand Airlines flights to Sydney - IATA Travel Pass

This non-exhaustive list of global digital vaccine credentialing efforts points to a future where digital health passes will be the norm for travel, work, school, and other daily activities.

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DOMESTIC & INTERNATIONAL USE CASES FOR CREDENTIALS

# **International Vaccine Credential Programs | Benefits & Concerns**

#### **Benefits**

#### **Vaccine Program Support**

Vaccine credentials facilitate access to goods, services, and activities, which **may incentivize vaccination**, thus supporting the vaccine program

#### **Reduction in Outbreaks**

Although vaccine credentials do not directly impact transmission rates, **they may contribute to reduction in large outbreaks** by limiting exposure in public places and by encouraging vaccination

#### Social Trust & Cohesion

Vaccine credentials **promote social cohesion and reduce social anxiety** in allowing adopters to identify individual actions contributing to shared responsibilities within broader public health goals which are necessary to return to normalcy

#### **Examples:**

- France | Since Macron announced plans on July 12 to require "health passes" to access indoor spaces, 4 million people got their first shot and 6 million made an appointment to get one; the announcement prompted nearly 1 million residents in one of the world's most vaccine-resistant countries to book an appointment in a single day
- Italy | When Italy announced its own "green pass", more than 150,000 Italians booked appointments to get vaccinated, up between 15% and 200% depending on the region according to the army general leading Italy's COVID-19 response

#### Concerns

#### Inequity in Accessibility

Vaccine passports may worsen inequities in vaccine distribution. It may take many years for some countries to reach high levels of vaccine coverage seen in others, further exacerbating the lack of inclusion.

#### **Data Privacy**

Privacy and security-related stakeholders have voiced concerns regarding the vaccine passport system retaining users' personal information and health data

#### **Examples:**

- Of the 841 million vaccine doses that had been administered by April of 2021, only 0.1% had gone to people in low-income countries; many argue that there should not be any vaccine passports until equitable access to vaccines can be ensured
- The EU proclaims solidarity through vaccine doses exported, funds donated to COVAX, and a new €1 billion initiative announced in May to help develop vaccine production capacity and medical technology in Africa; however, the launch of the Green Certificate still poses as a challenge to developing countries struggling to contain the virus

DOMESTIC & INTERNATIONAL USE CASES FOR CREDENTIALS

#### **Vaccine Credentials**

## Digital Identity is...

A collection of **ID characteristics** that are tied to a physical person, held in an **electronic form** and **available for use** in a digital world

#### **Digital ID Components**

#### Types of ID

**Foundational** – Birth Certificate, PR Card, Provincial ID, SIN, passport, etc.

**Extended** – Diploma, Telecom Account, Health Status, Social Media Login etc.

#### **Digital Wallet**

A portable medium allowing the user to control their ID in secure manner (e.g., mobile phone application)

#### Verifiers

Organization who seek to confirm an attribute about a holder. e.g.:

- Does this person have the rights to access these services?
- Is this person who they claim to be?

Questions could be Yes/No or involve information exchange, e.g.,:

- Does this person hold a valid driver's license (Y/N)?
- What is this person's address (exchange)?

## Some example use cases include...



#### **International Travel** (COVID relevant)

Users digitally demonstrate the required credentials for entry into another country



#### **Healthcare** (COVID relevant)

Users share select health information/status to providers of their choosing to provide an accurate and comprehensive view of their profile



#### **Government Service Delivery**

Users leverage their digital identity to apply for, and obtain, social supports (e.g., unemployment benefits, business supports, food assistance, etc.)



#### **Work & Education**

Users shares credentials with employers or educational institutions (e.g., proof of professional license (engineering, nursing), proof of vaccine record for school registration, etc.)



#### **General Commerce Applications**

Users leverage credentials to protect personal data (e.g., prevent ID or payments fraud) when interacting with businesses digitally

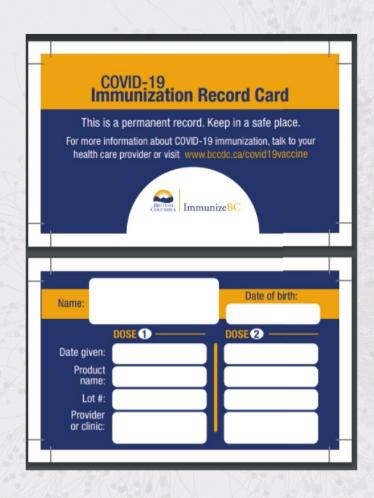
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# Details on options for a vaccine record or vaccine status



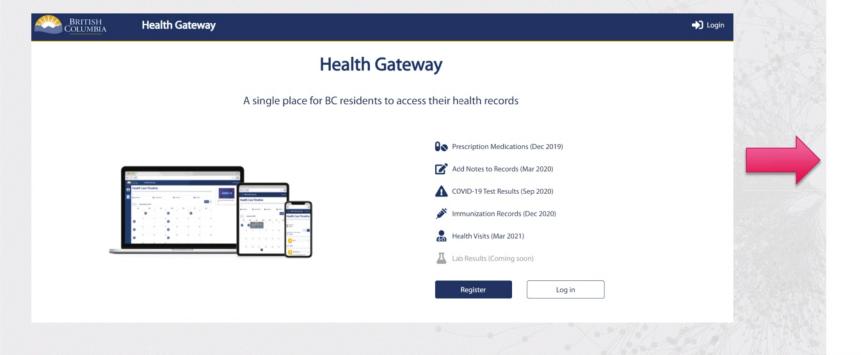
Paper Records – in use







# Health Gateway – in use



s.22

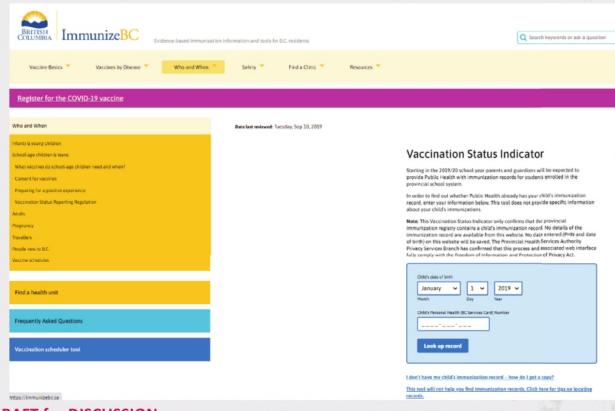
DRAFT for DISCUSSION



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# ImmunizeBC Vaccination Status Indicator – in use

https://immunizebc.ca/vaccination-status-indicator



Vaccination Status: Complete

We have your child's immunization record, you do not need to take further action at this time.

Find nearest health unit

Look up another record

I don't have my child's immunization record – how do I get a copy?

This tool will not help you find immunization records. Click here for tips on locating records.

How do I find out which vaccinations my child needs?

Where can I find more information about the Vaccination Status Reporting Regulation?

For any other questions, contact HealthLink BC by calling 8-1-1



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Withheld pursuant to/removed as

s.13; s.16

### Somner, Kurstie HLTH:EX

From: Barclay, Corrie A HLTH:EX
Sent: August 6, 2021 3:21 PM

To:Pokorny, Peter HLTH:EX; Gold, Crystal HLTH:EXSubject:Proof of vaccine approach and options (002).pptxAttachments:Proof of vaccine approach and options (002).pptx

For 3:30 meeting

From: Barclay, Corrie A HLTH:EX

To: Emerson, Brian P HLTH:EX

Subject: RE: Vaccine status indicator or "checker" order?

**Date:** August 20, 2021 11:52:51 AM

Hi Brian

#### s.13

----Original Message----

From: Emerson, Brian P HLTH:EX <Brian.Emerson@gov.bc.ca>

Sent: August 20, 2021 11:30 AM

To: Barclay, Corrie A HLTH:EX <Corrie.Barclay@gov.bc.ca>

Subject: Vaccine status indicator or "checker" order?

Hi Corrie.

Further to your query yesterday, I am hearing that an "order" is being developed to authorize/require use of this tool

As I mentioned, I am not doing such an order. Do you know anything about such an order?

Thanks.

Brian

Dr. Brian P. Emerson, Deputy Provincial Health Officer (acting) BC Ministry of Health, PO Box 9648 Stn Prov Govt, Victoria, BC V8W 9P1 T 250.952.1701 Cs. 17 F. 250.952. 1713 brian.emerson@gov.bc.ca

----Original Message----

From: Emerson, Brian P HLTH:EX Sent: August 19, 2021 8:00 AM

To: Barclay, Corrie A HLTH:EX <Corrie.Barclay@gov.bc.ca>

Subject: RE: OIPC meeting today

Hi Corrie and no, I have not has a request for such an order.

Perhaps it is being contemplated as a piece of legislation.

Thanks.

Brian

Dr. Brian P. Emerson, Deputy Provincial Health Officer (acting) BC Ministry of Health, PO Box 9648 Stn Prov Govt, Victoria, BC V8W 9P1 T 250.952.1701 Cs. 17 F. 250.952.1713 brian.emerson@gov.bc.ca

----Original Message----

From: Barclay, Corrie A HLTH:EX < Corrie.Barclay@gov.bc.ca>

Sent: August 19, 2021 7:57 AM

To: Emerson, Brian P HLTH:EX <Brian.Emerson@gov.bc.ca>

Subject: OIPC meeting today

Hi Brian

Are you working on the order for proof of vaccine for restaurants, events, etc?

I need to brief OIPC in the vaccine status indicator today and need help to provide them context.

Corrie

Sent from my iPhone

#### Vaccine Card Team

Name	Role	Org	Email
1. Nino Samson	Product Lead (incl. PIA and STRAs)	МоН	Nino.Samson@gov.bc.ca
2. Brad Head	Architect Lead (QR, Vacc Card)	MoH (Quartech)	Brad.Head@gov.bc.ca
3. Will Sonnex	Architect Lead (QR, Verifier App)	MoH (Freshworks)	will@freshworks.io
4. Stephen Laws	Scrum Master	MoH (Quartech)	Stephen.S.Laws@gov.bc.ca
5. Tiago Graf	Vacc Card Developer	MoH (Quartech)	s.22
6. Mike Lyttle	Vacc Card Developer	MoH (Quartech)	Mike@lre-tech.com
7. Amir Shayegh	Verifier App Developer	MoH (Freshworks)	amir@freshworks.io
8. Amit Metri	Verifier App Developer	MoH (Freshworks)	amit@freshworks.io
9. Aaron Woodruff	Verifier App Developer	MoH (Freshworks)	arran@freshworks.io
10. Aravind Elangovan	Verifier App Developer	MoH (Freshworks)	aravind@freshworks.io
11. Wade Bailey	PIR Lead	PHSA	Wade.Bailey@phsa.ca
12. Tyler Lloyd	PIR Developer	PHSA	Tyler.Lloyd@phsa.ca
13. Neil Edwards	UX Design Lead	MoH (Freshworks)	neil@freshworks.io
14. Claire Chen	UX Design	MoH (Freshworks)	claire@freshworks.io
15. Denise Chen	UX Design	MoH (Freshworks)	denise@freshworks.io
16. Mandad Tabrizi	UX Design	MoH (Quartech)	Mandad.H.Tabrizi@gov.bc.ca
17. Rachit Khare	Project Manager	MoH (Freshworks)	rachit@freshworks.io
18. Chris Carvalho	Project Manager	MoH (PHSA)	chris.carvalho@phsa.ca
19. Sonya Strong	Project Manager	МоН	Sonya.A.Strong@gov.bc.ca
20. Lisa Marsh	Support/Incident Lead	МоН	Lisa.2.Marsh@gov.bc.ca

From: Barclay, Corrie A HLTH:EX
To: Brown, Stephen R HLTH:EX
Cc: Barclay, Corrie A HLTH:EX
Subject: Vaccine Status Discussion Paper
Date: August 22, 2021 12:02:37 AM
Attachments: Vax Status Discussion.docx

#### Hi Stephen

Attached is a document outlining the approach to support the vaccine status needed for September 14th. I am confident the approach we are taking provides viable options for business and does include a secure and accessible solution for BC.

The step-wise approach we are taking is to provide options for businesses that include visual and digital verification options. There will be a secure QR code available for use. s.13; s.15 s.15

The solution CITZ is asking for will be there for September 13th. s.13 s.13

s.22

s.22 Happy to chat in the morning to walk through this document or answer questions.

Regards, Corrie

#### **COVID-19 Vaccination Status - Discussion**

- a) Overview for September 13<sup>th</sup> People in BC will be required to show their vaccine status to enter into certain events and facilities. For those vaccinated in BC, the following options are available to them to support the September 13 target implementation date:
  - Paper Record Covid-19 Immunization Record Card
  - Health Gateway Enrolment using the BC Mobile Card then allows for access to the Health
    Gateway which includes (1) Digital Record of your COVID-19 Vaccine which can be saved locally
    to your phone or printed (2) Vaccination Status and QR Code which can be saved locally to
    your phone or printed.
  - s.13
  - Provincial Vaccine Call Centre or Service BC walk-in Provide your first name, last name, DOB, PHN and one additional piece of information (data of vaccine clinic, name of vaccine clinic, address) a copy of a Covid-19 Immunization Record can be mailed or emailed.

#### b) Key Principles/Considerations

Purpo	se/use – what is the intended purpose s.13
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- c) Considerations and drivers for introducing lower barrier options for those in BC, other than requiring the BC Mobile Card
  - s.13

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e) Below are recent and real excerpts sent to the Minister from members of the public, that MoH has to respond to, related to BC Services Card s.13

- I like the idea of having all my medical information available in one place at
   <a href="https://www.healthgateway.gov.bc.ca/">https://www.healthgateway.gov.bc.ca/</a>. However I do not want it tied to a cell phone. Can I ask
  if there is an alternative option for getting registered
- I did sign up/register for the Provincial Health Gateway. But SUCH A HASSLE! ...when I go to my BC Services online card, there is nothing that tells me where to find my vaccine records. Very frustrating. I've spent over 2 hours this morning speaking with various offices, including Service BC (they, twice) and they were absolutely no help! I am almost 74 years old, and frankly, don't consider myself old and thankfully, I am very computer savy. But I feel bad for those seniors who are not. Huge headache
- I am asking for clarification reasons as to why I am unable to use my BC Services Card from my home computer. I do not have a sophisticated cell phone and I do not want to download any "apps". From my view our medical system at the ground level with doctors and clinics are not providing an accessible service to patients.
- Why must I have a smart phone to access my vaccination record.??? I am a senior who does not have or want a smart phone but I do have a desktop and I-Pad. Why cant I be accommodated?

And this was the global news story that aired August 12, 2021: <a href="https://globalnews.ca/video/8109002/b-c-residents-frustrated-with-app-only-access-to-personal-health-data">https://globalnews.ca/video/8109002/b-c-residents-frustrated-with-app-only-access-to-personal-health-data</a>

#### **Step-Wise Approach and Timelines**

- Communication educating our public and business to understand what is required of them and what the options are.
- Government is introducing new concepts for vaccine status which include visual verified status, digital verified status, digital credentials, digital identify, domestic use and internal travel use.

- Step 1: Vaccine Status Checker Timeline: August 30 (original due date for a solution)
  - Purpose: ability to quickly check your vaccine status and share if needed
  - Accessibility friendly:
    - Web based using laptop, PC, tablet, phone no app required
    - PHN + DoB
    - Mobile Phone or Email \$.13; \$.15
       \$.13; \$.15
    - Based on trust of the individual providing the status
- Step 2: Vaccine Status Checker + <u>Validation</u> (Digital Signature) Timeline: September 6 (next due date for a solution)
  - Purpose: building on Step 1 give confidence to business entities that the provided status is valid (has not been fraudulently reproduced)
  - Accessibility friendly:
    - Support smaller/low tech business entities with being able to validate a vaccine status without needing investment in technology (such as a QR code reader) while hinting at this future pathway
- Step 3: Vaccine Status Checker + QR Code Timeline: Sept 13 (current target date for solution)
  - Purpose: building on Step 2 implement (domestic) QR code option s. 13; s. 16
     s. 13; s. 16

- o Accessibility friendly:
  - Potential issue with QR verifiers (e.g businesses) needing an app to read the QR code

From: To: Subject:

Date:

Aitken, Jeff HLTH:EX Pokorny, Peter HLTH:EX Proof of Vaccination Options July 8, 2021 1:49:00 PM

Peter, here is a rough outline of the options we've captured so far from our conversations today on how to quickly provide people with proof of vaccination information. I have staff working on a slide deck to outline these options more clearly. I'm not sure what kind of time pressure you are under so I am providing this simple assessment for you now. I suspect we could be looking at implementing each of these options because they support different use cases. If you want this in a Word document of briefing note just let me know.

#### Health Gateway

Allows people to view and print their vaccination information.

- 4. Create a Verifiable Credential that can go in a Digital Wallet
- The federal government is promoting a new digital standard for creating a proof of vaccination credential (QR code) to support international travel. This standard could be adopted for use within BC to support its safe reopening plan including the lifting the access restrictions to Long Term Care.

#### Jeff Aitken

**Executive Director** 

COVID-19/Public Health Digital Response Team

Ministry of Health

2nd Floor, 1515 Blanshard Street | Victoria, BC

Office: 250 952-1170

Cell: s.17

From: Aitken, Jeff HLTH:EX
To: Pokorny, Peter HLTH:EX

Subject: Vaccination Status Options - Visuals

Date: July 8, 2021 5:05:00 PM

Attachments: 20210708 ImmsBC Vaccination Status options v2.pptx

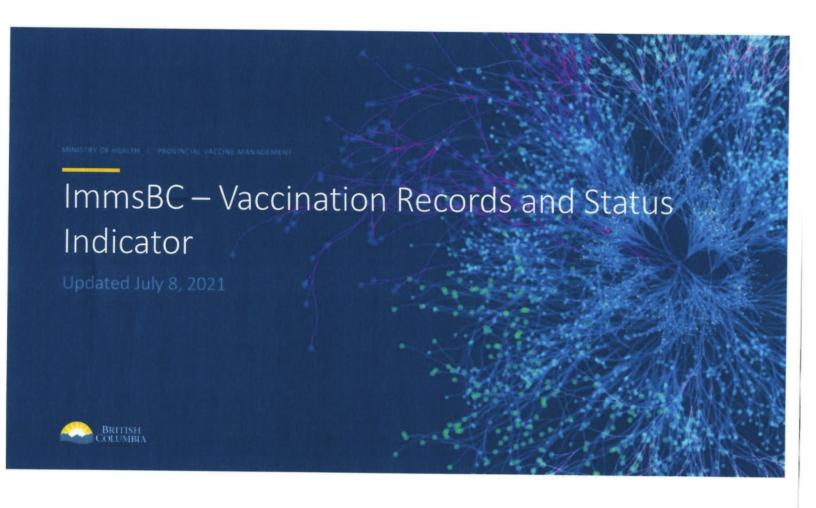
Hi, Peter. Here is a slide deck that provides some visualization of the options for providing citizens with access to their vaccination records.

#### Jeff Aitken

Executive Director
COVID-19/Public Health Digital Response Team
Ministry of Health
2nd Floor, 1515 Blanshard Street | Victoria, BC

Office: 250 952-1170

Cell: s.17



# **Business Problem**

- B.C. residents or other visitors need a way to demonstrate they are immunized for access to certain services and activities locally, such as visiting a family member at a Long Term Care facility
- Current paper copy (or wallet card) can fade (i.e. one-write) or be misplaced
- There is a need to offer a replacement of an individual's vaccination record or other form of status indicator of vaccination status (e.g. COVID-19 vaccine series "complete", "partially complete", "series not started")
- Providing an individual with their vaccination record is standard protocol and there are standard record templates used for this service currently
- ImmsBC has a Dose 1 paper record that public health can print during after-care (this service is not actively used operationally today)
- ImmunizeBC offers a vaccination status tool online for parents to check status of their school age children
- The public needs an online, self-serve and digital version of their vaccination record
- s.13

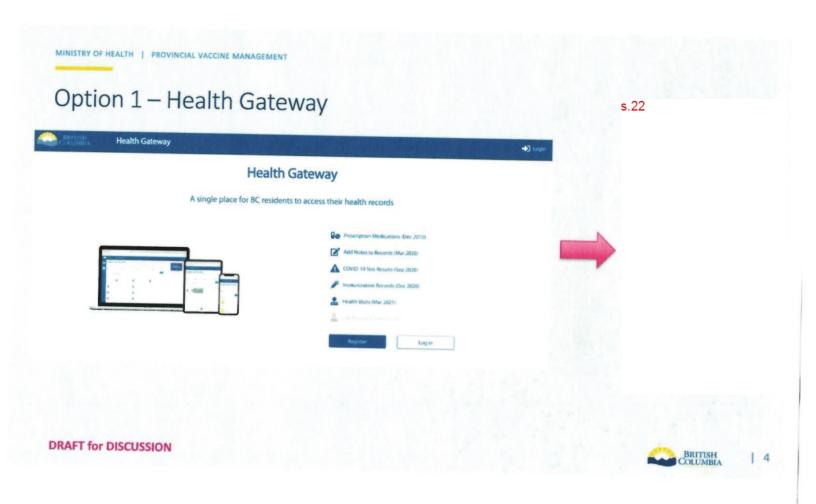


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# Assumptions and Questions

s.13





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# Option 4 – Proof of Vaccination Credential

s.13; s.16



 From:
 Aitken, Jeff HLTH:EX

 To:
 XT:Tuason, May HLTH:IN

Cc: XT: Music, Serge HLTH: IN; Tatto, Michael [PHSA]

Subject: Re: Proof of vaccination

Date: August 5, 2021 9:52:39 PM

Hi there. Deloitte showed a slide near the end of the call but they have not sent it through yet even though we've asked for a soft copy. Not much unique in the approach being taken by different regions. Corrie is developing the options paper herself. I agree it would be good to get Michael's and Serge's thoughts. We captured some of it when we did the initial options.

s.13; s.16

we can get an update from Corrie after her DM meeting tomorrow about the direction we will pursue. I suspect a working prototype will be where we go. All confidential for now.

Jeff Aitken

On Aug 5, 2021, at 6:58 PM, Tuason, May [PHSA] <may.tuason@phsa.ca> wrote:

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jeff, apologies for missing the Proof of Vaccination meeting this afternoon. Was there anything of value shared by Deloitte regarding approaches taken by other provinces or nations for our consideration? What are our next steps? It would be great to connect Serge into the solution options assessment and recommendation.

Thank you!

May

**May Tuason** 

Clinical Program Director, Digital Health Strategy Office Provincial Digital Health Team

Direct: s. 15

E-Mail: May.Tuason@phsa.ca
Provincial Health Services Authority

From:

Budgell, Jason

To:

Barclay, Corrie A HLTH:EX; Sanagan, Mary; XT:Tuason, May HLTH:IN; Aitken, Jeff HLTH:EX

Subject:

RE: Vaccine Proof - Touch base

Date:

August 6, 2021 9:30:25 AM

Attachments:

Vaccine Record Status PoC Document.pptx

This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Corrie,

The attached deck describes the vaccine 'certification' POC and the design considerations that would inform next steps.

Please let us know if you have any question. Adding May and Jeff so they have context.

WSJ posted a helpful article on this topic yesterday Prove Vaccine Status With a Phone.

Hope your meeting this morning went well!

Jason.

From: Barclay, Corrie A HLTH:EX <Corrie.Barclay@gov.bc.ca>

Sent: Friday, August 6, 2021 7:48 AM

To: Sanagan, Mary <msanagan@deloitte.ca>; Budgell, Jason <jbudgell@deloitte.ca>; Cox, Wendy G

HLTH:EX < Wendy.G.Cox@gov.bc.ca>

Cc: Peter Watkins <peter.watkins@iccs-isac.org>; Dalmia, Niraj <ndalmia@deloitte.ca>

Subject: [EXT] RE: Vaccine Proof - Touch base

Thank you Mary, this is a helpful deck

From: Sanagan, Mary <msanagan@deloitte.ca>

Sent: August 5, 2021 3:53 PM

To: Barclay, Corrie A HLTH:EX < Corrie.Barclay@gov.bc.ca >; Budgell, Jason < ibudgell@deloitte.ca >;

Cox, Wendy G HLTH:EX < Wendy.G.Cox@gov.bc.ca>

Cc: Peter Watkins < peter.watkins@iccs-isac.org >; Dalmia, Niraj < ndalmia@deloitte.ca >

Subject: RE: Vaccine Proof - Touch base

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Here are a couple of slides to guide the discussion. I have also asked Niraj to join us who is leading the PHAC vaccine work. Talk soon

----Original Appointment----

From: Barclay, Corrie A HLTH:EX < Corrie.Barclay@gov.bc.ca>

Sent: Thursday, August 5, 2021 10:22 AM

To: Barclay, Corrie A HLTH:EX; Budgell, Jason; Sanagan, Mary; Cox, Wendy G HLTH:EX

Cc: Peter Watkins

Subject: Vaccine Proof - Touch base

When: Thursday, August 5, 2021 4:00 PM-5:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where: Microsoft Teams Meeting

## Microsoft Teams meeting

#### Join on your computer or mobile app

Click here to join the meeting

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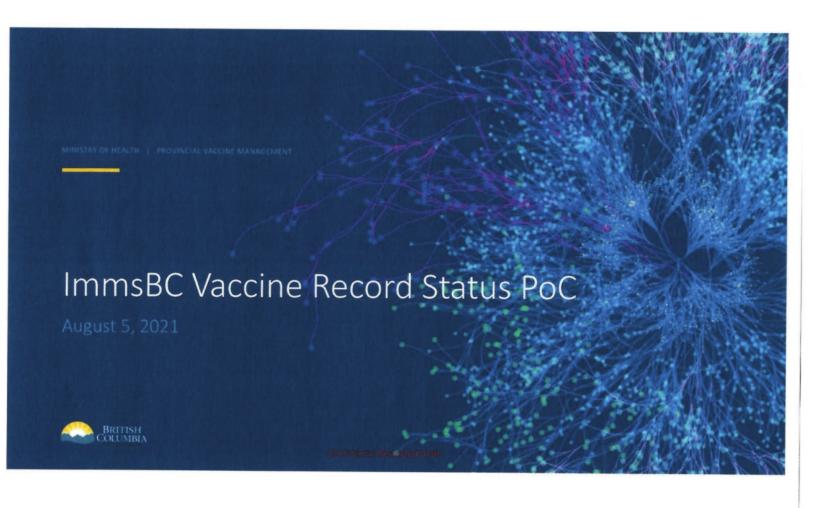
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