



Canada Health Infoway

Pan-Canadian Patient Summary

Clinical Session: Achieving pan-Canadian alignment on data elements

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Objectives

1. Share progress of pan-Canadian Patient Summary and benefits of pan-Canadian alignment for the PS-CA and upcoming initiatives (e.g., eReferral)
2. Discuss potential challenges and opportunities for achieving alignment within pan-Canadian interoperability initiatives



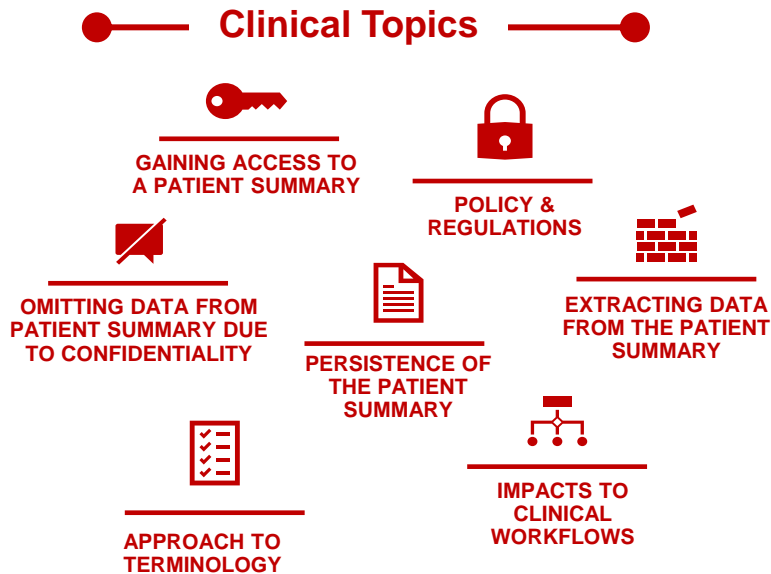
Pan-Canadian Patient Summary: Progress!

Together we collaborated on/in:

- 4 versions of the PS-CA specification, with companion and implementation guides
 - Multiple one-on-one sessions to align and clarify the specifications
 - 3 versions of the CA:FeX specification
 - 1 version of the Interoperability Reference Architecture
 - 2 Canadian Projectathons!
 - 2 pan-Canadian clinician engagement sessions plus jurisdictionally led sessions
 - Weekly/Bi-weekly and Ad-Hoc Jurisdiction Sessions as teams and as individuals
- Participation in international discussions (e.g., GDHP) and IHE events (e.g., IHE Connectathons in Switzerland and Nevada)
 - Bi-Weekly Coordinating Table meetings
 - Monthly Executive Table meetings



Snippets of what we heard in previous clinician sessions



The Patient Summary must:

- be seamlessly **integrated into existing workflows** and not create additional administrative burden.
- focus on **what will make the most clinical difference**. Challenge to “get it right” with free-text and coded values locally before introducing cross-border care.
- **not add additional data entry and complexity** of entering coded data (e.g., consider options such as artificial intelligence, important that a clinician can choose to see the free text, not just a coded value)
- find a **balance** between keeping the PS relevant / up-to-date but not onerous for the primary physician
- consider **Patient access** and ability to contribute to their own Patient Summary
- And so much more, which has been built into the PS-CA specifications and ongoing interoperability development, including the User Personas.

Tangible Benefits of Interoperability



For Providers

- Time savings as a result of having the ability to access more complete and comprehensive information in one place
- Improve communication with care teams across the health system
- Improve confidence in decision making
- Increase time to spend with patients and their families

Tangible Benefits

For Patients

- Improve patients' access to their health information, including their ability to manage and share it
- Reduce time to diagnosis and treatment
- Reduce medication errors that might lead to patient harm
- Result in fewer emergency visits and shorter hospital stays
- Facilitate better transitions of care

For Vendors

- Ability to reuse significant number of standardized components to implement across all jurisdictions with minimal variability.
- Reduction in implementation time.
- Coordinated approach for all jurisdictions reduces complexity and resource requirements.
- Alignment to global standards also supports international vendors who will no longer need to specialize their solutions specifically for Canada.

Current State

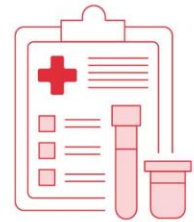
Dr. Abbas: A Clinician's Experience

I'm a family physician practicing in a small urban centre about one hour from a large hospital.

I'm often unable to get a full picture of my patients' visits to hospitals, emergency departments or specialists due to missing records or delays in receiving them.

I'm caring for Emma, a 77-year-old female who suffered a stroke and has just been discharged from the hospital. This is a life-changing event for her.

I've spent a lot of time trying to get a hold of Emma's complete health records to develop a proper care plan and ensure she receives appropriate follow-up services.



Hospital Visit Record & Medication List

Dr. Abbas learns from Emma's son that many of her meds were changed, but is unable to access the updated medication list. He is also unable to access Emma's hospital discharge summary. His team faxes the hospital for the records, but doesn't receive a response.



Administrative Burden

I have spent a lot of time trying to get Emma the post-discharge care she needs, but I'm still waiting on hospital records and trying to confirm whether referrals for services have been made.

I would like to spend less time looking for records, so that I can focus my efforts on discussing Emma's health condition and care plan with her.



10 + DAYS



Specialist Follow-up

Dr. Abbas is unable to find a referral for Emma to see a neurologist or outpatient stroke clinic. Emma's son doesn't remember hearing about one either and hasn't received an appointment.

Dr. Abbas's team fax an urgent referral, but do not receive any confirmation for an appointment or a receipt of the referral. A second fax also goes unanswered.



Home Care

Dr. Abbas learns Emma has not been connected to home care yet and faxes a referral. The referral is rejected days later, because the electronic medical record (EMR) has an old referral format on file.

Emma's Care Plan

Dr. Abbas does not have access to Emma's hospital discharge summary and referrals to inform her care plan.



The Promise

Dr. Abbas: A Clinician's Experience

I'm able to electronically access Emma's detailed hospital report and referrals in near real time. I'm able to review these records in advance of meeting with Emma.

I can focus my time providing Emma with direct care, helping her and her son better understand and manage her long term health and answering their questions rather than searching for records. This also frees up time for me to see other patients.



Patient Portal

Before leaving the hospital, Emma and her son sign up to access her hospital record through a patient portal. Emma makes an appointment with Dr. Abbas.

NEAR REAL TIME



Dr. Abbas Accesses Emma's Info

Dr. Abbas receives a notification of Emma's recent ED visit and notes an appointment has been made. He is able to access Emma's health information, including her test results, a reconciled medication list, a discharge plan and referrals.



Emma's Care Plan

Emma has her appointment with Dr. Abbas. With Emma's information available to him, he is able to answer Emma and her son's questions and guide her post-stroke care plan.

With all of Emma's health information available in near real time, Dr. Abbas is able to spend more time guiding Emma's post-stroke recovery, rather than searching for scattered records. Her specialists are also able to access her history, ensuring they avoid medication conflicts and unnecessary duplication of tests.

Current State

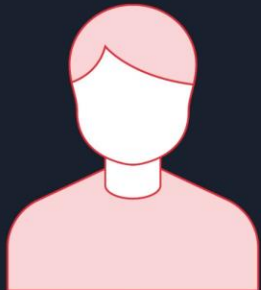
Chris: No Access to a Family Physician.

I am 48 years old, living in a suburban neighbourhood. My family physician recently retired, and I am on a waitlist to join a new primary care clinic.

I have a family history of heart disease and type 2 diabetes. I'm fairly healthy, but am currently feeling unwell.

I don't have access to my own previous health information.

Lack of access to my health records leads to repeat tests and delays in receiving a diagnosis.

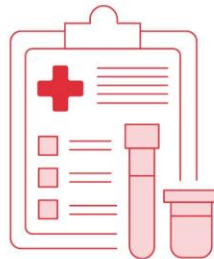


Chris is feeling unwell.



Walk-in Clinic

Chris does not have access to his own health information nor any previous test results to share with the physician. New blood tests are ordered.



+ 2 DAYS

Results received. The walk-in physician informs Chris that his "sugar is high" and discusses a diet and exercise routine. The physician is unable to confirm whether Chris is diabetic or pre-diabetic without previous results. Chris leaves without a clear understanding of the diagnosis.



+ 25 DAYS

Weeks later, Chris is feeling extremely unwell again.



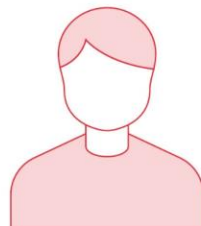
+ 6 HOURS

Emergency Department (ED)

ED physicians do not have access to Chris's medical history, including his most recent test results. Chris cannot access or share his own health information but informs the ED team his blood sugar was high.



Blood tests repeated. The ED physician suggests Chris might be diabetic based on Chris's recollection of test results, but is unable to confirm a diagnosis without his previous results. He suggests a diabetes education clinic.



I am feeling overwhelmed and unclear about my diagnosis and have spent a lot of time getting repeat blood work because no one has access to my health records.

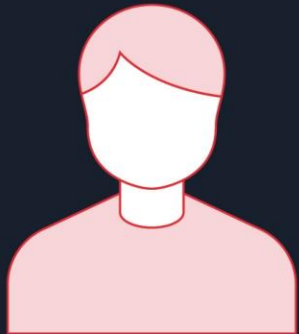
I would like to be able to access my own health information and feel that this would allow me to better understand and monitor my symptoms in order to have an informed discussion with a physician at the point-of-care.

The Promise

Chris: No Access to a Family Physician.

I am able to access my own health records and share information with my care providers, so they have a holistic view of my current and past health to understand my symptoms and confirm a diagnosis.

I am confident I will be able to manage my condition. The ability to view my test results will help me better understand and educate myself on how best to manage my conditions.



Chris is feeling unwell.



+ 1.5 HOURS

Walk-in Clinic

Chris provides the walk-in clinic physician with access to his health records. Blood tests are ordered.

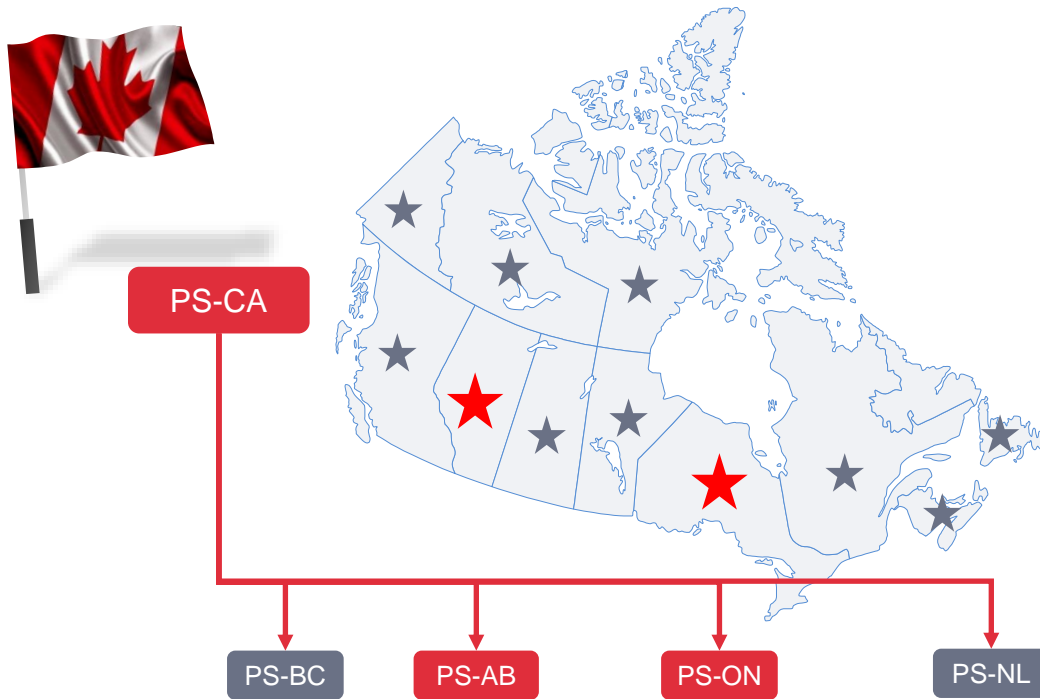


+ 2 DAYS

Diagnosis

Based on Chris's health history, as well as current and previous test results, the physician confirms Chris is diabetic and refers him to a diabetes education clinic.

Connected care puts Chris at the centre of care with information flowing through inter-connected systems that give patients – and their care teams – better insight into their diagnosis, prognosis and care plan.



As the Patient Summary (and other initiatives such as eReferral) evolve and implementations expand across the country, a formal **decision-making** approach to **achieve alignment** is needed to **solve for differences** (e.g., legislation, policy, clinical workflow, terminology, technical, etc.)

Committing to a **core pan-Canadian approach** (e.g., core data model, minimum must support values, cardinality, etc.) requiring **minimal configurations** to meet **intra-jurisdictional needs** without limiting the future of **inter-jurisdictional exchange**.



Framing the Discussion Scenario

Electronic Referral (eReferral) is a promising landscape for improvement through national standards

- Currently a mix of transmission methods (e.g., fax, phone, electronic)
- Discrete data elements rarely used – requiring identification and prioritization of key elements that will support eReferral functions (e.g., triaging).

eReferral is the perfect backdrop for our discussion scenario on how we jointly* prioritize and operationalize decisions on pan-Canadian standards. Particularly, when use and availability of data elements vary across sites and jurisdictions.

*Clinicians, Jurisdictions, Infoway, CIHI, Vendors,

- The challenge in the following scenario has more than one way of being solved
- Opinions may vary on the best method to resolve the gap – but the gap needs to be filled OR the national standard must be relaxed
- Process needs to be established to ensure these decisions are made collectively and to consider impacts and ways to address obstacles.

Discussion Scenario



Scenario 1: Alice is a 55 year old ex-smoker who is experiencing increasingly severe GERD symptoms in the past year. She has worked with her Primary Care Provider (PCP) to change her lifestyle including modifying her diet, but her symptoms persist despite use of PPI medications. She tested negative for H Pylori.

Her Primary Care Provider is concerned that she needs further investigation, and has initiated an eReferral to a Gastroenterologist, querying the need for an endoscopy procedure or an Upper GI series.

The GI clinic's eReferral process uses the severity of certain symptoms to prioritize when new intakes will be seen (e.g., <14 days, 90 days, 6 months, 1 year). eReferrals with discrete data that match the GI clinic's escalation rules are automatically assigned into high priority work queues.

Alice's referral did not indicate that her GERD was "Severe" as a discrete data point, even though her PCP had described it as "Acute" with free text.

Alice's referral lands in a "Follow-Up Needed" work queue which results in unnecessary delays in accessing the specialist, and additional burden on the GI clinic and Alice's PCP to fill the information gap needed to accurately triage her case.

A variety of change management options are available to prevent this scenario at scale (individually or in combination):

- a) eReferral forms/user-interfaces could be enhanced facilitate discrete collection/perform known translations,
- b) Clinical consensus could be sought to use standardized evidence-based terms in collecting and sending eReferral data,
- c) Policies could be introduced to encourage consistency,
- d) Interoperability standards could be changed to reduce reliance on a single set of terms (least desirable).

Discussion



As a primer for workshops to come, let's consider the following:

1. What challenges have you encountered, or do you foresee for aligning on a pan-Canadian scale? What do we need to be thinking about?
2. How would you foresee resolving these challenges? Would it be helpful to have a standard framework / pathway for resolving issues?
3. What kind of venue, format, or structure could work well? For example:
 - a. Vendor-Clinician sessions/workshops?
 - b. Clinician-Jurisdiction sessions/workshops?
 - c. Establishing a community of interest?
 - d. Other?
4. What other ideas may help to address these challenges?
 - a. Engaging stakeholders on Technology challenge (e.g., UI/UX)
 - b. Engaging stakeholders on potential** changes in clinical workflow, matched by technological adjustments (e.g., UI/UX)
 - c. Requesting changes from international standards (e.g., IPS)
 - d. Changes to policy and/or legislation à at what level
 - e. Other?
5. If there are dependencies on other **factors**, like policy, legislation etc., **what are your thoughts on** an appropriate time-frame to come to alignment?

Next Steps

We will be continuing to work toward progressing pan-Canadian interoperability initiatives, such as interoperable data standards, eReferral, patient access, etc.

We recognize the importance of clinical input and will continue our collaboration with clinicians, jurisdictions, and, vendors.

Stay tuned for opportunities to participate!



Canada Health Infoway

Thank you!

To learn more about the Projectathon 2023, visit:

<https://infoscribe.infoway-inforoute.ca/display/PCI/Projectathon+March+2023>

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Canada Health Infoway

Pan-Canadian Interoperability Projectathon

Wrap-up

March 23, 2023

Attila Farkas, Senior Director Interoperability
Michelle Cerqua, Director Interoperability Enablement

Projectathon Days 1 - 3

No Peer and Peer to Peer Testing

In this phase of testing, participating vendors can complete tests both individually and with partners to execute the test steps for the desired profiles

Purpose: To test the PS-CA, and PS-ON Specifications with a focus on both content and exchange

Outcomes:

- Projectathon was a great success with both PS-CA and PS-ON documents generated, reflecting a strong collaborative effort toward pan-Canadian interoperability!

Participating Systems from:



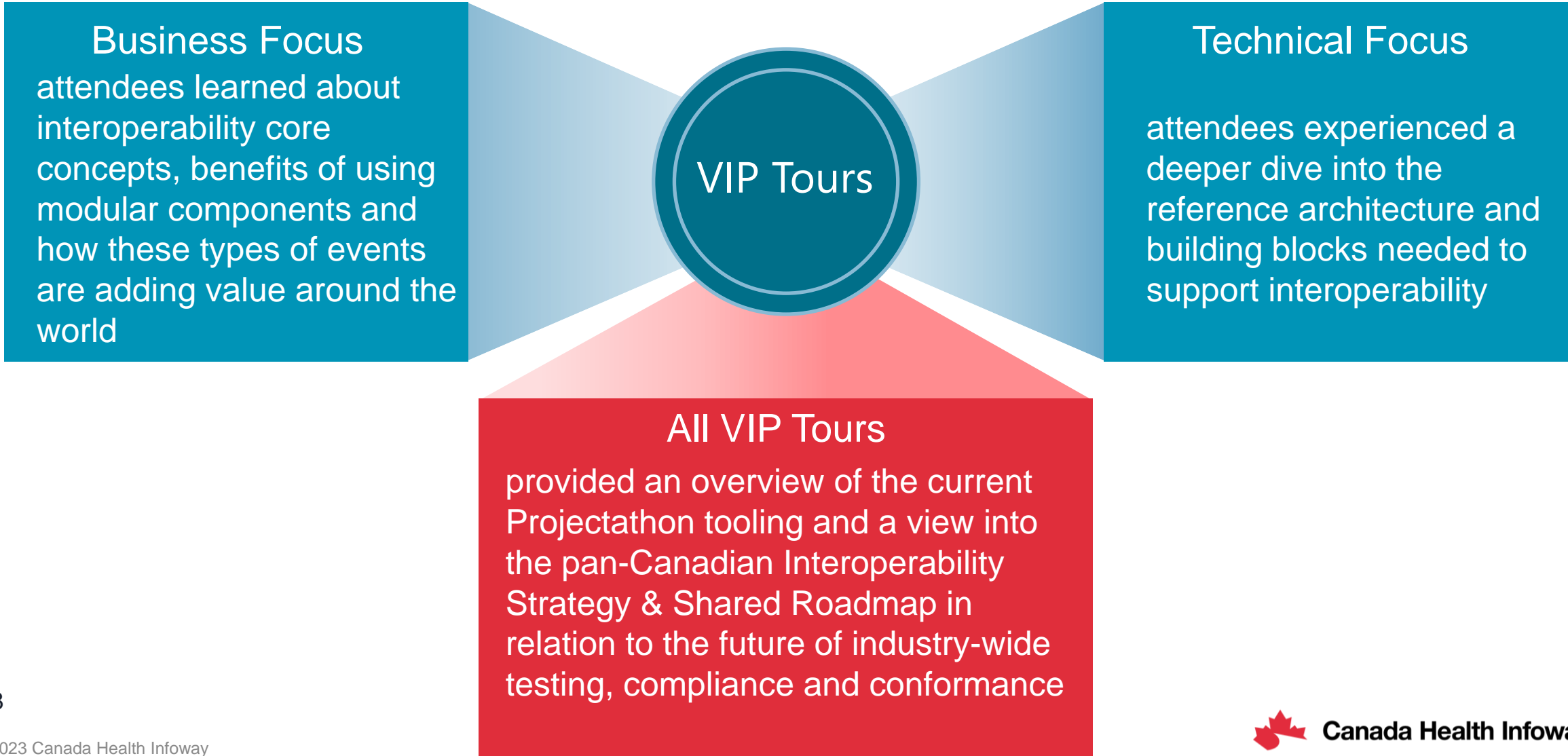
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Total Profiles Tested	Total Tests Conducted	Total No-Peer Tests Conducted	Total Peer-to-Peer Tests Completed	Total Test Instances Successfully Completed for PS-CA	Total Test Instances Under Revision (1 PS-CA and 1 PS-ON)
6	203	144	59	2	2

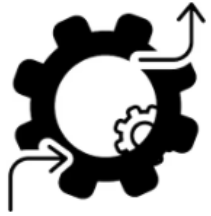


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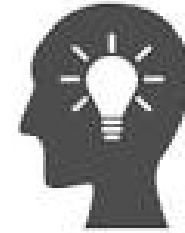
Highlights from the VIP Tours



Highlights from the Symposia Day



Bold Transformation



Lessons learned from ehealth Suisse



A collective guiding light



A fuller set of exchange paradigms



Possibilities for alignment

Interoperability works for everyone, or it works for no one.

The Roadmap belongs to you, supports you, and will be implemented hand-in-hand with you.

- Advancing pan-Canadian interoperability requires **partnership, collaboration and alignment** across the entire health ecosystem.
- **Infoway will leverage more than two decades of progress and experience** to convene, guide, and collaborate on this work.
- The Roadmap provides alignment and direction across the provinces and territories – and **we can't make the journey without you.**

Thank YOU!!!

- Participating vendors; Microquest, Telus, WELL Health, Smile Digital Health, Oracle, Verto, VeroSource, Akinox, Enovacom
- Participating jurisdictions, Ontario, Alberta, British Columbia, Newfoundland and Saskatchewan
- Clinicians
- CIHI and many other contributors
- IHE Catalyst and Kereval
- Broader Infoway team for countless contributions and support
- Core Infoway team, including our dear friend Tib Onu

Next Steps

- Participating vendor debrief sessions
- Projectathon Report, and CA:FeX White Paper to be posted on Infoscribe by end of April
- Recordings and all presentations will be uploaded onto Infoscribe by the end of next week
- Roadmap will be released in April
- Collaboration, collaboration, collaboration

Help us improve by completing the Survey!

Projectathon 2023
is dedicated
to our dear friend
Tib Onu

