



Canada Health Infoway

Pan-Canadian Service Directory Implementation Guide

March 20, 2025

Background

Agenda

Code of Conduct

- Members to share their opinions on the content presented
- Co-chairs to actively listen and consolidate the opinions and ideas shared during the WG sessions and shared through notes post meeting
- All ideas are welcome; however, priority will be given to content related to the current version of the guide
- Coming to a consensus that everyone “can live with”
 - If all avenues are exhausted through discussion and consensus has not been reached, an online poll (during the WG call and on forums) will be used to reach majority consensus

Service Directory – Summary

Definition

The service directory specification harmonizes how data regarding healthcare services and providers is structured and provides standardized interactions with that information (e.g., Querying service/provider information). This directory would also store relationships between the service, service providers and their roles, organizations, and associated locations, as well as details on how to contact them. This standardization will enable users (regardless of jurisdiction) to search for, locate, and communicate with healthcare providers, and help them search, plan, and choose the right health services for their patient(s) needs.

Out-of-Scope

The initial version of the implementation guide will not cover:

- A directory of instances and its subsequent such use,
- Federated services/functionality,
- Inclusion of actors outside the scope defined within this implementation guide. This is done to avoid complex processes that are outside of the current defined processes of a service directory.
- Security and access considerations

MustSupport Definition

The *supplier (sender)* of the service directory information

- **SHALL** populate any elements with the MustSupport flag set to true if the information is available and is appropriate to provide

The consumer (**receiver**) of the service directory information

- **SHALL** be capable of receiving any resource instances containing elements with the MustSupport flag set to true without generating an error or causing the application to fail.
- Elements without a MustSupport flag in a FHIR response **SHOULD** still be received without generating an error or causing the application to fail.

Use Cases

1. Search for Service

Service Consumer looks up specialist within the patient's city that speaks the same language

Query: Search for location that has a specific city and an associated specialist service and the specified language and return the location and associated practitioners that provide that service

Alternative: Health region queries all locations within the region to update its central repositories information

Query: Search for all locations within a specific organization that have been updated since the last update, and include in the results all practitioners associated with each location

2. Search for Service Provider

Patient asks their general practitioner additional information on their diagnosis which only the specialist they saw can provide additional information on

Query: Search for a practitioner based on their name and specific specialty and include locations and contact information in the response

Types of Actors – Roles and Definition (Pan-Canadian)

Actors	Description
Services Supplier	<p>Is an actor that accepts the query request and produces a list of matching resources that it sends as a response.</p> <p>Some examples of this actor are: Jurisdiction, Health Region, Hospital, Community Clinic</p>
Services Consumer	<p>Requests a list of resources from the SD Services Supplier based on the query parameters selected.</p> <p>Some examples of this actor are: Registered Care Providers (Physician, Nurse, etc.), Front Desk Staff, Health Region, Community Clinic, Patient*</p>

* Patient access to the service is not in scope for the first MVP release

Process for Creation and Review of Profiles

1. Profiles are created by Infoway and put on Github (auto-linkage with the Simplifier project - Public)
2. Profiles were published to simplifier on Wednesday, 10AM ET for WG review
3. WG members review the profiles together on Thursday, 1PM ET
4. Changes to the profiles and the pages are gathered and the updates made before the next session

Approach for Extensions & Valuesets

- Derived from the original IG
- The canonical URLs are updated to ensure that there aren't any dependencies on the IG that they are adopted from
 - These new extensions and valuesets are maintained by Infoway
- Valuesets to be hosted on terminology gateway by Infoway

CA:CSD Base Profiles

We are using the IHE mCSD version 3.8.0 as the basis for our profiles, and are deriving from them to ensure that we remain in line with it.

Should we identify something in the future that does not allow us to continue to derive from mCSD we can easily switch to using base FHIR r4.

Recap

Expectations for CA:CSD	Confirmation	Comments
GET	✓	<ul style="list-style-type: none">To confirm not having POST functionality
Use of \$export operation to retrieve resources	✓	<ul style="list-style-type: none">Confirmed usage of the \$export operationTo be included in the CapabilityStatements for CA:CSD
Support retrieval of the following resources: <ul style="list-style-type: none">○ HealthcareService○ Organization○ Location○ Practitioner○ PractitionerRole○ OrganizationAffiliation	✓	
Requiring the following parameters: <ul style="list-style-type: none">○ _outputFormat – (i.e., ndjson)○ _since○ _type	✓	<ul style="list-style-type: none">Confirmed use of _since and _typeconfirmed use of the ndjson file format
Support retrieval of information using endpoints for system level exports	✓	<ul style="list-style-type: none">Confirmed to export full directories – can do asynchronously

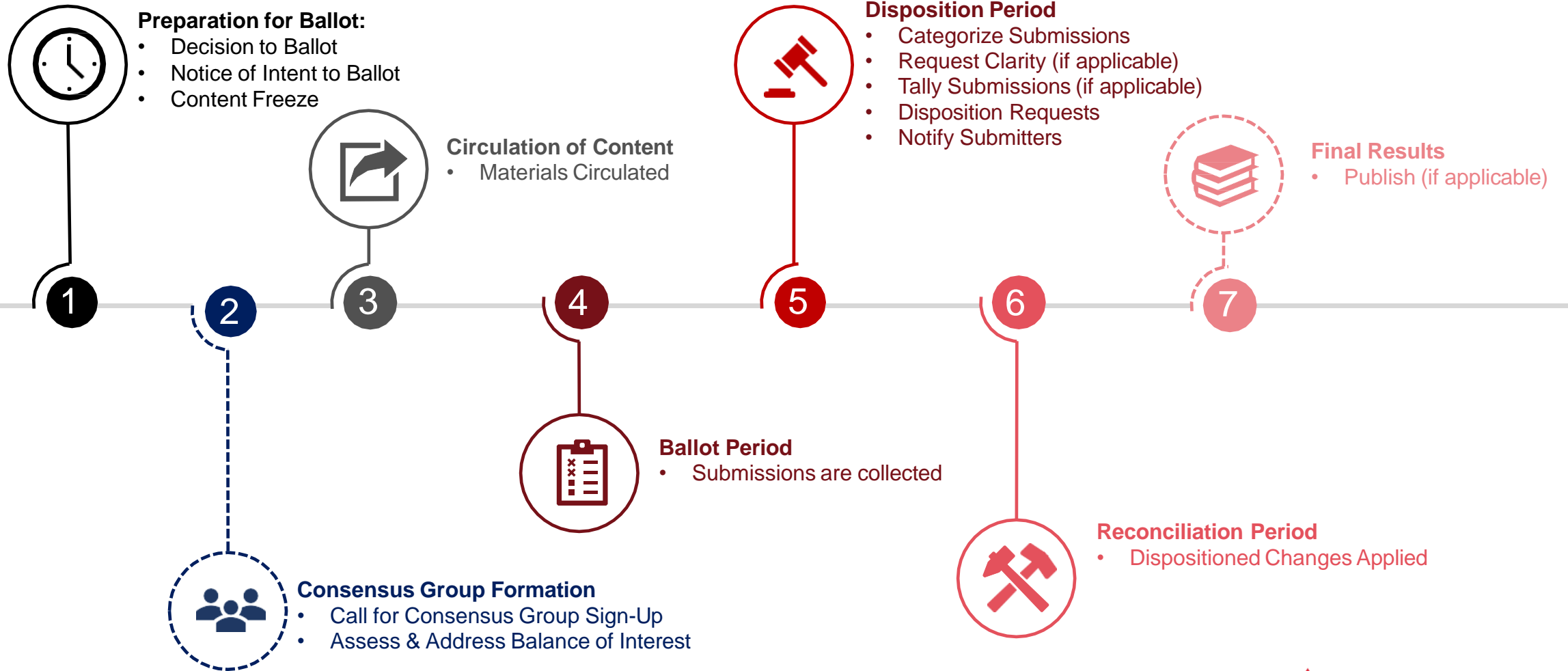
Agenda

- Infoway Balloting Process
 - CA:CSD balloting timeline
- Artifact changes made

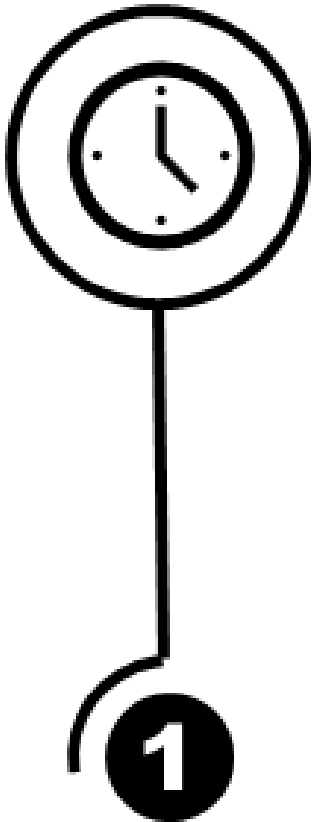
Type and Purpose of Balloting

- CA:CSD to be published as a “**For Comment Ballots**” specification
March 28th
 - Used in early development cycle to solicit feedback from the community
 - Don't result in a vote that authorizes a specification (no notion of pass/fail) and used for a draft level guide

Balloting Process: Stages



Preparation for Ballot



Decision to Ballot

- Typically, 60+ days before ballot open
- Working Groups decide whether to put forward their specification

Notice of Intent to Ballot

- Typically, 30+ days before ballot open
- Announcement that Specification pursuing ballot
- Some SDOs require reviews by other groups (e.g., TSC)

Content Freeze

- Version of the content is locked down to prepare for circulation
- Working Groups can still meet to discuss items

Consensus Group Formation

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Consensus groups help a) assist calculation in ballots with quorum and pass/fail requirements, b) assess balance of interest, c) provide secondary benefits

- *Given ties to voting, use of Consensus Groups may vary based on ballot level. For example, many national Draft for Comment ballots do not utilize Consensus Groups.*

Consensus Group Sign-Up

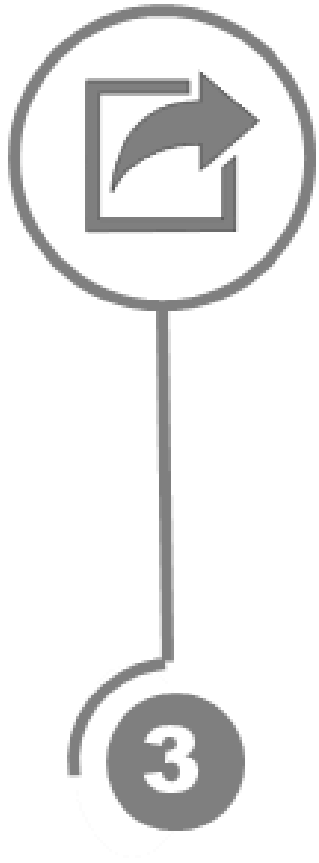
- Typically, 30+ days before ballot open – 30+ days in duration
- Interested parties sign up and provide details on their organization, contact information, interest category (e.g., vendor, healthcare provider, govt agency)

Assess and Address Balance

- Participation across interest categories calculated for purpose of avoiding a majority of a single interest group
- Allows for further engagement of underrepresented parties before sign-up closes



Circulation of Materials



Circulation of Materials

- Typically occurs 30+ days before ballot open
- Shared with consensus group/participating community
- Includes ballot content and instructions
 - Link or pdf to snapshot of the specification (e.g., Narrative/Guide, ballot version FHIR package)
 - Description of how to provide feedback (e.g., ballot spreadsheets, tooling instructions)

Ballot Period

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Ballot Period

- Typically, 30+ day duration
- Participants submit structured details that assist in reviewing their ballot comments (e.g., comments, requested changes):
 - Specification,
 - Location for ballot comments,
 - Ballot comment description & rationale,
 - Ballot comment type,
 - Ballot mark (if applicable)



Ballot Format

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A variety of methods exist to submit ballot comments and marks

- Structured content can be captured in excel spreadsheets
- Other tools can be configured to support sophisticated issue creation, voting, dashboards

Ballot Submission											
Ballot	Section	Artifact(s)	Page name(s)	URL	Vote and Type	Sub-category	Existing Wording	Proposed Wording	Ballot Comment	Summary	Submitter
2023-Sep FHIR IG BSeR R1 STU	1.2	1.2		http://hl7.org/fhir/us/bser/2023Sep/#overview	A-S	Clarification	... using the HL7 Fast Healthcare Interoperability Resources (FHIR) standard as an exchange format for clinical and non-clinical referrals (service requests).	... using the HL7 Fast Healthcare Interoperability Resources (FHIR) standard as an exchange format for clinical and non-clinical referrals to be communicated in the form of service requests.	As it is currently written some readers may infer that serviceRequest only apply to non clinical referrals	Clarify wording to ensure reader is equating service requests with only non-clinical referrals	Sheridan C
2023-Sep FHIR IG BSeR R1 STU		2.1		http://hl7.org/fhir/us/bser/2023Sep/Introduction.html#key-concepts	A-A				This section is helpful in framing the scope to readers assessing the guide for how referrals work in their national context	This section is helpful in framing the scope to readers assessing the guide for how referrals work in their national context	Sheridan C
2023-Sep FHIR IG BSeR R1 STU		2.4		http://hl7.org/fhir/us/bser/2023Sep/Introduction.html#collaboration	A-C	Clarification			Can you add a hyperlink to the page that provides guidance on this extension approach?	Add hyperlink to improve navigation between referenced pages	Sheridan C
2023-Sep FHIR IG BSeR R1 STU				http://hl7.org/fhir/us/bser/2023Sep/StructureDefinition-referral-task.html	NEG	Correction			MustSupport on the slices of Task.identifier to fix a type of PLAC and FILL seem overly constrained. It is unclear whether this fulfills any functional purpose when other elements exist to link the task to actors and objects in the state machine	Remove MustSupport on slices for Task.identifier	Sheridan C

Example of Ballot Spreadsheet Submission

Ballot Comment Categorization

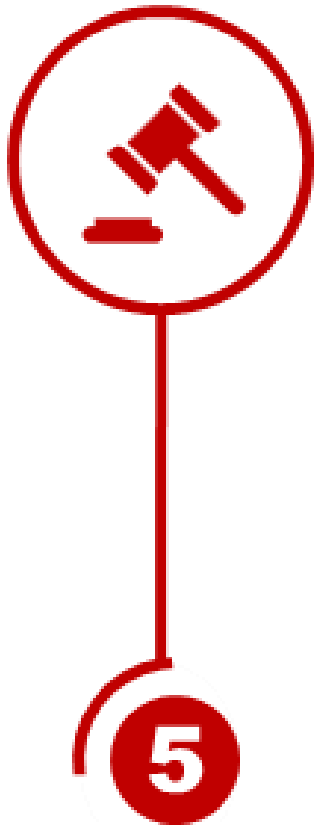
4

Categorization of ballot comment type (and in some cases sub-category) can help organize requests to prepare them to be dispositioned by a Working Group (WG). Examples from HL7 provided below demonstrate this categorization:

Type	Description
Suggestion	Use this if you are including a suggestion for the WG's consideration; such as additional background information or justification for a particular solution.
Typo	Use this if you are reporting a typographical error.
Question	Use this if you submitted a question for consideration by the WG.
Comment	Use this for a generic comment other than a suggestion, question, or typo .

Sub-Category (Suggestions or Negative Marks)	Description
Correction	Indicates that there is believed to be an issue with the specification such that it does not reflect the intent of the author or will not achieve the intended objective without adjustment
Clarification	Indicates that the wording of the specification, as written, is not sufficiently clear as to how conformant implementations should behave.
Enhancement	Indicates that an additional feature is desired that is felt to fall within the declared scope of the specification.

Disposition - Determinations



Disposition determinations are used by Working Group participants to use in committee decision making practices (e.g., Robert's Rules of Order) to arrive at a decision of how the comment should be dispositioned. Examples from HL7 below to demonstrate disposition determinations.

1. **Persuasive:** Whatever changes was proposed by the balloter will be made as requested
2. **Not Persuasive:** The WG will not make any change based on the raised issue (and will provide a rationale for why)
3. **Persuasive with Modifications:** The WG agrees with the issue identified and will make changes, but the changes will differ in a noticeable way from the balloter's suggestion/intention
4. **Not Persuasive with Modifications:** The WG disagrees with the issue, but will make a change to the specification as a result of the comment anyhow - e.g. to better document why things are the way they are
5. **Not Related:** The comment does not fall within the scope of the ballot. (The comment itself may eventually be dealt with as part of other review, but the comment is not deemed to be relevant to the current ballot.)
6. **Considered - No Action Required:** This is used for comments that do not propose a change
7. **Considered for Future Use:** No change will be made based on this comment for the current release, but the comment will remain "outstanding" and will be considered as a possible change in a future release
8. **Duplicate:** The proposal is substantially the same as another comment and the decision will be documented on the other comment.

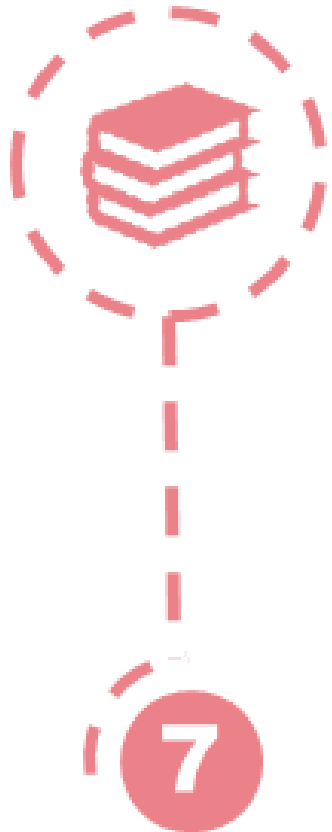
Reconciliation Period

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Dispositioned Changes Applied

- Duration depends on the volume of ballot comments and capacity of the Working Group
 - Pan-Canadian projects receiving support can typically expect to see changes incorporated into the specifications in ~3 weeks
- Changes applied to the Continuous Integration (CI) version of the specification

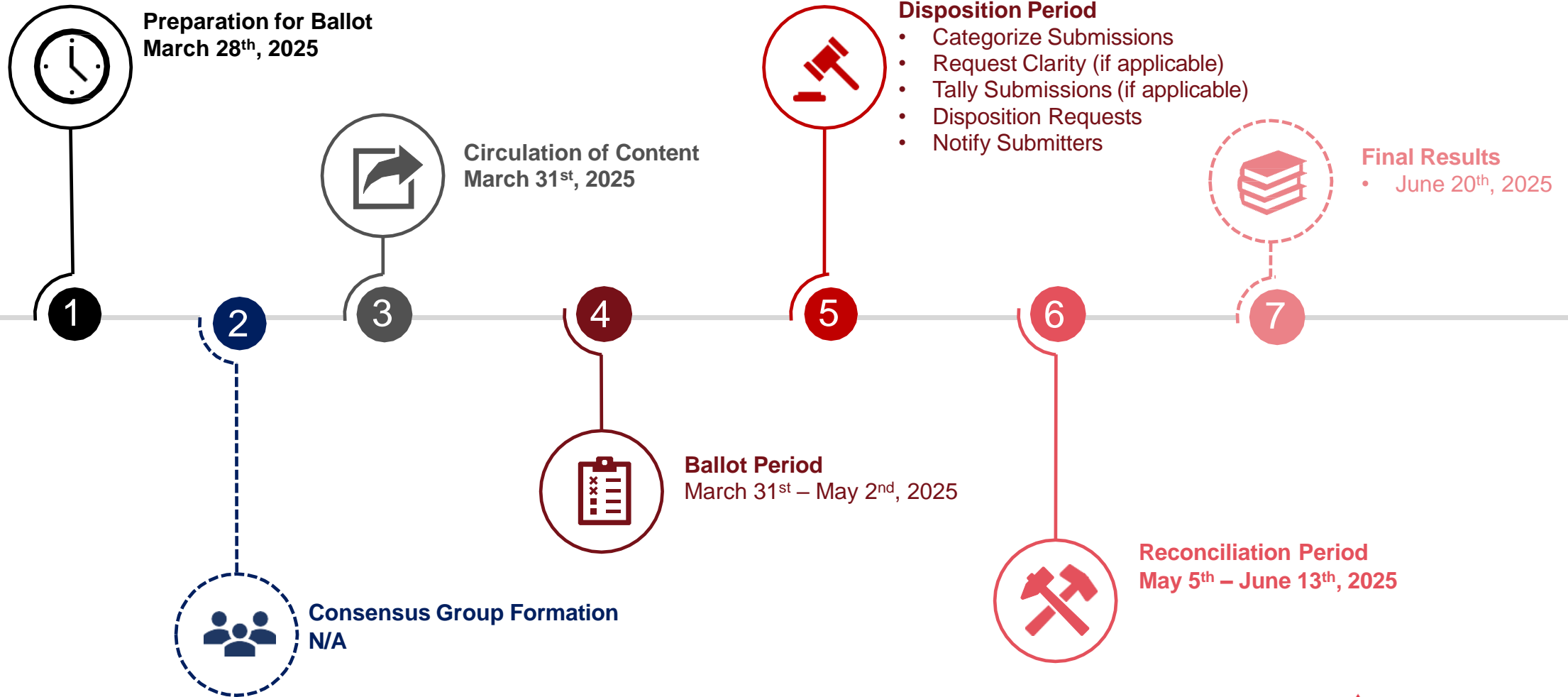
Final Results



Publish (if applicable)

- After changes have been incorporated and QA'd, specification can be formally published as a release (e.g., major, minor) with a release type tag (Draft, Trial Implementation, Final)
- [IO Specifications Publication Model](#)

Balloting Process: Stages



Artifact Changes

CapabilityStatements:

- Updated the two CapabilityStatements for the CSD consumer and supplier based on the IHE updates to indicate a SHOULD expectation on majority of the search parameters, including the **.identifier** elements on all resources

Next Meeting: March 27th

- Sharing changes made for harmonization
- Final view of the CA:CSD guide before ballot version release



Canada Health Infoway

Thank you!

Contact Information

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