Introduction to Balloting Processes
Community Education Session
11-28-2023

Intent of this Education Session

- Describe the process and intent of balloting:

  - Convey credibility and pragmatism of balloting as a method for community consultation and consensus building

  - Educate on the processes of balloting content at various levels of maturity

  - Reduce intimidation in trialing a well-vetted, globally recommended process

- Prepare our pan-Canadian communities to participate in the community balloting process as part of overall Interoperability Product development and maturation process

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What is Balloting?

Balloting is the formal process of sending a **specification to a consensus body, collecting and addressing feedback and change requests prior to publication**

Consensus Activity Used Around the World

- Consensus activity that SDOs (e.g., HL7, IHE, ISO, etc.) and other organizations use to gauge and drive agreement and formal decision making in specifications

Predictable Set of Community-Driven Processes

- A defined consensus group that:

- Reviews a specification,

- Submits comments/proposed changes during a fixed period (often vote-categorized),

- So that results can be compiled and tallied,

- And the responsible parties of the specification can discuss and agree on how the request should be dispositioned

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What is Balloting? Cont.'

Flexibility in Ballot Processes

- **Types** (e.g., new work item proposal, standard for trial use),

- **Format** (e.g., email, face-to-face),

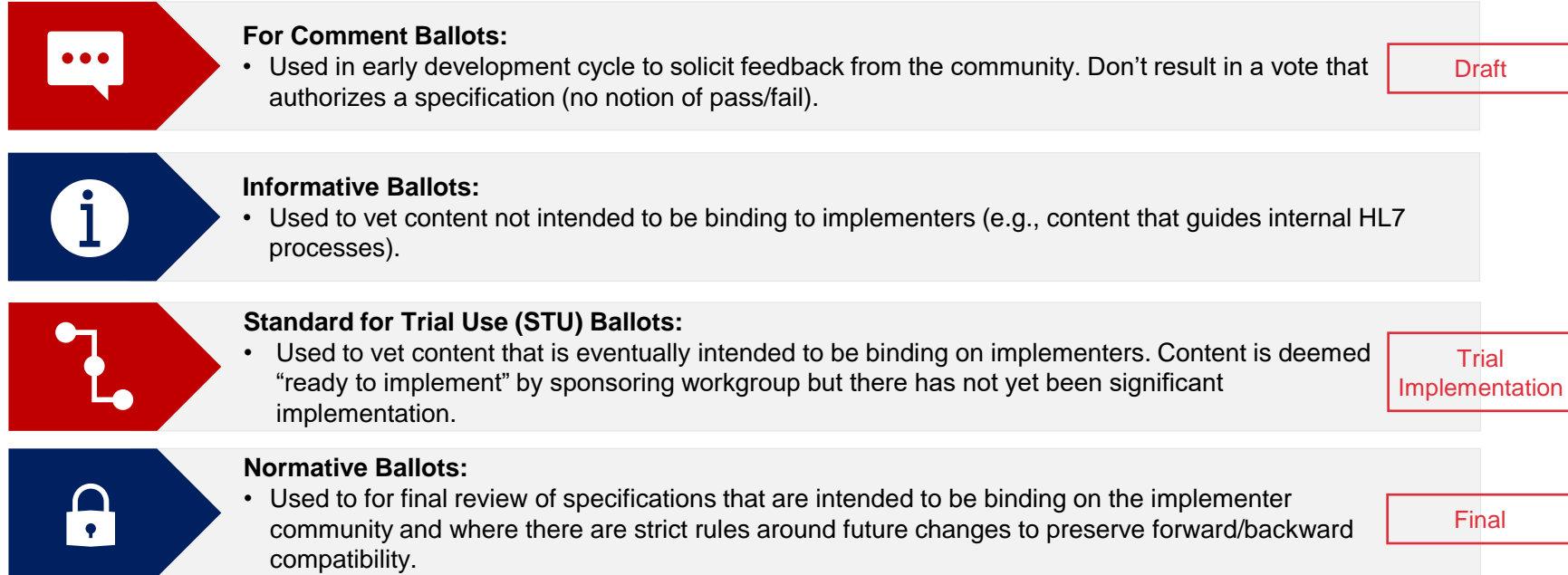- **Voting** (e.g., vote categories, voting processes)

Underlying Principles Drive Harmonization

- Essential principles defined by standards accreditation bodies (e.g., ANSI) that SDOs must follow for balloting

  - Ensures due process requirements are part of balloting processes (e.g., duration between notice of intent and ballot open date)

- Results in harmonization of well-documented and tested processes for how to facilitate ballots

https://wiki.ihe.net/index.php/ITI_Technical_Committee_Voting_Procedures
https://confluence.hl7.org/display/HL7/HL7+Balloting
https://helpdesk-docs.iso.org/article/228-ballot-types-and-stages
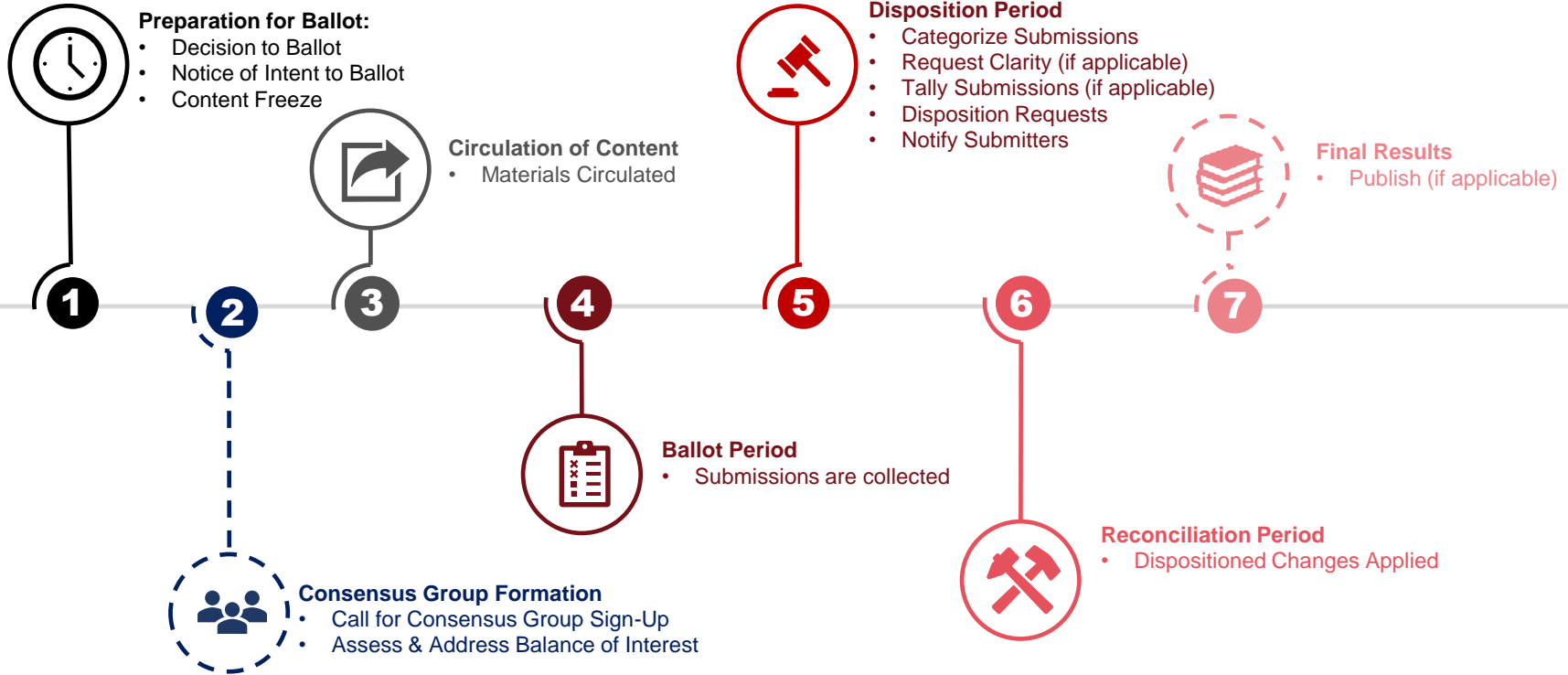
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Multiple Levels of Balloting & Impact on Process

HL7 specifications use the following levels to tie the maturity of the proposed specification to increasing consensus requirements (quorum, pass requirements). Aligns well to our IO Specifications Publication Model:

For Comment Ballots:
- 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).

Draft

Informative Ballots:
- Used to vet content not intended to be binding to implementers (e.g., content that guides internal HL7 processes).

Standard for Trial Use (STU) Ballots:
- Used to vet content that is eventually intended to be binding on implementers. Content is deemed "ready to implement" by sponsoring workgroup but there has not yet been significant implementation.

Trial Implementation

Normative Ballots:
- Used to for final review of specifications that are intended to be binding on the implementer community and where there are strict rules around future changes to preserve forward/backward compatibility.

Final

https://confluence.hl7.org/display/HL7/HL7+Balloting

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Balloting Process: Stages

Preparation for Ballot:
- Decision to Ballot
- Notice of Intent to Ballot
- Content Freeze

Circulation of Content
- Materials Circulated

Disposition Period
- Categorize Submissions
- Request Clarity (if applicable)
- Tally Submissions (if applicable)
- Disposition Requests
- Notify Submitters

Final Results
- Publish (if applicable)

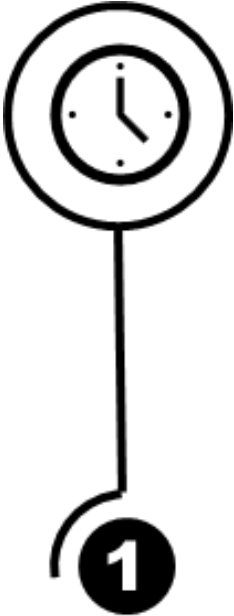**Ballot Period**
- Submissions are collected

Reconciliation Period
- Dispositioned Changes Applied

Consensus Group Formation
- Call for Consensus Group Sign-Up
- Assess & Address Balance of Interest

1 2 3 4 5 6 7

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End-to-End This Process Can Take 3+ Months

Ballot Period
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Reconciliation Period
- Dispositioned Changes Applied

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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

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Consensus Group Formation

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

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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)

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Ballot Period

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)

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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**	**Submitted**
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 HL7 Ballot Spreadsheet Submission

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Ballot Comment Categorization

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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.

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https://confluence.hl7.org/pages/viewpage.action?pageId=19136726#HL7Balloting-BallotProcess

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Ballot Marks (e.g., Voting)

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Ballots that have voting requirements typically rely on categorization of the vote. Participants will provide feedback as ballot comments and mark their comments as either "negative" or "affirmative". These comments get aggregated and determine the balloter's overall vote. Examples from HL7 provided below:

Abstain	The balloter has reviewed at least some of the ballot material but has not formed an opinion on whether the specification should be approved or not. Abstentions count towards quorum, but not towards whether the ballot passes or not.
Affirmative	The balloter may have some feedback about minor changes they would like to see (typos, small suggestions, etc.) but are overall comfortable with the specification and are happy to see the specification published even if none of their comments result in changes to the specification. Vote Types: Affirmative Vote without qualification, Affirmative Vote with Suggestion, Affirmative vote with Typo, Affirmative Vote with Question, Affirmative Vote with Comment
Negative	(NEG) Negative Vote with comment. Use this in the situation where the content of the material is non-functional, incomplete or requires correction before final publication. All Neg votes must be accompanied by comments and be resolved by the Work Group. All Normative Ballot negative comments must be addressed, if not finally resolved, before the Ballot can move to ANSI for approval.
No vote	No vote has been recorded. This is the initial state for the ballot submission. If no action is taken by the voter, this will be the voter's final submission status. A "no vote" means that the ballot submission won't count towards quorum.
Removed	After initially signing up as a voter, the user has been removed from the voting pool. This may be based on user request or due to a lapse of membership.

Domestic voting structure is being evaluated to ensure balance in organization and individual feedback before it could be used in future Trial Implementation and Normative ballots

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Ballot Marks (e.g., Voting) – Cont.'

Different types of ballots that have different expectations around quorum and passing requirements. Example requirements from HL7 are provided below to demonstrate how consensus agreement can be used to evaluate maturity of a specification.

Ballot Type	Quorum Requirements	Pass/Fail determination
For Comment	N/A	N/A
Informative	N/A	60%
STU	N/A	60%
Normative	50%+1	75%

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Disposition Period

Categorize Submissions

- After ballot closes, Working Group lead compiles submissions, groups submissions into blocks

Request Clarity (if applicable)

- In some cases, a submitter may be contacted to provide more clarity on their comment
- Submitters are allowed to retract their comment prior to dispositioning

Tally Submissions (if applicable)

- If the ballot includes pass/fail determination, ballot marks are tallied

Disposition Requests

- Working Group meets to review and disposition– cadence determined by working group capacity (e.g., back-to-back sessions vs. weekly) – ballot comment submitters are encouraged to attend
- Working Group participants discuss comments and use committee decision making practices (e.g., Robert's Rules of Order) to arrive at a decision of how the comment should be dispositioned

Notify Submitters

- Submitters are notified of the disposition and have opportunity to adjust their comments (i.e., withdraw)

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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.

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Reconciliation Period

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
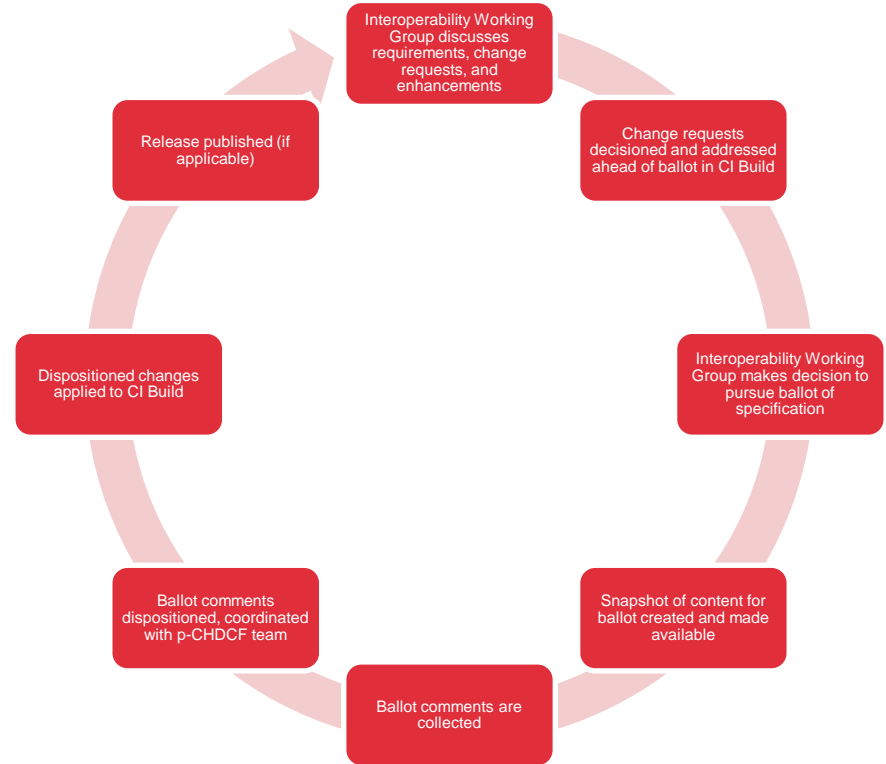
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Final Results

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

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Understanding How Balloting Weaves into Development and Publication Cycles

- Interoperability Working Groups are the driver of changes between releases and decisions

- Timeline for application of changes in CI Build ahead of ballot will depend on each Interoperability Working Group capacity/support

- Coordination with p-CHDCF (and other bodies – e.g., IPS) in ballot dispositioning will ensure that changes will be holistically addressed

Interoperability Working Group discusses requirements, change requests, and enhancements

Change requests decisioned and addressed ahead of ballot in CI Build

Interoperability Working Group makes decision to pursue ballot of specification

Snapshot of content for ballot created and made available

Ballot comments are collected

Ballot comments dispositioned, coordinated with p-CHDCF team

Dispositioned changes applied to CI Build

Release published (if applicable)

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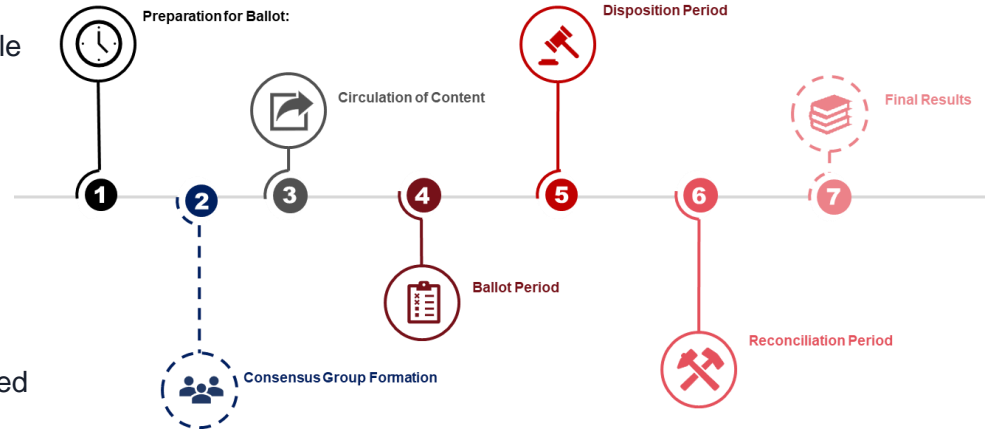# Journey to Using Balloting to Pan-Canadian Specifications

This will be a pilot year to familiarize ourselves with this process for managing specifications and increasing maturity of pan-Canadian specifications

Initial Cycle Proposed to Trial Draft for Comment Ballot Process:

- January 2024 – with potential dates for Spring/Summer Cycle

Prioritizing Pragmatic Trial Approach

- Evaluating balloting process as a whole

- Forgoing Consensus Group Formation in initial cycle given lessons learned from other countries on initial Draft For Comment Ballots

- Starting with spreadsheet while evaluating more sophisticated tooling

- Assessing bookend approach for HL7 International Cycles, as well as two cycle (e.g., minor, major) approach

Preparation for Ballot:
Circulation of Content
Consensus Group Formation
Ballot Period
Disposition Period
Reconciliation Period
Final Results

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Key Dates – 2024 Dates for Trialing Ballot Process

January 2024 –
Trialing Draft for Comment Ballot Process

Key Ballot Activities:	Start	End
Ballot Education Session	11/28	11/28
Notice of Intent (Jan Cycle) is circulated on Infocentral Communities	12/04	12/04
Content Freeze (stable version of guide produced for circulation)	12/08	12/08
Stable-release available for review	12/16	02/14
Trial Draft for Comment Ballot opens for submissions	01/15	02/14
Feedback is triaged by lead to support the Interoperability Working Group with decisioning	02/14	02/21
Interoperability Working Groups review feedback blocks during disposition periods, submitters notified	02/21	03/14
Changes are incorporated into the specification	02/28	03/21
Updated version is released to community	03/22	03/22

Example Sequencing for Second Cycle

Key Ballot Activities:	Start	End
Ballot Education Session Recording Reminder	02/01	02/01
Notice of Intent (May Cycle) is circulated on Infocentral Communities	02/09	02/09
Content Freeze (stable -version of guide produced for circulation)	03/11	03/11
Stable-release available for review	03/21	05/20
Ballot opens for submissions	04/20	05/20
Feedback is triaged by lead to support the Interoperability Working Group with decisioning	5/20	05/27
Interoperability Working Groups review feedback blocks during disposition periods, submitters notified	05/28	06/18
Changes are incorporated into the specification	06/04	06/25
Updated version is released to community	06/26	06/26

Candidates for process trial:
PS-CA v1.1 DFT, CA:FeX 2.0.0 DFT, potentially CA Core (Subset) v0.1 DFT

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Thank you!