



Canada Health Infoway

eReC Working Group

Online meeting
March 12, 2025

Topics

Topic	Time
Welcome	5 mins
CA:eReC IG Template Update	20 mins
Additional use case and code for ER-44	5 mins
Continue to work questions and feedback related to identifiers	25 mins
Address ER-82	
Next Steps	5 mins

CA:eReC IG Template Update

- [Link to CA:eReC CIBuild](#)

The screenshot shows the CA:eReC CIBuild website interface. At the top, there are logos for Canada Health Infoway, Pan-Canadian eReferral-eConsult (CA:eReC) CIBuild, and HL7 FHIR. A navigation bar includes links for Index, Home, Business Context, Technical Context, FHIR Artifacts, and Change Log. The main content area is titled 'preBallot - The specification is currently in ballot review and subject to change...' and features an 'Overview' section. This section includes a table for 'Business Model Components' and a section for 'Approaches to implementing eReferral Exchange' with a table of business models. A sidebar on the left contains navigation links for Overview, Business Model Components, Approaches to implementing eReferral Exchange, and Example Single Entry Models.

Overview

eReferrals and eConsults are created, submitted, tracked and managed electronically. When provider workflow considerations are addressed, eReferrals/eConsults have the potential to streamline and improve the patient referral and provider-to-provider consultation process compared to traditional paper-based or fax-based methods.

This specification defines messaging patterns to support models of eReferral and eConsult where system integrations are needed to enable clinical workflow and information sharing.

Business Model Components

Component	Description
eReferral vs eConsult	Definitions, similarities and differences between eReferrals and eConsults.
Service Record	Definition and set of information included in a Service Record.
Participants	People, Organizations and Systems contributing to the Service Record during the service lifecycle.

Approaches to implementing eReferral Exchange

This section identifies a few different eReferral eConsult related business models that are supported by this specification.

Business Model	Description
Single RMS Model	A single referral management system supporting the exchange of Service requests, Appointments and Secure Communications between Requester HCPs and Performer HCPs.
Point to Point Model	Health Care Providers (HCP)s who participate in referral workflows work within different Referral Management Systems (RMS) that each retain and manage separate instances of the Service Record that must be kept in sync.
Single Entry Models	A centralized entity performs services in support of the Requester HCP and/or Performer HCP within a service area and/or referral pathway. Single Entry Models may be implemented using the Single RMS Model or within a network of RMS solutions integrated using the Point to Point Model.

Example Single Entry Models

Example	Description
Example: Central Access and Triage (CAT) Model	A shared enterprise RMS is used to manage a shared Service Record that the Requester HCP, CAT team (Case Assigner with additional responsibilities) and Performer HCP all contribute to.
Example: Central Intake in Point to Point	A RMS used by Central Intake is a Target for requests from Requester HCPs and can be seen as a Source of Referrals to Performer HCPs within an existing network of Point to Point integrations.

- Standard template for all pan-Canadian implementation guides
- Aligns with international best practices
- Ease of use
- Responds to ballot feedback on organization and hierarchy
 - Break up long pages to short pages with tables/links to contained pages
 - Navigation between Headings within pages

ER-44: Mechanism to indicate what has changed with an update message is sent.

List of code/concepts currently used in AB:eReC IG.

Rationale: This approach to assigning the codes is that the codes are self-documenting in a way that is consistent with CA:eReC MessageEventCode.

Code	Display
<u>appointment-updated</u>	Appointment was updated
<u>appointment-status-updated</u>	Appointment status was updated
<u>service-request-status-updated</u>	ServiceRequest status was updated
<u>service-request-assigned-service-provider</u>	ServiceRequest was assigned a service provider
<u>service-request-reassigned</u>	ServiceRequest was assigned another service provider
<u>supporting-info-provided</u>	ServiceRequest supporting information was provided
<u>supporting-info-updated</u>	ServiceRequest supporting information was updated
<u>patient-demographic-info-updated</u>	Patient Demographic information was updated

Questions and feedback related to Identifiers and Use

Item	JIRA Link
Need to know the “official” or universal identifier for an eReferral (ServiceRequest.identifier)?	ER-75
Clarify intended use of ServiceRequest.identifier vs Task.identifier	ER-80
Patient.identifier – Why is this element required when there’s a reasonCode for not providing HCN? In what cases is an identifier other than an HCN required? (Missing binding and valueSet for extension.)	ER-70 , ER-69
Clarification of slimming rules needed: <ul style="list-style-type: none">- expectations on use .identifier vs .reference Reference datatype- business language needed about which referenced resources need to be in a Bundle	ER-67

Clarify expected use of ServiceRequest.identifier vs Task.identifier ER-80

Why: In messaging-based integrations both the Source System and Target System will have a copy of the referral potentially with local identifiers. (In messaging, .id is often not a persistent identifier)

Proposal:

- eReC Requester SHALL send the official or universal identifier in SR.identifier (MAY send others used by Source System in SR.identifier)
- eReC Performer SHALL store the official identifier for use in messages sent back to
 - e.g. Task.basedOn, Communication.basedon (etc) SHALL contain the “official” identifier received
- Requester (MAY send identifiers used by the Target System in Task.identifier)

Considerations, implications and options:

- Use of identifier in CAT Use Case ... “Official” identifier is generated by the CAT on receipt of the eReferral, is this the exception?

Discussion: Use of Patient.identifier

Patient.identifier

- Why is this element required when there's a reasonCode for not providing HCN?
 - In what cases is an identifier other than an HCN required?
- (Note the missing binding and valueSet for extension.)

[ER-75](#), [ER-70](#),
[ER-69](#)

Path	Cardinality	Binding	Type
Patient	I		Patient
identifier	S Σ 1..*		Identifier
extension	I 0..*		Extension
HealthCardNumberVersionCode	I 0..*		Extension(string)
ReasonForNoHCN	I 0..*		Extension(CodeableConcept)
use	Σ ?! 0..1	code	Binding
type	Σ 0..1	CodeableConcept	Binding
system	S Σ 1..1		uri
value	S Σ 1..1		string
period	Σ I 0..1		Period
assigner	Σ I 0..1		Reference(Organization)

Proposal:

- Make identifier.system and identifier.value optional

Considerations, implications and options?

-

.identifier

- Business identifier(s) for the patient, multiple allowed
- **MAY** include patient health card number or reason if an HCN is not provided (see: [ReasonForNoHCN](#))
 - **MAY** also include an HCN version code in Jurisdictions where it is applicable (see: [HealthCardNumberVersionCode](#))
- **MAY** include other business identifiers
- where present, the business identifier **MAY** be pushed to reference this resource in subsequent messages

Discussion: Clarification of slimming rules needed

- expectations on use `.identifier` vs `.reference` Reference datatype
- business language needed about which referenced resources need to be in a Bundle

[ER-75](#), [ER-67](#)

Reducing message size

References between resources within a Message Bundle (illustrated as relationships in the diagram above) are managed using using the Reference element, specified below.

Reference	1		Element
- reference	Σ 1	0..1	string
- type	Σ	0..1	uri Binding
- identifier	Σ	0..1	Identifier
- display	Σ	0..1	string

The structure supports references in either of two formats:

- a `reference` to a FHIR resource including within a `Bundle.entry`, or
- a shared business `identifier` for a Resource known to both systems

eReC Messaging requires that:

- when sending `Send new service request [eReCm-1]` transaction *all* Resources referenced within the message **SHALL** be included in the message as `Bundle` entries and referenced from other resources using an absolute URL
- when sending messages for other transactions:
 - any Resource(s) referenced in `MessageHeader.focus` **SHALL** be included in the message as `Bundle` entries and referenced from other resources using an absolute URL
 - any Resource referenced within the message that does not include a previously shared business `identifier` **SHALL** be included in the message as a `Bundle` entry and referenced from other resources using an absolute URL
 - other Resources with a previously shared business `identifier` **MAY** be referenced using the `reference.identifier` element with both the `system` and `value` elements populated

- basedOn	Σ	Σ 1	1..1	Reference(ServiceRequest)
- reference	Σ	Σ 1	0..1	string
- type	Σ		0..1	uri Binding
- identifier	Σ	Σ	0..1	Identifier
- use	Σ ?		0..1	code Binding
- type	Σ		0..1	CodeableConcept
- system	Σ	Σ	1..1	uri
- value	Σ	Σ	1..1	string
- period	Σ 1		0..1	Period
- assigner	Σ 1		0..1	Reference(Organization)

`.basedOn`

- used to associate the Task with the ServiceRequest being performed
- **SHALL** be populated with a reference to the ServiceRequest being performed
- if the Task is being transmitted via messaging, this element **SHALL** either
 - `.reference` a resource included in the message as a `Bundle.entry`
 - include an `.identifier` previously known to both systems

Next meeting



Canada Health Infoway

Thank you!

VISIT OUR WEBSITE
infoway-inforoute.ca

VISIT OUR SURVEY WEBSITE
insights.infoway-inforoute.ca/

LET'S CONNECT ON LINKEDIN
linkedin.com/company/canada-health-infoway/

LET'S CONNECT ON TWITTER
[@infoway](https://twitter.com/infoway)

Need to know the “official” or universal identifier for an eReferral (ServiceRequest.identifier)? [ER-75\(1\)](#)

Why: The specification allows for multiple identifiers to be added to a ServiceRequest. Systems that don't assign a SR.identifier need a consistent way to recognize a ServiceRequest (or Task, Appointment, Communication basedOn a SR) in messages exchanged.

Example: Ontario's PCCG is a intermediary that uses subscriptions to route messages to interested parties using the ServiceRequest.identifier.

Options:

1. Define a universal system for eReferral identifiers in CA:eReC that implementers SHALL send with a UUID
2. Allow RMS to continue to define system and id, mark “use” as “official” ([valueset](#)) < one and just one
3. Other options?

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Considerations

ServiceRequest model:



Property	Cardinality	Value	Binding
ServiceRequest	1		
extension	1	0..*	Extension
identifier	1	0..*	Identifier
use	2..71	0..1	code Binding
type	1	0..1	CodeableConcept Binding
system	1	1..1	uri
value	1	1..1	string
period	1	0..1	Period
assigner	1	0..1	Reference(Organization)

Use of identifier in .basedOn

- Single identifier is allowed, this addresses an issue about how to populate the item when slimming.

Use of identifier in CAT Use Case

- “Official” identifier is [generated by the CAT on receipt of the eReferral](#).

Use of identifier when routing

- Duplicate identifiers when routing (see [route, split, chain](#) – bottom of page)

Routing	<p>1:1 relationship between parent and child ServiceRequests where:</p> <ul style="list-style-type: none">- ServiceRequest.identifier: There is a shared business identifier between parent and child- ServiceRequest.requisition: not used- ServiceRequest.replaces: populated in child with a reference to the parent- ServiceRequest.basedOn: not used
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- Motion:
 - eReC Requester SHALL send a service request with an identifier with unique system and value with use = “official”
 - There SHALL only be one “official” identifier associated with a ServiceRequest
 - In usage notes, provide example of <http://pancdn//id>, uuid, use = “official”
- Vote: Motion Russ, 2nd Tim, 12 in favour

Feedback related to Communications and Use

Item	JIRA Link
<p>Need extra Communication messaging patterns We have 4 communication patterns but only document two of them:</p> <ul style="list-style-type: none">• Initial communication from requester• Initial communication from provider• Followup communication from requester• Followup communication from provider	<p>ER-68</p>

ER-44: Mechanism to indicate what has changed with an update message is sent.

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<u>supporting-info-updated</u>	ServiceRequest supporting information was updated

ER-48, ER-55 Further clarification of use of HealthcareService in messaging is needed

- CA:eReC includes support for HealthcareService as ServiceRequest.performer, this is the preferred modelling for Central Access and Triage (CAT)
- HealthcareService is not permitted in related elements on responses
 - Task.owner
 - Communication.sender
 - MessageHeader.author

- Option 1 (preferred): Permit use of HealthcareService as Task.owner, Communication.sender, MessageHeader.author empty

Considerations:

- modelling is permitted in R4 (not fully in R5,R6 – error?)
- MessageHeader.author(HealthcareService) not supported in R4, make optional

- Option 2: CAT as an Organization and HealthcareService

Considerations:

- Two representations of CAT is redundant
- MessageHeader.author(Organization) not supported in R4

- Option 3: Leave Task.owner & MessageHeader.author is left empty if no responsible individual

Considerations:

- Sending back HealthcareService isn't providing any new information to the requester