UC-02 Sequence-Diagram-XDS

Scenario: Clinical Solution A Retrieves PS from XDS Document Registry – (XDS IHE Profile)

Assumption: Patient Summary is stored in Local (Decentralized) Document Repository (XDS style repository)

Alternative Option: This sequence diagram provides the option of using the XDS IHE profile to give jurisdictions and vendors option to leverage existing XDS-based implementations in the ecosystem
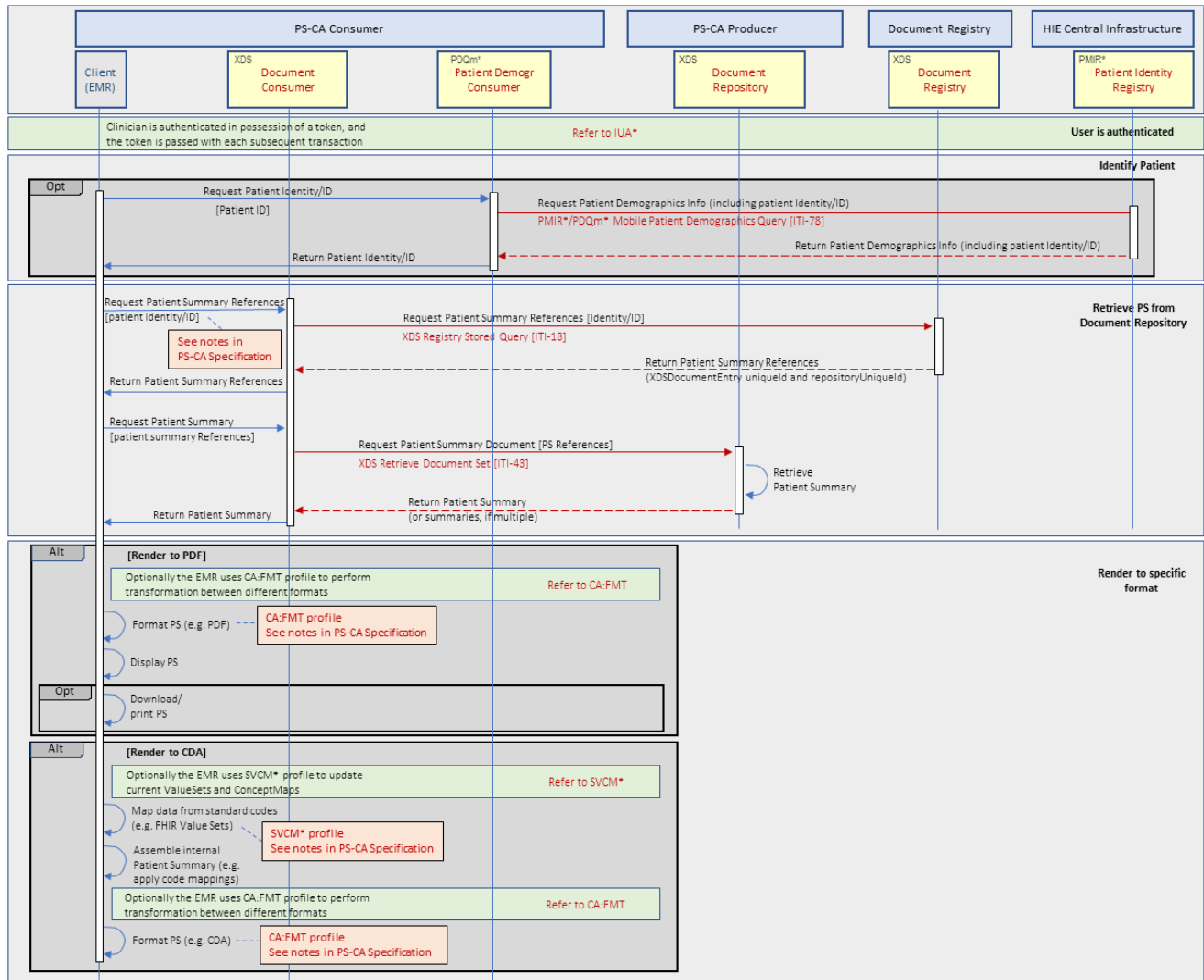
Sequence Diagram Overview:

Below provides guidance on how to read the sequence diagram:

- This sequence diagram illustrates how the different standardized actors of system should interact with each other to carry out specific standardized transactions, and the order in which the transactions and interactions occur when Use Case 1 of the Patient Summary-CA is executed.
- The legend on the bottom right corner describes the different system components, actors and transactions that are necessary to carry out this particular use case.
- The green swim lane is a simplified view of the actors and transactions required by the Foundational IHE Profiles, in addition to the other ones that are not explicitly illustrated on the diagram (e.g. ATNA, CT) but included as a white note. These are pre-requisite conditions for this particular use case and it is assumed that these will be satisfied.
- The blue swim lanes groups sequence of processes (along with their required actors and transactions) that are needed to occur to satisfy this particular use case. These are to be read from left to right and top to bottom.
- The red note boxes describe important call outs, information and notes that provide more context for the sequence diagram.
- This sequence diagram includes a custom Canadian IHE profile (e.g. CA:FMT) that handles transformations to and from various formats (e.g. FHIR to PDF, CDA, etc). Additional details will be included in the PS-CA Interoperability Specifications.
- More information about those details of the Foundational IHE Profiles an be found here.

UC-02 HCP Views/Consumes PS-CA - XDS

Clinical Solution A Retrieves PS from XDS Document Registry – (XDS IHE Profile)

PS is stored in Local (Decentralized) Document Repository (XDS style repository)

PS-CA Consumer			PS-CA Producer	Document Registry	HIE Central Infrastructure
Client (EMR)	XDS Document Consumer	PDQm* Patient Demogr Consumer	XDS Document Repository	XDS Document Registry	PMIR* Patient Identity Registry

Clinician is authenticated in possession of a token, and the token is passed with each subsequent transaction — Refer to IUA* — **User is authenticated**

Identify Patient

Opt:
- Request Patient Identity/ID [Patient ID]
- Request Patient Demographics Info (including patient Identity/ID)
  PMIR*/PDQm* Mobile Patient Demographics Query [ITI-78]
- Return Patient Demographics Info (including patient Identity/ID)
- Return Patient Identity/ID

Retrieve PS from Document Repository

- Request Patient Summary References [patient Identity/ID]
- Request Patient Summary References [Identity/ID]
  XDS Registry Stored Query [ITI-18]
  - *See notes in PS-CA Specification*
- Return Patient Summary References (XDSDocumentEntry uniqueId and repositoryUniqueId)
- Return Patient Summary References
- Request Patient Summary [patient summary References]
- Request Patient Summary Document [PS References]
  XDS Retrieve Document Set [ITI-43]
  - Retrieve Patient Summary
- Return Patient Summary (or summaries, if multiple)
- Return Patient Summary

Render to specific format

Alt **[Render to PDF]**
- Optionally the EMR uses CA:FMT profile to perform transformation between different formats — Refer to CA:FMT
- Format PS (e.g. PDF) — *CA:FMT profile See notes in PS-CA Specification*
- Display PS
- Opt: Download/ print PS

Alt **[Render to CDA]**
- Optionally the EMR uses SVCM* profile to update current ValueSets and ConceptMaps — Refer to SVCM*
- Map data from standard codes (e.g. FHIR Value Sets) — *SVCM* profile See notes in PS-CA Specification*
- Assemble internal Patient Summary (e.g. apply code mappings)
- Optionally the EMR uses CA:FMT profile to perform transformation between different formats — Refer to CA:FMT
- Format PS (e.g. CDA) — *CA:FMT profile See notes in PS-CA Specification*

Prerequisites

Client is logged into the system (IUA*)

Client obtained a valid access token from the Authorization Server that is used with each transaction (IUA*)

All communication is done through secure channels (ATNA)

System time is synchronized among all components (CT)

Legend

IHE Profile	CA: Profile
	Actor

↓ **[ITI-X]** IHE Transaction
↓ **[CA:x]** Canada Extension Profile

System Component

IHE Actor   * FHIR support

Custom IHE Actor   ** One or multiple calls of same type

IHE Transaction [ITI-xx]

Custom IHE Transaction [xx]

Non-IHE Exchange