# 2022-05 International Patient Summary

- **Short Description**
  This track will test the creation, exchange and visualization of patient summary data across jurisdictions and usage contexts using the FHIR International Patient Summary (IPS) Implementation Guide specification.

- **Long Description**
  This track will test the creation, exchange and visualization of patient summary data across jurisdictions and usage contexts using the FHIR International Patient Summary (IPS) Implementation Guide specification. The track will focus on the primary theme of cross-border IPS document bundle data exchange, with additional sub-themes:
  - Pilot implementations of multiple jurisdictions (e.g., GDHP) for cross-border IPS document bundle data exchange
  - Test implementation of proposed Patient resource $summary operation (multiple servers, including Terminz)
    - Can generate an IPS instance for a patient based on existing data and a set of rules
    - Rules can be server-defined (default) or specified by parameter
    - Need to answer the “relevant” question for what data to include
  - Enhanced IPS instance testing leveraging available testing suites
    - The Inferno testing tool (ONC/MITRE)
    - The Gazelle testing tool suite (used in common with the IHE North American and European Connectathons, optionally, as available)
    - One or more FHIR server(s) for demonstrating and testing IPS data exchange
  - Transforming IPS data to a WHO DDCC:VS vaccination certificate document including the EU DCC, Smart Health Cards, and DIVOC QR code specifications.

  General track goals include:
  - Promote the sharing of experiences
  - Identify tools and resources for IPS examples and validation
  - Identify gaps and pitfalls in the IPS adoption

  An open approach will be followed, expecting attendees to actively participate in the selection and definition of the tests to be performed and topics to be discussed, beyond those suggested by the track leaders.

- **Type**
  Test an Implementation Guide

- **Submitting Work Group/Project/Accelerator/Affiliate/Implementer Group**
  Patient Care / HL7 sponsorship of IPS

- **Track Lead(s)**
  John D’Amore, More Informatics, johnd@moreinformatics.com

- **Track Lead Email(s)**
  johnd@moreinformatics.com

- **Related Tracks**
  International Patient Access
  Vulcan/Gravitate
<table>
<thead>
<tr>
<th><strong>FHIR Version</strong></th>
<th>R4</th>
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| **Specification(s) this track uses** | IPS CI build  
http://build.fhir.org/ig/HL7/fhir-ips  
1.0.0 STU1 build  
http://hl7.org/fhir/uv/ips/  
(Note that the STU may be updated before May 2022 connectathon) |
| **Artifacts of focus** | We're planning to focus this time on the updated IPS Bundles that include required resources of Composition, Patient, Medications (MedicationRequest/MedicationStatement), Allergies (AllergyIntolerance) and Problems (Condition) sections. Recommended sections of Immunization and Lab Results sections may also be included.  
A library of examples of IPS have been collected in the following location since September 2021: https://github.com/jdamore/IPSviewer/tree/main/samples  
IPS Bundle: http://build.fhir.org/ig/HL7/fhir-ips/StructureDefinition-Bundle-uv-ips.html  
IPS Composition: http://build.fhir.org/ig/HL7/fhir-ips/StructureDefinition-Composition-uv-ips.html  
IPS MedicationRequest: http://build.fhir.org/ig/HL7/fhir-ips/StructureDefinition-MedicationRequest-uv-ips.html  
IPS AllergyIntolerance: http://build.fhir.org/ig/HL7/fhir-ips/StructureDefinition-AllergyIntolerance-uv-ips.html  
IPS Condition: http://build.fhir.org/ig/HL7/fhir-ips/StructureDefinition-Condition-uv-ips.html  
IPS Immunization: http://build.fhir.org/ig/HL7/fhir-ips/StructureDefinition-Immunization-uv-ips.html  
IPS Observation - Results (Laboratory): http://build.fhir.org/ig/HL7/fhir-ips/StructureDefinition-Observation-results-laboratory-uv-ips.html  
IPS Patient: http://build.fhir.org/ig/HL7/fhir-ips/StructureDefinition-Patient-uv-ips.html |
| **Expected participants** | • IPS adopters and implementers  
• GDHP Interoperability Work Stream IPS Work Group member countries and territories participating in IPS pilot implementations  
• IHE IPS profile implementers and testers  
Expected number of participants: 10-15 |
| **Zulip stream** | https://chat.fhir.org/#narrow/stream/207835-IPS |
| **Track Kick Off Call** | |
### Track Details

#### IPS Roles

**IPS Document Creator**

Creates or updates a FHIR IPS document (Bundle containing a Composition and supporting resources) from source data. The source data likely will be existing data on a FHIR server, but this can be done using whatever means are appropriate, including manual creation, assembling documents from other resources, transforming from a CDA IPS document, etc. Submits that document to a FHIR server.

**IPS Document Consumer**

Retrieves a FHIR IPS document and/or individual component resource instances created by the Document Creator from the FHIR server and does one or more of the following: a) validates the document and/or component resource instances against the IPS Clinical Document profile, b) displays the document and/or discrete data components in a browser (or by other means), c) translates the coded and/or narrative data to a different language for display, or d) translates the coded data to different code system(s) used in a jurisdiction that is different from the source.

**IPS Document Processor**

Uses a FHIR IPS document and/or individual component resource instances for the purpose of creating/updating other kinds of IPS based documents as for example vaccination certificate.

### Track Activities

#### Planned Sessions

- Track kickoff
- Review of 2022 updated profiles in IPS
- Sample creation and validation
- Joint IPA / IPS session. May 3 at 2pm. fyi - Mikael Rinnetmaki, John D'Amore
- Track Wrap Up
- Additional sessions may be added closer to event

#### Testing Scenarios

- Create an IPS bundle from a FHIR server using the $summary operation ([http://build.fhir.org/ig/HL7/fhir-ips/OperationDefinition-summary.html](http://build.fhir.org/ig/HL7/fhir-ips/OperationDefinition-summary.html))
- View an IPS bundle using tools provided
- Demonstrate IPS transformations to/from other standards (e.g. WHO DDCC and IPS)
- Demonstrate IPS terminology utilization (and translations)
- BONUS: Demonstrate IPS language translation
- BONUS: Use of $docref operation (see [http://build.fhir.org/ig/HL7/fhir-ipa/OperationDefinition-docref.html](http://build.fhir.org/ig/HL7/fhir-ipa/OperationDefinition-docref.html))

**TestScript(s):** None provided at current time

Connectathon Manager (ConMan) link used to record exchanges during event
**Available servers & tools**

- **Terminz**  
  https://terminz.azurewebsites.net/fhir

  Will now accept (and save) POSTs of IPS Bundles that satisfy the following criteria...

  - Bundle.Type == Bundle.BundleType.Document
  - Bundle.Identifier.System == "urn:oid:2.16.724.4.8.10.200.10"
  - Contains one Composition and one Patient Resource
  - Contains at least one of each of these resources: AllergyIntolerance, Condition and MedicationStatement.
  - Includes at least one Patient.Identifier with populated system and value elements (these are used for persistence and $summary request purposes)

  The $summary operation is also provisionally defined at https://terminz.azurewebsites.net/fhir/OperationDefinition/Patient-summary

- **Gravitate Health**  
  https://gravitate-dk-ips.trifork.dev/fhir

  The summary operation is found at: https://gravitate-dk-ips.trifork.dev/fhir/Patient/$summary

  Note: Only POST's are supported

  The body being, e.g.:

  ```xml
  <Parameters xmlns="http://hl7.org/fhir">  
    <parameter>
      <name value="identifier"/>
      <valueIdentifier>
        <system value="urn:oid:1.2.3.4"/>
        <value value="1206450168"/>
      </valueIdentifier>
    </parameter>
    <parameter>
      <name value="profile"/>
      <valueUri value="http://hl7.org/fhir/uv/ips/StructureDefinition/Bundle-uv-ips"/>
    </parameter>  
  </Parameters>
  ```

  When invoked with the system identifier used above, it returns the expected IPS examples. Both of the bundles are not entirely IPS compliant as they are lacking some data.

  [Note: Using a different system identifier the server hooks into the danish national test setup and may return unexpected results.]

- **Rob Hausam’s test server**  
  https://fhir.hausamconsulting.com

  Based on HAPI 5.4.0. No $summary operation (yet).

- **IPS Viewer**:  https://www.ipsviewer.com/

- **Inferno Validator**:  https://inferno-qa.healthit.gov/ (may be moved to DEV/PROD before May 2022)

- **ClinFHIR** (not IPS specific but helpful for bundle visualization):  http://clinfhir.com/bundleVisualizer.html