Timeline
## Connectathon 28 – Sept. 13-15

<table>
<thead>
<tr>
<th>Date (2021)</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/21</td>
<td>Track Proposals Due</td>
</tr>
<tr>
<td>8/6</td>
<td>Track Schedules Due</td>
</tr>
<tr>
<td>8/16</td>
<td><strong>Early Bird Registration Cutoff</strong> ($175 / $275)</td>
</tr>
<tr>
<td>8/30</td>
<td><strong>Registration Deadline</strong> ($275 / $400)</td>
</tr>
<tr>
<td>8/31</td>
<td>Participant Information Session</td>
</tr>
<tr>
<td>9/8 1:30PM ET</td>
<td>Track Kick-off Calls</td>
</tr>
<tr>
<td>9/13-9/15</td>
<td>Connectathon 28</td>
</tr>
</tbody>
</table>

Connectathon Page: [https://confluence.hl7.org/display/FHIR/2021+-+09+Connectathon+28](https://confluence.hl7.org/display/FHIR/2021+-+09+Connectathon+28)
Focus Areas

• Use Cases 4 (Update) & 5 (Verify current version)
• Authenticated/Authorized Access (Security)
• Contained Document (Snapshot) Communication
• Document Authentication
• Document Versioning
• HCA Authority (Consent)
• Intervention and Care Exp Pref as Goals
• Care Plan
## Focus Areas

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Scene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Case 4 (Update)</td>
<td>2</td>
</tr>
<tr>
<td>Use Case 5 (Verify current version)</td>
<td>3</td>
</tr>
<tr>
<td>Authenticated/Authorized Access (Security)</td>
<td>All</td>
</tr>
<tr>
<td>Contained Document (Snapshot) Communication</td>
<td>All</td>
</tr>
<tr>
<td>Document Authentication</td>
<td>2</td>
</tr>
<tr>
<td>Document Versioning</td>
<td>2</td>
</tr>
<tr>
<td>HCA Authority (Consent or Observation)</td>
<td>2/3</td>
</tr>
<tr>
<td>Intervention as a ServiceRequest</td>
<td>2/3</td>
</tr>
</tbody>
</table>
System Roles

Scenario 1

1. AD Information Creator (Client)
   - A system that creates an ADI IG Conformant set of FHIR resources, stores, and pushes to another system. (An ADI Information Receiver)
   - Advance Preparation: The system will be able to create advance directive documents (FHIR Document Reference or Document Bundle) and send them through a FHIR interface.

2. AD Information Receiver (Server)
   - A system, acting as a FHIR Server, that receives an ADI IG Conformant set of FHIR resources. These resources may be utilized for display or made available for query. (Acting as an ADI Information Repository). As a repository enables the replacement of a document.
   - Advance Preparation: The system will be able to receive and store ADI profile resources through a FHIR interface.

Scenario 2

1. AD Information Repository (Server)
   - A system that stores and makes available for query, ADI IG conformant FHIR resources.
   - Advance Preparation: The system will be able to store ADI profile resources and make them available for query through a FHIR interface.

2. AD Information Retriever (Client)
   - A system that queries an ADI Information Repository for advance directive FHIR resources and displays or otherwise uses the information contained within.
## Minimum Viable Product - System Roles

<table>
<thead>
<tr>
<th>System</th>
<th>Scene/Role</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MyDirectives/ADVault Server</td>
<td>2/1, 2/2, 3/1</td>
<td>FHIR Server storing/providing access to advance directive information (ADI)</td>
</tr>
<tr>
<td>MaxMD Advance Directives Client</td>
<td>3/2</td>
<td>Mobile client to retrieve and display ADI to patient</td>
</tr>
<tr>
<td>MITRE Pseudo EHR (Reference Client)</td>
<td>3/2</td>
<td>Open-source reference client to retrieve and display ADI to provider</td>
</tr>
<tr>
<td>MITRE Server</td>
<td>2/3, 3/1</td>
<td>FHIR Server (sample data pre-requisite)</td>
</tr>
<tr>
<td>MiHIN</td>
<td>3/1</td>
<td>State HIEs</td>
</tr>
</tbody>
</table>
ADI Major Tasks
## ADI Major Tasks

<table>
<thead>
<tr>
<th>ADI Major Task</th>
<th>Effort (L,M,H)</th>
<th>Benefit (L,M,H)</th>
<th>Must do for STU-1</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorporating Adjudication Team Outcomes</td>
<td></td>
<td></td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Consent re: HCA authority (powers/limitations)</td>
<td>M</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consent to share</td>
<td>H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Not provided - data absent or decline to answer reasons</td>
<td>L</td>
<td>H</td>
<td></td>
<td>Scope including only HCA</td>
</tr>
<tr>
<td>Security &amp; Privacy</td>
<td>H</td>
<td></td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Intervention Resource Type As ServiceRequest</td>
<td>L</td>
<td></td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Separate question and answers in Goals (address multi-answer questions)</td>
<td>L</td>
<td>H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Define Must Support</td>
<td>L</td>
<td></td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Document authentication &amp; Digital Signatures</td>
<td>M</td>
<td></td>
<td>Y</td>
<td>Prove unaltered state</td>
</tr>
<tr>
<td>Capturing additive contextual information</td>
<td></td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Most recent document verification (versioning)</td>
<td>L</td>
<td>H</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Coordinate/align with other initiatives Gravity, LEAP, NeCC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fully Contained Document Restructuring</td>
<td>M</td>
<td></td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Use of CarePlan to communicate condition based GPP</td>
<td>M</td>
<td></td>
<td>?</td>
<td></td>
</tr>
</tbody>
</table>
Major IG Changes

- Staged: [https://build.fhir.org/ig/HL7/pacio-adi/branches/connectathon-28-CarePlan/](https://build.fhir.org/ig/HL7/pacio-adi/branches/connectathon-28-CarePlan/)
- Encapsulated Document Bundle with DocumentReference searching
- Changed GPP Under Certain Health Conditions to a Preference CarePlan
  - All Preferences changed to Goals of difference kinds (Interventions, care experience Preferences, personal goal)
- Created Healthcare Agent Consent With Powers & Limitations
- Added DNR Order to Administrative Section (with PMOLST)
- Created extension to enable systems multipart answers with context and values separated.
- Added attester information to include role, date, statement, and signature.
- Added document jurisdiction
ADI Person-Authorized Treatment/Care Plan – VA Form Example

GPP for Life-Sustaining Treatment
75789-8
Section Under Emergency/EOL Intervention Preferences

If I become Unconscious, in a Coma, or in a Persistent Vegetative State w/Little or No Chance of Recovery Problem/Condition/Context

Patient Goals

Yes. I would want Life-sustaining treatments

Provider-Authored Goal-Specific Intervention(s)

Provider-Authored Goal-Specific Intervention

I'm not sure. It would depend on the circumstances

Provider-Authored Goal-Specific Intervention

No. I would not want life-sustaining treatments

Provider-Authored Goal-Specific Intervention

If I sustain Permanent, Severe Brain Damage and Unable to Recognize My Family and Friends Problem/Condition/Context

Patient Goals

Yes. I would want Life-sustaining treatments

Provider-Authored Goal-Specific Intervention(s)

Provider-Authored Goal-Specific Intervention

I'm not sure. It would depend on the circumstances

Provider-Authored Goal-Specific Intervention

No. I would not want life-sustaining treatments

Provider-Authored Goal-Specific Intervention
General ADI FHIR Document Structure

- **Bundle**: `type = document`  
- **Composition**:  
  - Header (Date, subject ref., participant refs, etc.)  
  - Full Narrative Text

**Sections**

- **Healthcare Agent Appointment**
  - Text
  - Consent for Healthcare Agent
  - Personal Goal
  - Care Exp Preference Goal
  - Terminal Preference CarePlan
  - Vegetative Preference CarePlan
  - Intervention Preference Goal
  - Personal Goal
  - Care Exp Preference Goal

- **GPP Personal Care Experience Text**

- **GPP Under certain health conditions Text**

- **GPP Upon Death Text**
  - Autopsy Observation
  - Organ Donation Observation
  - PMOLST Observation
  - DNR Order Observation

- **Administrative Information Text**

- **Entry Refs.**
  - Personal Priorities Organizer
General ADI FHIR Document Structure

Bundle
  type = document

Composition
  Header (Date, subject ref., participant refs, etc.)
  Full Narrative Text

Sections
  Healthcare Agent Appointment
  GPP Personal Care Experience Text
  GPP End of life or severely debilitating Condition Text
  GPP Upon Death Text
  Administrative Information

Entry Refs.
  Personal Goal
  Care Exp Preference Goal
  Terminal Preference CarePlan
  Vegetative Preference CarePlan
  Autopsy Observation
  Organ Donation Observation
  PMOLST Observation
  DNR Order Observation

Entry Resources
  Healthcare Agent
  Consent for Healthcare Agent
  Personal Goal
  Care Exp Preference Goal
  Intervention Preference Goal
  Personal Goal
  Care Exp Preference Goal