

# Activity Prescription Form (APF) Implementation Guide

### APF Implementation Guide for external systems

**Revision History:** 

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### **1** Introduction

This document provides guidelines for implementing Activity Prescription Form (APF) in external systems (e.g., medical providers' EMR systems) to facilitate exchange of APF data with L&I via *One*HealthPort HIE.

### **1.1 Document Purpose**

APF data mappings are based on the HL7 CDA R2 schema for "Subsequent Evaluation Note" template (aka "Progress Note" template). To meet APF requirements, Progress Note template is further constrained with data conformance rules, namespaces, conventions and value sets.

Purpose of this document is to explain these conformance rules, namespaces, conventions and value sets used for APF data mappings for exchanging APF data with L&I.

### 1.2 Scope

Scope of this document is limited to data conformance rules, namespaces, conventions and value sets used for APF data mappings in addition to Progress Note template constraints.

APF data mappings are based on CDA R2 schema for the Progress Note template. This document <u>does</u> <u>not</u> explain implementation requirements/constraints for the Progress Note template. Please refer to the IHE Health Story Consolidation Implementation Guide available at HL7 website for implementation guidelines related to Progress Note.

Further, actual implementation in external systems is outside the scope of this document as that will vary for different systems/business practices. Primary focus of this document is on the exchange format and elements of exchanged document only.

### 1.3 Intended Audience

- Business stakeholders of external systems implementing APF functionality
- IT Staff implementing APF functionality in external systems
- OHP HIE
- L&I Business stakeholders for APF as data
- L&I IT Staff implementing APF as data functionalities

### 1.4 Definitions, Acronyms and Abbreviations

- APF Activity Prescription Form
- CDA R2 Clinical Document Architecture (Release 2)
- COHE Center of Occupational Health and Education
- EHR Electronic Health Record
- EMR Electronic Medical Record
- HIE Health Information Exchange

HL7 – Health Level 7

OHMS – Occupational Health Management System

OHP – **OneH**ealth**P**ort (WA State HIE provider)

OID - Object Identifier

ROA - Report Of Accident

XML – Extensible Markup Language

### 2 Implementation Guide

Listed below are guidelines for APF data exchange format and guidelines.

#### 2.1 Sample Document

A sample document with headers/body sections is provided with this implementation guide. Sample document also comes with the default HL7 CDA transformation applied to render it in XSL aware browsers (e.g. Internet Explorer) as HTML. In actual messages, this XSL transform should not be present.

#### 2.1.1 Sample Document Usage

Primary purpose of sample APF XML document provided with these implementation guidelines is to illustrate the layout/format of document conforming to these guidelines. Please note the following when using this sample document:

- i. <?xml-stylesheet type="text/xsl" href="styles/CDA.xsl"?> directive on top of the sample xml document is only for viewing it in a XSL aware browser (e.g. Internet Explorer). This should not be present in actual XML documents being generated for data exchange.
- ii. Comments in the sample XML document are only for providing additional information to assist in development of exchange documents. These **should not be** present in actual XML documents being generated for data exchange. Comments are enclosed in <!---> tags. E.g.
   <!-- US General Header realmCode. Fixed Not to be changed. -->
- Some nodes in sample xml document are not discussed in this implementationguide. Usually, these codes are only needed for "human readable format" rendering of exchange data using standard CDA R2 stylesheets. These should be present in the exchange data as is.
   E.g. <title> tag with a value of Activity Prescription Form, <languageCode> tag with en-US code etc.
- iv. Values in sample xml document are for illustration purpose only and provide a visual representation of constraints defined in this implementation guide. Actual values will be populated from the systems of records on senderside.

#### 2.1.2 General Guidelines

- i. The XML document has to **enforce UTF-8** encoding in the xml declaration.
- *ii.* Only "State Funded" documents are processed, to identify the document as "State Funded or Self-Insured" the optional element in "receivedOrganisation" added under intendedRecipent. (Section 2.2.9)
- iii. The element tag *"assignedAuthoringDevice"* under author (section 2.2.6) is optional to provide information from provider to identify the system or device (EMR) this document generated.
  - a. If the above tag is used the respective details will be added in the acknowledgement to provider.

### 2.2 Header Constraints

In addition to HL7 CDA R2 Progress Note constraints, following are header constraints specific to APF document schema. These constraints must be followed to ensure successful processing of APF at L&I.

#### 2.2.1 Templates

APF document will have following templateIds in the header:

- i. US Realm header template (identified by fixed templateld/@root=" 2.16.840.1.113883.10.20.22.1.1") must be present.
- ii. Progress Note template (identified by fixed templateId/@root=" 2.16.840.1.113883.10.20.22.1.9") must be present.
- iii. APF V2 template (identified by fixed templateId/@root=" 2.16.840.1.113883.3.4819.11.1.1.2") must be present.

#### Sample:

```
<templateId root="2.16.840.1.113883.10.20.22.1.1"/> <!--US Realm Header--> <templateId root="2.16.840.1.113883.10.20.22.1.9"/> <!--Progress Note--> <templateId root="2.16.840.1.113883.3.4819.11.1.1.2"/> <!--APF V2 Template-->
```

#### 2.2.2 ID

Header must have one <id> node present such that @root attribute has a globally unique document id (generated by the sending system) and @extension attribute mapped to L&I Claim Number. Per CDA R2 guidelines, @extension attribute is optional. However, for APF, @extension attribute is mandatory and must have the associated L&I claim number present.

#### Sample:

<id extension="AX12345" root="2.16.840.1.113883.19.5.99999.1"/>

In the above sample, AX12345 represents the L&I Claim number.

LNI Claim Number requirements:

- i. Must be 7 characters in length
- ii. Cannot contain special characters

- iii. The following format will be accepted:[a-ruxyzA-RUXYZ][a-zA-Z0-9][0-9][0-9][0-9][0-9][0-9]
- iv. Currently we do not accept Self insured claims, these start with [S,T,W], Example: SS09910

#### 2.2.3 SetID

Document header must have one <setId> node present such that @root attribute has a globally unique identifier (generated by sending system) and @extension attribute mapped to L&I Claim Number. SetId node must be accompanied with a <versionNumber> node. setId remains the same across all updates to the same document.

Per CDA R2 guidelines, setId and associated versionNumber nodes are optional. However, these are required for APF document to facilitate future updates (if permissible) to APF document.

**<u>\*Note</u>**: In certain scenarios, sender systems may not have capability to track different versions of the document. In such case, setId values should be same as id node explained above and the versionNumber should always be set to 1.

setId works in conjunction with the id node described above. If the sending system is capable of sending updates to an existing APF document, each updated instance will have:

- i. A globally unique id under <id>node
- ii. Same unique id under setId node @root attribute
- iii. Incremented value under versionNumber node

**<u>\*Note (Special Handling)</u>**: In certain scenarios, sender systems may not have capability to track different versions of the document. In such case, setId values should be same as id node explained above and the versionNumber should always be set to 1 (even when sending updates to existing document).

#### Sample:

```
<setId extension="AX12345" root="2.16.840.1.113883.19.5.999999.19"/>
<versionNumber value="1"/>
```

#### SetId Use Example:

In the current example, first version of APF is sent with a unique id (under root attribute of id node) 2.16.840.1.113883.19.5.99999.1 and claim number AX12345 under extension.

First version of document also has a setId with unique id (under root attribute of setId node) 2.16.840.1.113883.19.5.99999.19 and claim number Ax12345 under extension attribute.

First version of document is indicated by versionNumber node with attribute value set to 1 (<versionNumber value="1"/>).

Each subsequent update(s) to the APF will have a new unique id (under root attribute of id node) e.g. 2.16.840.1.113883.19.5.90900.1 for update to the original APF document.

However, the setId will still have the same value for its root attribute (i.e.

2.16.840.1.113883.19.5.99999.19 in this example). versionNumber attribute will be set to next value indicating update to the last updated document (<versionNumber value="2"/>). For first update, this will be set to 2, second update will be indicated by 3 and so on...

#### 2.2.4 Effective Time

effectiveTime header indicates when the document was last modified in the sender system (modify timestamp). This entry must be precise to date and preferably should have Hr/Min + Time Zone values as well (if Hr/Min values are provided, it should also have Time Zone offset).

#### Sample:

```
<effectiveTime value="201402131320-0800"/>
Or
     <effectiveTime value="20140213"/>
```

**\*Note (Special Handling):** This timestamp is used at L&I to determine the update version of document if sender system doesn't have capability for capturing version information of document (see SetId and version details above). Ideally, this should be last modified time stamp indicating when the document was last modified in the sender system. If last modified timestamp is not present, it can be the system/database current date timestamp at the time of document being picked up for sending to L&I.

#### 2.2.5 recordTarget header

recordTarget header represents the patient information. This must have following:

- i. at least one <patientRole> node
- ii. <patientRole> node must have ana. a first <*id*> node having intended recipient information (*required*)

an @root attribute set to 1.3.6.1.4.1.38630.2.1.1.46 (OHP OID for L&I) , and

an @extension attribute set to f5tp1v00 (OHP Production server ID for L&I)

OR

an @extension attribute set to f5tp1v01 (OHP pre-production server ID for L&I).

This information is required by HIE to route the document to L&I.

id Examples:

#### For OHP Production OrgID for L&I:

<id root="1.3.6.1.4.1.38630.2.1.1.46" extension="f5tp1v00" />

#### For OHP UAT OrgID for L&I:

<id root="1.3.6.1.4.1.38630.2.1.1.46" extension="f5tp1v01" />

<id> node such that the @extension attribute contains the patient id in sender system

a second <*id*> representing the sender organization using OHP assigned OID and OrgID
 \*\*\*IMPORTANT: The example below shows the information for the OHP Test account.

#### <u>Sender organizations should replace the following <root> and <extension> values with</u> the ones applicable to them

<id root="1.3.6.1.4.1.38630.2.1.1.15.3" extension="7uycso03"/>

c. a **third** <*id*> where extension represents PatientID, which can be alphanumeric, and root represents the unique identifier for the patient from Sender system. (*optional*)

```
<id root="2.16.840.1.113883.19.5.99999.2" extension="D1222398991" />
```

- d. <**addr**> node with appropriate @use attribute. Nodes underneath <addr> node must have address information for the patient.
- <telecom> node with @value and @use attributes set to phone number and phone number type respectively.
- f. <*patient*> node with patient name information.
- g. <*administrativeGenderCode*> and <*birthTime*> nodes with patient gender code (conforming to code system 2.16.840.1.113883.5.1) and birthTime (accurate to date).

#### Sample:

```
<recordTarget>
<patientRole>
       <id root="1.3.6.1.4.1.38630.2.1.1.46" extension="f5tp1v01" />
       <id root="1.3.6.1.4.1.38630.2.1.1.15.3" extension="7uycso03"/>
       <id root="2.16.840.1.113883.19.5.999999.2" extension="D1222398991" />
       <addr use="HP">
               <streetAddressLine>1234 Main Street</streetAddressLine>
               <city>Olympia</city>
               <state>WA</state>
               <postalCode>98512</postalCode>
               <country>US</country>
       </addr>
       <telecom value="(360)123-4567" use="HP"/>
       <patient>
               <name use="L">
               <given>Jane</given>
               <given>H.</given>
               <family>Doe</family>
               </name>
               <administrativeGenderCode code="F" codeSystem="2.16.840.1.113883.5.1"</pre>
              displayName="Female"/>
               <birthTime value="19980501"/>
       </patient>
</patientRole>
</recordTarget>
```

#### 2.2.6 author header

author header represents the author information for the APF. Depending on the practice, this may be different from the attending provider (which is represented by the authenticator header below). Author header must have following:

- i. <author> node must have a <time> node with @value attribute containing Date of Service.
- ii. <assignedAuthor> node with at least one <id> node with @extension attribute set to the assigned person id (e.g., NPI or L&I Provider ID) in sender system and @root attribute set to the naming system (e.g. 2.16.840.1.113883.4.6 for NPI, 2.16.840.1.113883.3.4819.12.1.1 for L&I Issued Provider ID)
- iii. <assignedAuthor> node must have and <addr> node with appropride values for author's address information.
- iv. <assignedAuthor> node must have <telecom> node with appropriate @use and @value attributes set for author's phone number.
- v. <assignedAuthor> node must have an <assignedPerson> node with author's name.
- vi. <assignedAuthoringDevice> node is **optional** and may contain information to identify the system information the document is being processed.

```
<author>
  <time value="201402131320-0800"/>
  <assignedAuthor>
    <id extension="99999999" root="2.16.840.1.113883.4.6"/>
    <addr>
      <streetAddressLine>1234 Healthcare Street </streetAddressLine>
      <city>Olympia</city>
      <state>WA</state>
      <postalCode>98512</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="360-102-3435"/>
    <assignedPerson>
      <name>
        <given>Attending</given>
        <family>Provider</family>
      </name>
    </assignedPerson>
     <assignedAuthoringDevice>
            <manufacturerModelName>Good Health Medical
            Device</manufacturerModelName>
```

```
<softwareName>Good Health Report Generator</softwareName>
</assignedAuthoringDevice>
</assignedAuthor>
```

```
</author>
```

#### 2.2.7 custodian

custodian header entry must have an ID node such that the @root attribute has value of 2.16.840.1.113883.3.4819.12.1.1 (namespace for L&I issued Provider ID) and @extension attribute set to L&I issued Provider Id for the Clinic/Healthcare Facility.

#### Sample:

```
<telecom value="360-102-3435" use="WP"/>
<addr use="WP">
<streetAddressLine>1234 HealthCare Street</streetAddressLine>
<city>Olympia</city>
<state>WA</state>
<postalCode>98512</postalCode>
<country>US</country>
</addr>
</representedCustodianOrganization>
</assignedCustodian>
</custodian>
```

#### 2.2.8 legalAuthenticator header

Please see IHE Health Story Consolidation Implementation Guide (under related artifacts) for implementation of legalAuthenticator header. Sample XML document contains a legalAuthenticator header to illustrate structure. Currently, at L&I, legalAuthenticator header is used only to determine legalAuthenticator signature (identified by signatureCode entry under legalAuthenticator).

#### Sample:

```
<legalAuthenticator>
 <time value="20140221130208-0800"/>
 <signatureCode code="S"/>
 <assignedEntity>
    <id extension="999999999" root="2.16.840.1.113883.4.6"/>
     <addr>
        <streetAddressLine>1111 Authenticator Grove</streetAddressLine>
       <city>Olympia</city>
       <state>WA</state>
       <postalCode>98512</postalCode>
       <country>US</country>
    </addr>
    <telecom use="WP" value="360-123-3456"/>
    <assignedPerson>
        <name>
           <given>Legal</given>
           <family>Authenticator</family>
       </name>
    </assignedPerson>
 </assignedEntity>
</legalAuthenticator>
```

#### 2.2.9 Authenticator header

Authenticator header is optional for "Progress Note". However, it's required for APF document. Authenticator header must have:

- An ID node such that the @root attribute is set to 2.16.840.1.113883.3.4819.12.1.1
   (namespace for L&I issued Provider ID) and @extension attribute is set to L&I issued
   Provider Id of attending provider.
- ii. A signatureCode node with value "S" indicating:
  - a. sending organization/system's possession of a signed copy (electronic or paper) of the document
  - b. document is signed by attending provider
- iii. The assignedEntity shall contain exactly one assignedPerson

- a. This assignedPerson shall contain at least one name.
- b. name shall
  - i. contain exactly one family
  - ii. contain at least one given
  - iii. may contain zero or one prefix
  - iv. may contain zero or one of the following suffixes to identify the credentials
    - Doctor
    - ARNP
    - PA-C

#### Sample:

```
<authenticator>
    <time value="20140218100501-0800"/>
    <signatureCode code="S"/>
    <assignedEntity>
          <id extension="999999999" root="2.16.840.1.113883.4.6"/><!-- NPI -->
          <id extension="1234567" root="2.16.840.1.113883.3.4819.12.1.1"/><!--</pre>
L&I Provider Id -->
       <addr>
          <streetAddressLine>1234 Medical Street</streetAddressLine>
          <city>Olympia</city>
          <state>WA</state>
          <postalCode>98512</postalCode>
          <country>US</country>
       </addr>
       <telecom use="WP" value="360-102-3435"/>
       <assignedPerson>
          <name>
             <given>Attending</given>
             <family>Provider</family>
            <suffix>ARNP</suffix>
          </name>
       </assignedPerson>
    </assignedEntity>
 </authenticator>
```

#### 2.2.10 componentOf header

componentOf header is required for "Progress Note" as progress note is always tied to an encounter. componentOf header must have an encompassingEncounter. For APF, this encompassingEncounter is further constrained as below:

- i. An id node with @root attribute tied to the claim identifier in sending system and @extension attribute set to L&I Claim Number.
- ii. An effectiveTime/low entry indicating the <u>date of injury</u>. This entry must be precise to date.
   It can have Hr/Min values as well. If Hr/Min values are provided, it should also have Time
   Zone offset.

#### Sample:

```
<componentOf>
```

### 2.3 Data Conformance – APF Acceptance

Data conformance rules listed below are only limited to conformity of APF data exchange format. These rules define the minimum "acceptance" criteria (in addition to header constraints explained above) for APF at L&I and are only limited to required sections, templates etc.

APF documents failing to meet these "acceptance" criteria will be rejected and will not be processed by L&I systems.

### 2.3.1 Required Sections

CDA R2 Progress Note schema requires Assessment and Plan sections to be present. For APF, Assessment and Plan sections must be present <u>separately</u>. This is a constraint on Progress Note schema where Assessment and Plan sections must be present either separately or in one "Assessment and Plan" section. For APF, these must be present separately.

### **Implementation Guideline:**

- In the APF document, structuredBody/Assessment section (identified by fixed templateId/@root="2.16.840.1.113883.10.20.22.2.8") must be present.
- In the APF document, structuredBody/Plan section (identified by fixed <u>templateId/@root="2.16.840.1.113883.10.20.22.2.10</u>") must be present.

### 2.3.2 Assessment section requirements for acceptance

Assessment section in APF must have <u>at least one entry</u> selected for Injured Worker's return to work status from following fields:

- i. Worker is released to Job of Injury (JOI) without restriction
- ii. Worker may perform modified duty
- iii. Worker may work limited hours
- iv. Worker is working modified duty or limited hours
- v. Worker not released to any work
- vi. Poor prognosis for return to work

Selection of "If released for modified duty, may work more than normal schedule" field doesn't contribute towards Assessment Section acceptance criteria. One of the 6 fields listed above are needed to be present.

**\*Note:** Sample below is shown with ID attributes of table/td etc. These values follow a specific pattern for locally "codifying" the narrative text. ID attribute patterns are explained later in this document.

Sample:

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.22.2.8"/>
<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="51848-0"
displayName="ASSESSMENT"/>
<title>ASSESSMENT</title>
<text>
 <thead>
 Assessment
  Value
  Hours
  From Date
  To Date
 </thead>
 Worker may work limited hours
  Yes
  6
  20140311
  20140315
 Worker not released to any work
  Yes
  20140211
  20140310
 </text>
</section>
</component>
```

### 2.3.3 Plan Section Requirements for acceptance

At least one entry in Plan section, Claim Manager Notes or selection of "May need assistance returning to work" must be present/selected.

### 2.4 Best Practice Conformance – APF

**\*Note:** APF best practice measures may vary by best practices programs. With evolving best practices and business rules, these are subject to change. Please coordinate with your best practice contract manager at L&I to obtain full criteria applicable to your scenario. To ensure the best practice measures

are helped by your HIE implementation, please consider these best practice requirements when developing your user interface rules. These do not play a part in exchange of APF data.

### 2.5 Body Constraints

CDA R2 guidelines require all CDA R2 based documents to be renderable faithfully in a human readable form. This in turn implies that narrative texts for different body sections have the applicable information presented in CDA R2 schema for narrative texts sections (e.g., using , < list> etc.).

APF exchange format discussed in this document follows the CDA R2 guidelines. Various sections of APF body are presented in this template using CDA R2 schema compliant elements so that the APF document can be rendered in a human readable form (HTML) using generic CDA R2 XSL transformation.

APF template further "codifies" these narrative texts using locally defined ids for various text elements. APF section mappings nad coding scheme are discussed in detail here.

### 2.5.1 Date fields within body sections

Unless otherwise specified, dates appearing within the body sections of APF document follow **yyyymmdd** format with optional HHMMSS section for 24 hr. time. When 24 hr. time is provided, it should also include the time zone information in the format yyyymmddHHMMSS-ZZzz (ZZzz indicates the time zone values, e.g. -0530 for UTC -05:30).

### 2.5.2 Section Mappings

"Progress Note" template sections that are used for APF are listed here. Table below lists the CDA R2 Template/Header mappings for various sections of APF. These are illustrated in a diagram also showing where various sections of APF paper form are mapped to CDA R2 templates.

| APF Paper Form<br>Segment | APF Paper<br>Form Fields         | CDA R2 Progress<br>Note<br>Headers/Templates                | Template ID (where applicable) |
|---------------------------|----------------------------------|---|--------------------------------|
| General Info              | Worker's Name                    | Header:<br>recordTarget                                     | N/A                            |
|                           | Patient ID                       | Header:<br>recordTarget                                     | N/A                            |
|                           | Visit Date                       | Header:<br>effectiveTime                                    | N/A                            |
|                           | Claim Number                     | Header: id<br>Header: setId<br>Header:<br>componentOf       | N/A                            |
|                           | Healthcare<br>Provider's<br>Name | Header:<br>authenticator                                    | N/A                            |
|                           | Date of Injury                   | Header:<br>encompassingEncou<br>nter (under<br>componentOf) | N/A                            |

|                                      |  |                                       | 0 1 0 0 0 1 110000 10 00 00 0 5 |
|--------------------------------------|--|---------------------------------------|---------------------------------|
|                                      | Diagnosis                                  | Template: Problems<br>Section         | 2.16.840.1.113883.10.20.22.2.5  |
| Released for work?                   | (All Fields)                               | Template:                             | 2.16.840.1.113883.10.20.22.2.8  |
|                                      |  | Assessment Section                    |                                 |
| Key Objective Finding(s)             | (All Fields)                               | Template: Objective<br>Section        | 2.16.840.1.113883.10.20.21.2.1  |
| Estimate what the worker can do      | (All Fields)                               | Template:<br>Instructions Section     | 2.16.840.1.113883.10.20.22.2.45 |
| Other Restrictions /<br>Instructions | (All Fields)                               | (Same as above)                       | 2.16.840.1.113883.10.20.22.2.45 |
| Employer Notified                    | Employer<br>Notified of<br>Capacities      | Template:<br>Interventions<br>Section | 2.16.840.1.113883.10.20.21.2.3  |
|                                      | Modified Duty<br>Available                 | (Same as above)                       | 2.16.840.1.113883.10.20.21.2.3  |
|                                      | Date of Contact                            | (Same as above)                       | 2.16.840.1.113883.10.20.21.2.3  |
|                                      | Name of<br>Contact                         | (Same as above)                       | 2.16.840.1.113883.10.20.21.2.3  |
|                                      | Notes                                      | (Same as above)                       | 2.16.840.1.113883.10.20.21.2.3  |
| Note to Claim Manager                | (All Fields)                               | Template: Plans<br>Section            | 2.16.840.1.113883.10.20.22.2.10 |
| New Diagnosis                        | (All Fields)                               | Template:<br>Interventions<br>Section | 2.16.840.1.113883.10.20.21.2.3  |
| Opioids Prescribed                   | (All Fields)                               | (Same as above)                       | 2.16.840.1.113883.10.20.21.2.3  |
| Plans                                | (All Fields)                               | Template: Plans<br>Section            | 2.16.840.1.113883.10.20.22.2.10 |
| Sign                                 | Signature                                  | Header:<br>Authenticator              | N/A                             |
|                                      | Phone Number                               | Header:<br>Authenticator              | N/A                             |
|                                      | Date                                       | Header:<br>Authenticator              | N/A                             |
|                                      | Copy of APF<br>Given to<br>worker          | Template:<br>Instructions Section     | 2.16.840.1.113883.10.20.22.2.45 |
|                                      | Talking points<br>discussed with<br>worker | Template:<br>Instructions Section     | 2.16.840.1.113883.10.20.22.2.45 |
|                                      |  |                                       |                                 |

| (If selected, skip to "Plans<br>Worker may perform r   | the job of  | injury (  | /////   | ıD:<br><mark>Teade</mark> i   | <b>r</b>  | Visit Da                                     |                                    | CiDodument Header  |  |
|--|---|---|---|---|---|--|------------------------------------|--|--|
| Worker is released to t<br>(if selected, skip to "Plans<br>Worker may perform r  | the job of  | injury (  | /////   | leade   | 1   | Date of                                      | Things                             |  |  |
| (If selected, skip to "Plans<br>Worker may perform r   |   |   | (100 C / 100  |   |   |  | injury.                            | Diaproblems Section  |  |
| Worker may perform r   | 777777  | Worker is released to the job of injury (JOI) without restrictions (related to the wo<br>(if selected, skip to "Plans" section below) |   |   |   |  |                                    |  |  |
| 10*  | modified  | Required: Measurable Objective Finding(s)<br>(e.g., positive x-ray, swelling, muscle atrophy,   |   |   |   |  |                                    |  |  |
| If released to mode  |   |   |   |   |   | edule  |                                    | decreased range of motion)                                     |  |
|  |   |   |   |   |   |  |                                    | Objective Centier  |  |
|  |   |   |   |   | date)   |  |                                    | Objective Section  |  |
|  |   |   |   |   | 77773   | *estimate                                    |                                    |  |  |
| Poor prognosis for r   | eturn to  | work  | at the iol  | b of iniun  | v at any  | date   | 22224                              |  |  |
| 1-10 days 🔲 11-20 days   | 21-30   | days [  | ] 30+ da  | ys 🗖 peri   |   |  |                                    | Other Restrictions / Instructions:<br>Instructions Section     |  |
| orker can: (Related to work  | k injury)   | Never   | Seldom<br>1-10%<br>0-1 hour   | 11-33%  | 34-66   | 156 C  | 17-100%                            |  |  |
|  |   | 7777  |   |   |   |  |                                    |  |  |
| and / Walk   |   |   |   | <u></u>   | 4   |  |                                    | Employer Notified of Capacities? DYes                          |  |
| mb ladder  |   | 7777  | <del></del>   |   |   |  |                                    | Modified duty available? See See See See See See See See See S |  |
| imb stairs   |   | 11/1  |   | 17/1/2  |   | 11/1   | 11/12                              |  |  |
| list   |   |   |   | 444   | 44  |  | Date of contact<br>Name of contact |  |  |
| the second s   |   |   |   | <u> </u>  |   |  |                                    | Notes:   |  |
| a supervision of the part of t | Instru  | ction   | s Sec   | tion  |   | <del>- 1</del> -                             |                                    |  |  |
| and a second  | Landard and and a   | 7777  |   |   |   |  |                                    |  |  |
|  |   | 7773  | 0////   | 10000   | 7/7/  | 2212   | 7777                               | Note to Claim Manager:   |  |
|  |   | 2772  |   | 10////  |   |  |                                    |  |  |
|  |   |   |   |   |   |  |                                    |  |  |
|  |   |   |   |   |   |  |                                    | Disus Castian  |  |
| والمريد أبوحانك والجرائبة المرابعة والمتواجع والمراجع المود والمراجع والمراجع والمراجع والمراجع  | and the state of the   |   |   | <del> </del>  | -   |  |                                    | Plans Section  |  |
| والمشير والمراجع والمراجع والمراجع والمتحد والمتح والمراجع والمراجع والمراجع والمراجع والمراجع   | and the second se | 7777  |   |   |   |  |                                    |  |  |
| aratory tasks; low impact  | L, R, B   | 7777  |   | 17777   |   | 000  | ////                               |  |  |
| ting / Pushing   | Never   | -   |   | Occas.  | and the second se |  | Instant                            | May need assistance returning to work                          |  |
| ample  |   |   |   | 10 100  |   |  |                                    | New diagnosis  |  |
|  |   |   |   |   |   |  |                                    | OpioidInterventions Section or                                 |  |
| irry L, R, B   | 105   | 100   | lbs   | lbs   | lbs   |  | fbs                                | Chronic pain   |  |
|  | / / to*<br>Worker is working mo<br>Worker not released to<br>Poor prognosis for r<br>long do the worker's cu-<br>10 days ☐ 11-20 days<br>actives apply all day, every<br>actives apply all day, every<br>orker can: (Related to work<br>ank space = Not restricted<br>md / Walk<br>form work from ladder<br>nb ladder<br>nb ladder<br>nb stairs<br>st<br>d / Stoop<br>tat / Kneel<br>wi<br>act / Kneel<br>wi<br>board L. R<br>t (flexion/axtension) L, R<br>e manipulation L, R<br>e manipulation L, R<br>ratory tasks; low impact<br>ratory tasks; low impact<br>ing / Pushing<br>imple<br>L, R, B   |   | /       to*         Worker is working modified duty or lin         Worker not released to any work from         Poor prognosis for return to work.         Iong do the worker's current capacities         -10 days       11-20 days         21-30 days         acities apply all day, every day of the week.         orker can: (Related to work injury)         ank space = Not restricted         md / Walk         form work from ladder         nb ladder         nb statins         st         d/ Stoop         at/ Kneel         wid         Instruction         rk above shoulders         L, R, B         at (flexion/extension)         L, R, B         e manipulation         L, R, B         ratory tasks; low impact         ratory tasks; low impact         mid         mide         50 os         20 os | /////worker is working modified duty or limited hou         Worker not released to any work from (date):         Poor prognosis for return to work at the johong do the worker's current capacities apply (estimated to any active apply all days in the second active apply all days every day of the week, at home a criteria apply all day, every day of the week, at home a criteria apply all day, every day of the week, at home a criteria apply all day, every day of the week, at home a criteria apply all day, every day of the week, at home a criteria apply all day, every day of the week, at home a criteria apply all day, every day of the week, at home a criteria apply all day, every day of the week, at home a criteria apply all days every day of the week, at home a criteria apply all days every day of the week, at home a criteria apply all days every day of the week, at home a criteria apply all days every day of the week, at home a criteria apply all days every day of the week, at home a criteria apply all days every day of the week, at home a criteria apply all days every day of the week, at home a criteria apply and the second every tasks ing impact L, R, B criteria tasks; low imp |   | Worker not released to any work from (date): |                                    |  |  |

#### 2.5.3 Coding scheme for locally coded entries

HL7 CDA R2 requires documents to be renderable in a human readable format representing the data faithfully. This in turn requires providing renderable information into *text* nodes of *section* templates.

APF implementation of CDA R2 schema for "Progress Note" document template further "codifies" these text entries to allow treating these text entries as coded entries while maintaining the renderability of document in human readable form using HL7 CDA R2 standard XSL transformations. This is achieved using a local coding scheme for assigning fixed ids to each data element. Below is an overview of these coding schemes with examples from sample document. Each of these sections and their value sets are explained further in next section.

Tables/Lists: coded as apf.<<apf section>>.<<area>>; e.g., *apf.capacities.functional* refers to table containing *functional capacities* in *apf*.

Cells in Table entries: coded as <<apf section>>.<<area>>.<<entry id>>.<<iteration>>.<<entry attribute>>; e.g., *capacities.functional.100.1.text* identifies *text* attribute of *iteration 1* of "Reaching" capacity (*id 100*) under *functional capacities*.

#### 2.5.4 Section, Codes, Value Sets mapping

Listed below are value sets used in different sections for local codification of text entries.

2.5.4.1 Problems Section (templateId: 2.16.840.1.113883.10.20.22.2.5) (Optional) If present, problems section of XML document identified by templateId 2.16.840.1.113883.10.20.22.2.5 maps following elements of APF document:

Diagnosis

This section must have a templateId node with root attribute set to

2.16.840.1.113883.10.20.22.2.5 and a code node with fixed code of 11450-4 and LOINC code system 2.16.840.1.113883.6.1 as shown below.

```
<templateId root="2.16.840.1.113883.10.20.22.2.5"/>
<code code="11450-4" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC"
displayName="PROBLEM LIST"/>
```

Text entry in Problems section should list diagnosis codes in a list identified by id apf.accepteddiagnosis as shown below. This section <u>should not</u> list all diagnosis codes from the patient history, only the ones applicable to this encounter and/or accepted by L&I (if known).

```
t ID="apf.accepteddiagnosis" listType="ordered">
<item>(ICD-9)907.4</item>
<item>Pain Right Upper Arm</item>
</list>
```

Entries in List:

| Entry | Purpose/Description                                 | Value Type | Possible<br>Values |
|-------|---|------------|--------------------|
| item  | L&I Accepted Diagnosis (ICD9/10 codes or free text) | String     | Free form          |

2.5.4.2 Assessment Section (templateId: 2.16.840.1.113883.10.20.22.2.8) (Required)

Assessment section of XML document identified by templateId 2.16.840.1.113883.10.20.22.2.8 maps following elements of APF document:

Work Status

This section must have a templateId node with root attribute set to

2.16.840.1.113883.10.20.22.2.8 and a code node with fixed code of 51848-0 and LOINC code system 2.16.840.1.113883.6.1 as shown below.

```
<templateId root="2.16.840.1.113883.10.20.22.2.8"/>
<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="51848-0"
displayName="ASSESSMENT"/>
```

Text entry in Assessment section will contain a table identified by id apf.assessment as shown here. All possible values for cell identifiers are provided in the table below.

```
<thead>
   Assessment
     Value
     Hours
     >From Date
     To Date
   </thead>
 Worker is released to the job of
injury without restrictions as of:
     No
     Worker may perform modified duty,
if available:
     No
     Worker may work limited hours
     Yes
     6
     20140311
     20140325
```

#### **APF Field Mappings to table cell entries:**

Listed below are the Id values for table cells and corresponding APF entry mapped to them.

| Id             | Mapped APF Entry   |
|----------------|--|
| assessment.100 | Worker is released to job of injury without restriction            |
| assessment.101 | Worker may performed modified duty, if available                   |
| assessment.102 | If released to modified duty, may work more than usual hours       |
| assessment.103 | Worker may work limited hours                                      |
| assessment.104 | Worker is working modified or limited hours                        |
| assessment.105 | Worker not released to any work                                    |
| assessment.106 | Poor prognosis for return to work at the job of injury at any time |

#### id attributes of table cell entries:

| Attribute | Purpose/Description  | Value Type | Possible<br>Values |
|-----------|--|------------|--------------------|
| text      | Display text in sender system corresponding to entry                   | String     | Free form          |
| value     | Selection value of applicable entry (Checked = Yes,<br>Unchecked = No) | Yes/No     | Yes<br>No          |
| hours     | When applicable, number of hours IW can work                           | Number     | 0 to 24            |
| fromdate  | When applicable, indicates the start date when assessment applies      | Date       | Date               |
| todate    | When applicable, indicates the end date till the assessment apply      | Date       | Date               |

#### 2.5.4.3 Objective Section (templateId: 2.16.840.1.113883.10.20.21.2.1) (Optional)

If present (see **Error! Reference source not found.** for conditions when this section should be present), Objective section of XML document identified by templateId 2.16.840.1.113883.10.20.21.2.1 maps following elements of APF document:

• Key Objective Findings

This section must have a templateId node with root attribute set to

2.16.840.1.113883.10.20.21.2.1 and a code node with fixed code of 61149–1 and LOINC code system 2.16.840.1.113883.6.1 as shown below.

```
<templateId root="2.16.840.1.113883.10.20.21.2.1"/>
<code code="61149-1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="OBJECTIVE DATA "/>
```

Text entry in Objective section should list key objective findings of the encounter in a list identified by id apf.keyobjectivefindings as shown below.

| Entry | Purpose/Description                       | Value Type | Possible<br>Values |
|-------|---|------------|--------------------|
| item  | Key objective findings from the encounter | String     | Free form          |

#### 2.5.4.4 Instructions Section (templateId: 2.16.840.1.113883.10.20.22.2.45) (Optional)

If present (see **Error! Reference source not found.** for conditions when this section should be present), Instructions section of XML document identified by templateId

2.16.840.1.113883.10.20.22.2.45 maps following elements of APF document:

- Capacity duration
- Estimate what the worker can do
- Other Restrictions/Instructions
- Copy of APF given to worker/Talking points discussed with worker

This section must have a templateId node with root attribute set to

2.16.840.1.113883.10.20.22.2.45 and a code node with fixed code of 69730-0 and LOINC code system 2.16.840.1.113883.6.1 as shown below.

```
<templateId root="2.16.840.1.113883.10.20.22.2.45"/>
<code code="69730-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="INSTRUCTIONS"/>
```

Text entry in this section contains following items:

- A list identified by id apf.capacities.duration(details below)
- A table identified by id apf.capacities.basic(details below)
- A table identified by id apf.capacities.functional (details below)
- A table identified by id apf.capacities.weight(details below)
- A list identified by id apf.capacities.other(details below)
- A table identified by id apf.capacities.communication(details below)

#### List apf.capacities.duration:

This list (identified by id apf.capacities.duration) lists duration for which capacities are estimated. Example:

| Entry | Purpose/Description                         | Value Type         | Possible<br>Values                         |
|-------|---|--------------------|--|
| item  | Duration for which capacities are estimated | Choice<br>(String) | 1-10<br>11-20<br>21-30<br>30+<br>permanent |

#### Table apf.capacities.basic:

This table (identified by id apf.capacities.basic) contains estimates for basic capacities as shown here. All possible values for cell identifiers are provided in table below.

```
<caption>Capacities</caption>
 <thead>
   \langle t,r \rangle
     Function
     Estimate
   </thead>
 Sit
     Frequent
   Stand/Walk
     Perform work from ladder
     Frequent
   Climb ladder
     Seldom
```

#### Field Mappings to table apf.capacities.basic cell entries:

Listed below are the Id values for table cells and corresponding APF entry mapped to them.

| Id                   | Mapped APF Entry         |
|----------------------|--------------------------|
| capacities.basic.100 | Sit                      |
| capacities.basic.101 | Stand/Walk               |
| capacities.basic.102 | Perform work from ladder |
| capacities.basic.103 | Climb ladder             |
| capacities.basic.104 | Climb stairs             |

| capacities.basic.105 | Twist       |
|----------------------|-------------|
| capacities.basic.106 | Bend/Stoop  |
| capacities.basic.107 | Squat/Kneel |
| capacities.basic.108 | Crawl       |

#### id attributes of table apf.capacities.basic cell entries:

| Attribute | Purpose/Description                                  | Value Type         | Possible<br>Values                                     |
|-----------|--|--------------------|--|
| text      | Display text in sender system corresponding to entry | String             | Free form  |
| frequency | Frequency for applicable capacity                    | Choice<br>(String) | Never<br>Seldom<br>Occassional<br>Frequent<br>Constant |

#### Table apf.capacities.functional:

This table (identified by id apf.capacities.functional) contains estimates for functional capacities as shown here. All possible values for cell identifiers are provided in table below.

```
<caption>Capacities Cont.</caption>
 <thead>
   \langle tr \rangle
     Function
     Estimate
     Side of body (Left, Right, Both) 
   </thead>
 >
     Reach
     Work above
shoulders
     Never
```

#### Field Mappings to table apf.capacities.functional cell entries:

Listed below are the Id values for table cells and corresponding APF entry mapped to them.

| Id                        | Mapped APF Entry |
|---------------------------|------------------|
| capacities.functional.100 | Reach            |

| capacities.functional.101 | Work above shoulders         |  |
|---------------------------|------------------------------|--|
| capacities.functional.102 | Keyboard                     |  |
| capacities.functional.103 | Wrist (flexion/extension)    |  |
| capacities.functional.104 | Grasp (forceful)             |  |
| capacities.functional.105 | Fine manipulation            |  |
| capacities.functional.106 | Operate foot control         |  |
| capacities.functional.107 | Vibratory tasks; high impact |  |
| capacities.functional.108 | Vibratory tasks; low impact  |  |

#### id attributes of table apf.capacities.functional cell entries:

| Attribute  | Purpose/Description                                  | Value Type         | Possible<br>Values                                     |
|------------|--|--------------------|--|
| text       | Display text in sender system corresponding to entry | String             | Free form  |
| frequency  | Frequency for applicable capacity                    | Choice<br>(String) | Never<br>Seldom<br>Occassional<br>Frequent<br>Constant |
| sideofbody | Indicates affected side of the body                  | Choice<br>(String) | L<br>R<br>B  |

#### Table apf.capacities.weight:

This table (identified by id apf.capacities.weight) contains estimates for capacities involving weight as shown here. All possible values for cell identifiers are provided in table below.

```
<caption>Lifting/Pushing Capacities</caption>
 <thead>
  Capacity
    Weight
    Frequency
    >Side Of Body
  </thead>
 Lift
    50
    Never
    Lift
    20
    Seldom
```

```
Lift
Lift

Carry
ID="capacities.weight.101.1.text">Carry

Carry

Carry

Never

Never

Never

Never

Never

Never

Never

</tr
```

**\*Note:** Weight capacities use iterations to indicate capacities for different weights in the same category. E.g., in the example above, Injured Worker should not lift 50 lbs + weights, can lift 10 lbs occasionally and seldom go for 20 lbs. Refer to Coding scheme for locally coded entries section for more details.

#### Field Mappings to table apf.capacities.weight cell entries:

Listed below are the Id values for table cells and corresponding APF entry mapped to them.

| Id                    | Mapped APF Entry |
|-----------------------|------------------|
| capacities.weight.100 | Lift             |
| capacities.weight.101 | Carry            |
| capacities.weight.102 | Push/Pull        |

#### id attributes of table apf.capacities.weight cell entries:

| Attribute  | Purpose/Description                                      | Value Type         | Possible<br>Values                                     |
|------------|--|--------------------|--|
| text       | Display text in sender system corresponding to entry     | String             | Free form  |
| weight     | Weight applicable to this iteration of capacity estimate | Number<br>(lbs)    | Number   |
| frequency  | Frequency for applicable capacity                        | Choice<br>(String) | Never<br>Seldom<br>Occassional<br>Frequent<br>Constant |
| sideofbody | Indicates affected side of the body                      | Choice<br>(String) | L<br>R<br>B  |

#### List apf.capacities.other:

This list (identified by id apf.capacities.other) lists other restrictions/instructions.

| Entry | Purpose/Description             | Value Type | Possible<br>Values |
|-------|---------------------------------|------------|--------------------|
| item  | Other restrictions/instructions | String     | Free Text          |

#### Table apf.capacities.communication:

This table (identified by id apf.capacities.communication) contains entries indicating communication with Injured Worker during the encounter. All possible values for cell identifiers are provided in table below.

```
<caption>Worker Communication</caption>
    Copy of
APF given to worker
             <td
ID="capacities.communication.copygiventoworker.l.value">Yes
        <td
ID="capacities.communication.talkingpointsdiscussed.l.text">Discussed three key
messages with patient
             <td
ID="capacities.communication.talkingpointsdiscussed.1.value">Yes
```

#### Field Mappings to table apf.capacities.communication cell entries:

Listed below are the Id values for table cells and corresponding APF entry mapped to them.

| Id  | Mapped APF Entry                          |
|---|---|
| capacities.communication.copygiventoworker      | Copy of APF given to worker               |
| capacities.communication.talkingpointsdiscussed | Discussed three key messages with patient |

#### id attributes of table apf.capacities.communication cell entries:

| Attribute | Purpose/Description                                  | Value Type         | Possible<br>Values |
|-----------|--|--------------------|--------------------|
| text      | Display text in sender system corresponding to entry | String             | Free form          |
| value     | Value corresponding to entries                       | Yes/No<br>(String) | Yes<br>No          |

#### 2.5.4.5 Interventions Section (templateId: 2.16.840.1.113883.10.20.21.2.3) (Optional)

If present, Intervenstons section of XML document identified by templateId 2.16.840.1.113883.10.20.21.2.3 maps following elements of APF document:

- Employer Communication
- New Diagnosis
- Opioids Prescription

This section must have a templateld node with root attribute set to

2.16.840.1.113883.10.20.21.2.3 and a code node with fixed code of 62387-6 and LOINC code system 2.16.840.1.113883.6.1 as shown below.

```
<templateId root="2.16.840.1.113883.10.20.21.2.3"/>
<code code="62387-6" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC"
displayName="INTERVENTIONS PROVIDED"/>
```

Text entry in this section contains following items:

- A table identified by id apf.interventions.employernotification (details below)
- A list identified by id apf.interventions.newdiagnosis (details below)
- A list identified by id apf.interventions.opioids (details below)

#### Table apf.interventions.employernotification:

This table (identified by id apf.interventions.employernotification) contains entries pertaining to employer communication as shown here. All possible values for cell identifiers are provided in table below.

```
<caption>Employer Communication</caption>
  <thead>
    Employer Notified of Capacities?
       Modified Duty Available?
       Contact Date
       Contact Name
       Notes
    </thead>
  Yes
     Yes
     20140213
     HR Manager
     Discussed
modified/limited duties available.</rr>
    </t.r>
```

#### Field Mappings to table apf.interventions.employernotification cell entries:

Listed below are the Id values for table cells and corresponding APF entry mapped to them.

| Id                                 | Mapped APF Entry                |
|------------------------------------|---------------------------------|
| interventions.employernotification | Employer Notified of Capacities |

#### id attributes of table apf.interventions.employernotification cell entries:

| Attribute    | Purpose/Description                                | Value Type | Possible<br>Values |
|--------------|--|------------|--------------------|
| value        | Selection indicating whether employer was notified | Yes/No     | Yes                |
|              |  | (String)   | No                 |
| modifiedduty | Selection indicating if modified duty is available | Yes/No     | Yes                |
|              |  | (String)   | No                 |
| date         | Date employer was contacted/notified               | Date       | Date               |
| contact      | Name of contacted person                           | String     | Free Text          |
| notes        | Notes from the employer discussion                 | String     | Free Text          |

#### List apf.interventions.newdiagnosis:

This list (identified by id apf.interventions.newdiagnosis) lists any new diagnosis discovered/established during the encounter.

#### Entries in List:

| Entry | Purpose/Description                                      | Value<br>Type | Possible<br>Values |
|-------|--|---------------|--------------------|
| item  | New diagnosis from the encounter (ICD9/10 codes or text) | String        | Free Text          |

#### List apf.interventions.opioids:

This list (identified by id apf.interventions.opioids) lists if opioids are prescribed to the injured worker.

```
t ID="apf.interventions.opioids" listType="ordered">
        <caption>Opioids prescribed for</caption>
        <item>Acute Pain</item>
        <item>Chronic Pain</item>
</list>
```

| Entry | Purpose/Description            | Value Type         | Possible<br>Values         |
|-------|--------------------------------|--------------------|----------------------------|
| item  | Reason for Opioid prescription | Choice<br>(String) | Acute Pain<br>Chronic Pain |

2.5.4.6 Plan Of Care Section (templateId: 2.16.840.1.113883.10.20.22.2.10) (Required) Plan of Care section of XML document identified by templateId

2.16.840.1.113883.10.20.22.2.10 maps following elements of APF document:

- Plans
- Note to Claim Manager (including "May need assistance returning to work" checkbox)

This section must have a templateld node with root attribute set to

```
2.16.840.1.113883.10.20.22.2.10 and a code node with fixed code of 18776-5 and LOINC code system 2.16.840.1.113883.6.1 as shown below.
```

```
<templateId root="2.16.840.1.113883.10.20.22.2.10"/>
<code code="18776-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="Treatment plan"/>
```

Text entry in this section contains following items:

- A table identified by id apf.plans.nextvisit(details below)
- A list identified by id apf.plans.progress (details below)
- A list identified by id apf.plans.currentrehab(details below)
- A table identified by id apf.plans.surgery(details below)
- A list identified by id apf.plans.impairment(details below)
- A list identified by id apf.plans.rateimpairment (details below)
- A list identified by id apf.plans.treatmentend(details below)
- A list identified by id apf.plans.transferred(details below)
- A list identified by id apf.plans.consultation(details below)
- A list identified by id apf.plans.study(details below)
- A list identified by id apf.plans.clmmgrnotes(detail below)
- A list identified by id apf.plans.mayneedassistance (details below)

#### Table apf.plans.nextvisit:

This table (identified by id apf.plans.nextvisit) contains entries pertaining to next scheduled visit as shown here. All possible values for cell identifiers are provided in table below.

```
        <caption>Next scheduled visit in</caption>
        <thead>

            >Value
```

```
Days/Weeks/Date
</thead>
6
```

#### Field Mappings to table apf.plans.nextvisit cell entries:

Listed below are the Id values for table cells and corresponding APF entry mapped to them.

| Id              | Mapped APF Entry     |
|-----------------|----------------------|
| plans.nextvisit | Next scheduled visit |

#### id attributes of table apf.plans.nextvisit cell entries:

| Attribute | Purpose/Description                     | Value Type         | Possible Values  |
|-----------|---|--------------------|--|
| value     | Value for next scheduled visit          | Number/Date        | Number as Text<br>Date of next visit                   |
| interval  | Interval for next scheduled visit value | Choice<br>(String) | Date (if value is next visit<br>date)<br>Days<br>Weeks |

#### List apf.plans.progress:

This list (identified by id apf.plans.progress) lists indicators of worker progress.

```
<list ID="apf.plans.progress" listType="ordered">
        <caption>Worker Progress</caption>
        <item>As expected</item>
</list>
```

#### Entries in List:

| Entry | Purpose/Description              | Value Type | Possible Values      |
|-------|----------------------------------|------------|----------------------|
| item  | Value indicating worker progress | Choice     | As expected          |
|       |                                  | (String)   | Slower than expected |

#### List apf.plans.currentrehab:

This list (identified by id apf.plans.currentrehab) current rehab for worker (if any).

```
<list ID="apf.plans.currentrehab" listType="ordered">
        <caption>Current Rehab</caption>
```

```
<item>PT</item>
<item>OT</item>
<item>Home Exercise</item>
<item>Chiropractic</item>
</list>
```

| Entry | Purpose/Description        | Value Type          | Possible Values   |
|-------|----------------------------|---------------------|-------------------|
| item  | Current rehab indicator(s) | Choice(String)/Free | РТ                |
|       |                            | Text                | ОТ                |
|       |                            |                     | Home exercise     |
|       |                            |                     | (Other/Free Text) |

#### Table apf.plans.surgery:

This table (identified by id apf.plans.surgery) contains entries pertaining to surgery actions. All possible values for cell identifiers are provided in table below.

```
<caption>Surgery</caption>
<thead>
Action
 Value
 Date
 </thead>
Planned
 Yes
 20141214
 Completed
 Yes
 20141130
```

Other example (without date):

```
<caption>Surgery</caption>
<thead>
Action
ActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActionActio
```

```
Yes

<t/tr>
<t/tbody>
```

#### Field Mappings to table apf.plans.surgery cell entries:

Listed below are the Id values for table cells and corresponding APF entry mapped to them.

| Id            | Mapped APF Entry |
|---------------|------------------|
| plans.surgery | Surgery plan     |

#### id attributes of table apf.plans.surgery cell entries:

| Attribute | Purpose/Description                                     | Value Type | Possible Values      |
|-----------|---|------------|----------------------|
| action    | Surgery related action                                  | Choice     | Not Indicated        |
|           |   | (String)   | Possible             |
|           |   |            | Planned              |
|           |   |            | Completed            |
| value     | Value for the surgery related action                    | Yes/No     | Yes                  |
|           |   | (String)   | No                   |
| date      | Date of planned or completed surgery (where applicable) | Date       | Date (if applicable) |

#### List apf.plans.impairment:

This list (identified by id apf.plans.impairment) indicates any permanent/partial impairment(s) for the worker.

```
<list ID="apf.plans.impairment" listType="ordered">
        <caption>Any permanent/partial impairment</caption>
        <item>Yes</item>
        </list>
```

#### Entries in List:

| Entry | Purpose/Description          | Value Type         | Possible<br>Values    |
|-------|------------------------------|--------------------|-----------------------|
| item  | Permanent/partial imparement | Choice<br>(String) | Yes<br>No<br>Possibly |

#### List apf.plans.rateimpairment:

This list (identified by id apf.plans.rateimpairment) indicates rating/referral for imparement by the attending provider (if qualified).

```
<list ID="apf.plans.rateimpairment" listType="ordered">
        <caption>Please rate impairment, if qualified</caption>
        <item>Will Refer</item>
</list>
```

#### Entries in List:

| Entry | Purpose/Description | Value Type         | Possible<br>Values                     |
|-------|---------------------|--------------------|--|
| item  | Impairment rating   | Choice<br>(String) | Will rate<br>Will refer<br>Request IME |

#### List apf.plans.treatmentend:

This list (identified by id apf.plans.treatmentend) indicates if the treatment is concluded for the worker.

# Entries in List:

| Entry | Purpose/Description                     | Value Type | Possible<br>Values |
|-------|---|------------|--------------------|
| item  | Indicator if the treatment is concluded | Yes/No     | Yes<br>No          |

#### List apf.plans.transferred:

This list (identified by id apf.plans.transferred) indicates if the care is transferred to another provider/facility.

</list>

#### **Entries in List:**

| Entry | Purpose/Description                                    | Value Type | Possible<br>Values |
|-------|--|------------|--------------------|
| item  | Name of provider/facility where care is transferred to | String     | Free Text          |

#### List apf.plans.consultation:

This list (identified by id apf.plans.consultation) indicates if further consultation is needed.

| Entry | Purpose/Description                        | Value Type | Possible<br>Values |
|-------|--|------------|--------------------|
| item  | Indicators for further consultation needed | String     | Free Text          |

#### List apf.plans.study:

This list (identified by id apf.plans.study) indicates if further study is needed/pending.

```
<list ID="apf.plans.study" listType="ordered">
        <caption>Study Pending:</caption>
        <item>Need more tests</item>
```

#### </list>

#### **Entries in List:**

| Entry | Purpose/Description     | Value Type | Possible<br>Values |
|-------|-------------------------|------------|--------------------|
| item  | Further/pending studies | String     | Free Text          |

#### List apf.plans.clmmgrnotes:

This list (identified by id apf.plans.clmmgrnotes) contains notes for L&I Claim Manager.

```
<list ID="apf.plans.clmmgrnotes" listType="ordered">
        <caption>Note to Claim Manager</caption>
        <item>Previous back injury</item>
</list>
```

#### Entries in List:

| Entry | Purpose/Description    | Value Type | Possible<br>Values |
|-------|------------------------|------------|--------------------|
| item  | Notes to claim manager | String     | Free Text          |

#### List apf.plans.mayneedassistance:

This list (identified by id apf.plans.mayneedassistance) contains indicator if the patient may need assistance returning to work.

```
<list ID="apf.plans.mayneedassistance" listType="ordered">
        <caption>May need assistance returning to work</caption>
        <item>Yes</item>
        </list>
```

| Entry | Purpose/Description                   | Value Type         | Possible<br>Values |
|-------|---------------------------------------|--------------------|--------------------|
| item  | May need assistance returning to work | Yes/No<br>(String) | Yes<br>No          |

### 3 APF Acknowledgements/Responses

APFs sent to L&I will have 2 responses sent back. One, sent from OHP HIE (HIE Acknowledgement) indicating successful delivery of document to L&I. Second, sent from L&I (L&I Deferred Response) with information about processing of received document at L&I.

OHP HIE acknowledgements will inform sender about "delivery" of document to L&I.

L&I Deferred Response will inform sender about any technical errors (e.g. missing important fields etc.), any other information regarding the provider's source device details (using author information) if included in the receiving document will be added in the response or other updates on received document (e.g. successful processing etc.).

### 3.1 Sample OHP HIE Acknowledgement

Below is a sample OHP HIE Acknowledgement message. Notice the root node name = OHPHIEack.

<Status> field in the message above indicates successful delivery of document to L&I.

<SenderId> and <SenderName> fields in the message are related to original sender of the file.

<ReceiverId> and <ReceiverName> fields in the message are related to receiver of original document (L&I).

### 3.2 L&I Deferred Response Scheme

L&I Deferred response scheme will be detailed in an additional document and provided separately with field level details, schema etc.

### 4 XSL Transformations

Organizations/systems implementing APF exchange with L&I via HIE are encouraged to leverage XSL Transformations to create the desired exchange format message. One possible scenario would be to implement data extract from EMR systems in raw/proprietary XML format and run it through an XSL transform to create an XML document in the exchange format discussed here.

# 5 Appendix

# 5.1 APF Form Image

| Employ  | nsured Claims: Contact th<br>yer (SIE)/Third Party Admin<br>list of SIE/TPAs, go to www.   | strator (TF   | PA)  | nsured    |                           | 1        | requi                | red. Comp   | ete this form  | only when the                           | L&I or SIE/TPA as<br>re are changes in<br>elease for work statu |  |
|---|--|---|------|-----------|---------------------------|----------|----------------------|---|--|---|---|--|
| General<br>info   | Worker's Name: Patient ID:   |   |      |           | Visit Date: Claim Number: |          |                      | er:   |  |   |   |  |
| Ger   | Healthcare Provider's Name (please print):   |   |      |           |                           |          | Date                 | e of Injury:  | y: Diagnosis;  |   |   |  |
| Required:<br>Work status  | Worker is released to the job of injury (JOI) without restrictions (related to the work injury) as of (date):/_/   |   |      |           |                           |          |                      |   |  |   |   |  |
|   | Worker may perform modified duty, if available, from (date): /   |   |      |           |                           |          |                      | (e.g., positiv  |  | jective Finding(s)<br>, muscle atrophy, |   |  |
|   | Poor prognosis for i     How long do the worker's ci   | eturn to v  | work | at the jo | b of injur                |          | (*esti               | mated date)   | Other Res  | trictions / Ins                         | tructions:  |  |
| <u>Required</u> : Estimate what the worker can do<br>at work and at home unless released to JOI | I-10 days 11-20 days     Capacities apply all day, even     Worker can: (Related to wor     A blank space = Not restricted     Sit   | day of the  |      |           |                           | at work. | uent<br>36%<br>iours | Constant<br>67-100%<br>(Not<br>restricted)              |  |   |   |  |
|   | Stand / Walk<br>Perform work from ladder<br>Climb ladder<br>Climb stairs<br>Twist<br>Bend / Stoop<br>Squat / Kneel<br>Crawl  |   |      |           |                           |          |                      |   | Employer Notified of Capacities? □Yes □<br>Modified duty available? □Yes □No<br>Date of contact:/<br>Name of contact:/<br>Notes: |   |   |  |
|   | Reach         Left, Right, I           Work above shoulders         L, I           Keyboard         L, I           Wrist (flexion/extension)         L, I           Grasp (forceful)         L, I           Fine manipulation         L, I           Vibratory tasks; high impact         Vibratory tasks; low impact           Vibratory tasks; low impact         Lifting / Pushing  | 2, B<br>2, B<br>2, B<br>2, B<br>2, B<br>2, B<br>1, R, B | Cal  | dom       | Occas.                    | Frequer  | nt I                 | Constant  |  | aim Manager:                            |   |  |
|   | Example  | _50_lbs   | -    | ) lbs     | <u>10</u> ibs             | _O_ID:   | _                    | <u>0</u> lbs  | New diagno   |   | turning to work   |  |
|   | Lift L, R, B<br>Carry L, R, B  | lbs   | -    | lbs       | lbs                       | Ib       | _                    | lbs<br>lbs  |  | escribed for:                           | Acute pain or   |  |
|   | Push / Pull L, R, B  | lbs   |      | lbs       | lbs                       | lb       | _                    | lbs   | 5776762075702025   | 0.507493407252375310                    | Chronic pain  |  |
| <u>Required:</u><br>Plans   | Worker progress:       As expected / better than expected         Slower than expected (address in chart notes)       Insert expected (address in chart notes)         Current rehab:       PT         Other (eg. Activity Coaching)       Insert expected (address in chart notes)         Surgery:       Not Indicated         Planned       Date:         Planned       Date:         Completed       Date:         Study pending:       Study pending: |   |      |           |                           |          |                      | ovement (MMI)<br>s □No □Possibly<br>nt for your patient |  |   |   |  |
| ä 5   | Copy of APF given to work  | er  | DD   | iscussed  | three key i               | message  |                      | ack of form   |  |   |   |  |
| Sign  | Signature: Doctor  |   |      |           |                           | -        | /<br>Date            | ·   | ( )  | Phone                                   |   |  |

# 5.2 APF Sample CDA XML

Embedded attached sample to understand the structure of APF CDA:

