Report of Accident (ROA) Implementation Guide

ROA Implementation Guide for external systems

Revision History:

Version	Date	Contributors	Section	Comment (s)
1.0	01-01-2017	Deepa Srinivaas, Lewis Tyson		
1.1	02-22-2017	Deepa Srinivaas		Added additional questions to Assessment Section, describe required questions. Plan and Key objective sections added
1.2	04-12-2017	Deepa Srinivaas	All Sections	Formatted, Updated based on comments.
1.3	04-27-2017	Deepa Srinivaas		Added appropriate sample, corrected the spellings, updated XML structure.
1.4	07-14-2017	Deepa Srinivaas	2.2, 2.3, 2.4, 4.1	Added additional fields not in ROA Form but available in WEB Forms. Rearranged the section details as per review comments. ROA CDA XML updated.
1.5	08-05-2019	Deepa Srinivaas, Rose Jones		
1.6	04-27-2021	Deepa Srinivaas, Rose Jones	1.3, 2.5, 3	Added section HIE ROA Transaction Uses Cases, sub-section on consolidated mapping details of CDA ROA HIE Transaction and ROA Response updated.
1.7	08-03-2021	Deepa Srinivaas, Rose Jones	1.3, 2.6	Added use case for complete ROA submitted without claim number, Updated Language preferences, Marital Status Code options in "ROA mapping details and restrictions" spreadsheet.

Table of Contents

LNIDefRes_Success.
xml

LNIDefRes_Failed.x
ml

1 Introduction

This document provides guidelines for implementing the Report of Accident (ROA) in external systems (e.g., medical providers' EMR systems) to facilitate exchange of ROA data with the Washington State Department of Labor & Industries (L&I) via OneHealthPort (OHP) HIE. The Report of Accident is used by L&I to gather initial injury/illness information for workers contending an injury/illness that occurred in the course of their work for an employer insured through the State Fund.

1.1   Document Purpose

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

The purpose of this document is to explain these conformance rules, namespaces, conventions, and value sets used for ROA data mappings for exchanging ROA data with L&I. The document is in compliance with L&I form – F242-130-000 Report of Accident(Workplace Injury, Accident or Occupational Disease) 10-15. A sample ROA form is provided in the Appendix for reference.

This document assumes that the prepopulated filled ROA form is available to fill in the required CDA document for processing except in the use case where the ROA information was entered directly into the EMR without a corresponding paper form

1.2   Scope

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

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

Please note that data fields from a particular section of the ROA form may map to different sections in the HIE ROA document.

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

1.3   HIE ROA Transaction Use Cases

1.3.1   Current ROA Transaction Use Cases -

Use Case A – Partner EMR submits complete ROA document including claim number from paper form. L&I determines that this ROA was not previously submitted to L&I , so the complete ROA is passed on to L&I systems.

Use Case B - Partner EMR submits complete ROA document including claim number from paper form. L&I determines that the Injured Worker ROA was previously submitted to L&I. Only the Provider section of the ROA is passed on to L&I systems.

Use Case C - Partner EMR submits complete ROA document including claim number from paper form. L&I determines that a complete ROA was previously submitted for this claim number due to one of the following conditions:

- Claim number, injured worker details and date of injury is an exact duplicate or
- Claim number matches, but was submitted for a different injured worker

L&I sends a response to the Partner EMR indicating that the ROA is an exact duplicate or a possible match, including details on the match. No HIE ROA document is submitted.

Use Case D - Partner EMR submits complete ROA without a claim number that was entered directly into the EMR without a corresponding paper form. L&I checks whether this ROA was previously submitted. If the claim is not established within L&I systems, L&I sends an acknowledgement with an assigned claim number to the Partner.
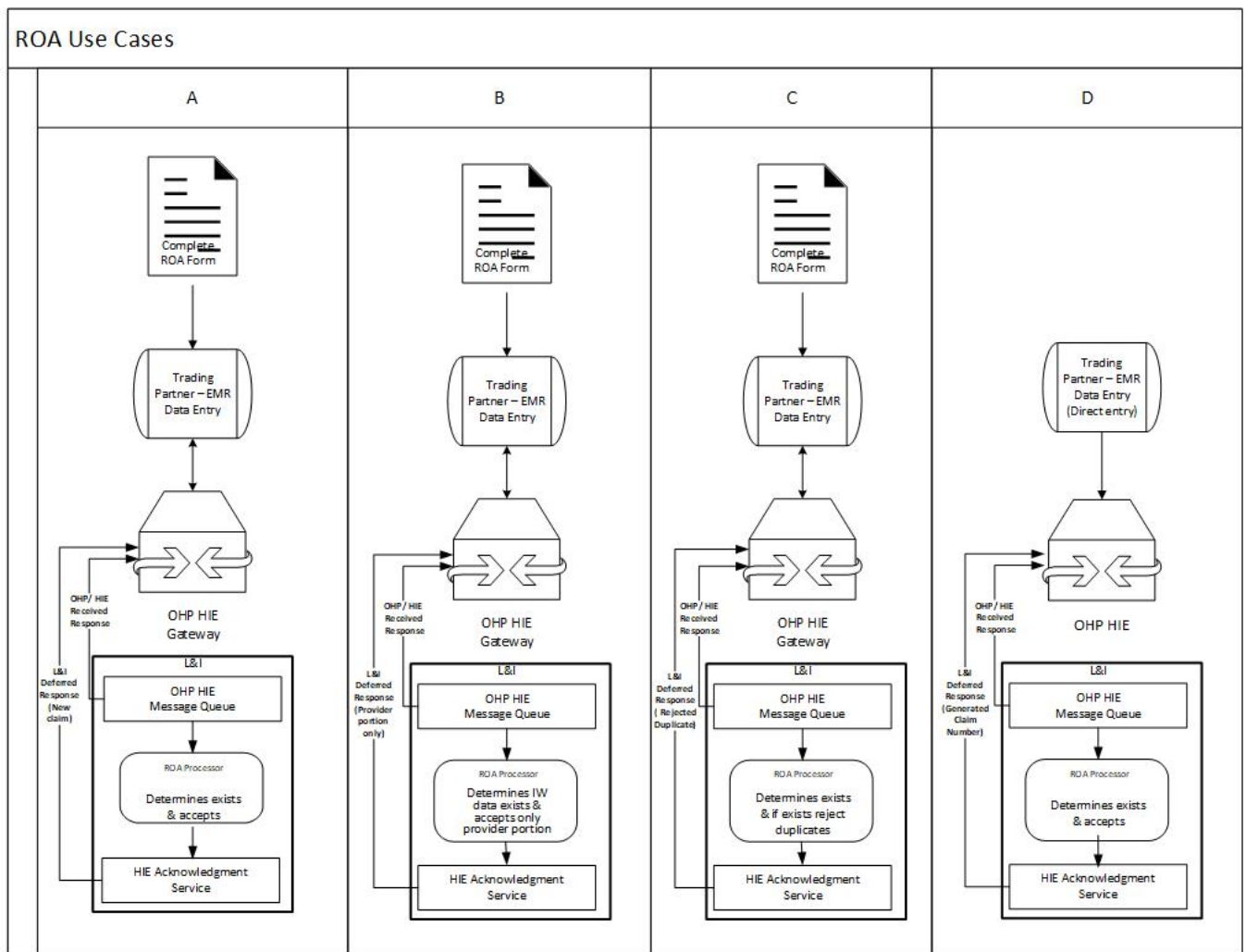
1.4   Embedding Data

Embedding this data within an external system such as an Electronic Medical Records (EMR) system is also outside the scope of this document. Embedding the Progress Note template will depend upon the system and processes of your external system and will vary across systems and business processes.

1.5   Intended Audience

- HIE partners' business staff, i.e., business stakeholders of external systems implementing ROA functionality
- HIE partners' information technology (IT) staff implementing the ROA in the partners' EMRs and implementing the exchange document
- IT staff implementing ROA functionality in L&I core systems
- OneHealthPort (OHP) Health Information Exchange (HIE) technical and business staff
- L&I business stakeholders and IT staff

1.6   Acronyms and Abbreviations

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

L&I   Washington State Department of Labor & Industries

OHMS   Occupational Health Management System

OHP   OneHealthPort (WA State HIE provider)

OID   Object Identifier

ROA   Report of Accident – The term "ROA form" refers to the form that is submitted to L&I by the injured worker and the provider. The term "ROA document" refers to the HIE ROA XML document that is transmitted to L&I through OHP.

XML   Extensible Markup Language

2   Implementation Guide

Listed below are guidelines for ROA data exchange.

2.1 Sample Document

A sample document with header/body sections is provided with this implementation guide. The 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

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

- ✓ The `<?xml-stylesheet type="text/xsl" href="styles/CDA.xsl"?>` directive at the top of the sample xml document is only for viewing it in an XSL aware browser (e.g., Internet Explorer). This **should not** be present in actual XML documents being generated for data exchange.

- ✓ Comments in the sample XML document are only intended to provide additional information to assist in development of exchange document. 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 the sample xml document are not discussed in this implementation guide. 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. For example, <title> tag with a value of Report of Accident, document submission <languageCode> tag with en-US code, etc.

- ✓ The values in the sample xml document **are for illustration purposes only** and provide a visual representation of constraints defined in this implementation guide. Actual values will be populated from the system(s) of record on the sender's side.

2.1.2 General Guidelines

The XML document must enforce UTF-8 encoding in the xml declaration.

2.2 Header Constraints

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

2.2.1 Templates (*Required*)

The ROA document will have the following template IDs in the header. All three must be present:

- ✓ US Realm header:

```
<templateId root="2.16.840.1.113883.10.20.22.1.1"/> <!--US Realm Header-->
```

- ✓ Progress Note template:

```
<templateId root="2.16.840.1.113883.10.20.22.1.9"/> <!--Progress Note-->
```

✓ ROA template : This ID verifies the different format in which the document can identified and transmitted to HIE.

```
<templateId root="2.16.840.1.113883.3.4819.11.1.2.1"/> <!--ROA V1 Template-->
```

2.2.2   id (*Required*)

The **id** header must have one *<id>* node present such that:

✓ the **@root** attribute has a globally unique document id (generated by the sending system), and

✓ the **@extension** attribute is mapped to the L&I Claim Number and it is mandatory.

For ROA, the **@extension** attribute is mandatory and *must have* the associated Claim Number present, unless the submission is the fully electronic ROA without a claim number from a paper form (Use Case D – section 1.3.1).

Example:

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

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

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

In the above sample, the blank extension indicates fully electronic ROA without Claim number.

2.2.3   setId (*Required*)

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

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

✓ A globally unique id under <id> node

✓ Same unique id under setId node @root attribute

✓ Incremented value under versionNumber node

Sample:

```
<setId extension="AX12345" root="2.16.840.1.113883.19.5.99999.19"/>
<versionNumber value="1"/>
```

Or for complete ROA submitted without claim number -

```
<setId extension="" root="2.16.840.1.113883.19.5.99999.19"/>
```

```
<versionNumber value="1"/>
```

SetId Use Example:

In the current example, the first version of the ROA 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.

The first version of the document also has a setId with a unique id (under root attribute of setId node)

2.16.840.1.113883.19.5.99999.19 and claim number AX12345 under extension attribute.

The first version of the document is indicated by versionNumber node with attribute value set to 1

(<versionNumber value="1"/>).

Each subsequent update to the ROA 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 ROA 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 the first update,

this will be set to "2", second update will be indicated by "3" and so on. When subsequent versions are

submitted for fully electronics ROAs, the claim number will have been sent back with the

acknowledgement from L&I and should be included in the resubmitted document.

2.2.4 effectiveTime (*Required*)

The **effectiveTime** header indicates when the document was last modified or when it was created in the sender system (modify timestamp). This entry must be precise to date and preferably should have hour/minute followed by time zone values (if hour/minute values are provided, time zone must also be included).

Example:

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

2.2.5 recordTarget (*Required*)

The **recordTarget** header represents the patient / injured worker information from the ROA form, although this document can also represent the clinic details. The **recordTarget** header must have at least one *<patientRole>* node and it must have the following:

✓ 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" />
```

✓ 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**.**

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

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

✓ a third <id> where extension attribute represents the patient SSN from Sender system. (*optional*)

   <id root="2.16.840.1.113883.19.5.99999.2" extension="111-00-1234"/>

✓ a fourth <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" />

   **NOTE: The <id> tag is differentiated by the root value uniqueness from Sender system and extension of SSN or PatientID varies in format to identify within HIE systems.

✓ an *<addr>* node with appropriate **@use** attribute; (*required*)
   **NOTE: nodes beneath the <addr> node must have address information for the patient.*

   **NOTE: While there is only one line on the ROA form for the patient's Home and Mailing street addresses, as well as for other address lines on the ROA form, the HIE ROA document can contain up to three lines for street addresses.*

✓ a *<telecom>* node with **@value** and **@use** attributes set to phone number and phone number type respectively; at least one phone number needs to be provided. (*required*)

✓ a *<patient>* node with patient name information; (*required*)

✓ an *<administrativeGenderCode>* node with patient gender code (conforming to code system 2.16.840.1.113883.5.1) and; (*required*)

   ▪ F – Female
   ▪ M - Male

✓ a *<birthTime>* node (accurate to date). (*required*)

- ✓ a *<maritalStatusCode>* node with @code attribute to identify the Family status of the patient on the Date of Injury. (*optional*)
    - M – Married
    - D – Divorced
    - W – Widowed
    - L – Legally Separated
    - S – Never Married / Single
    - T – Registered Domestic Partner
- ✓ a <providerOrganization> node represents information on the provider organization details containing name, telecom and address details.

Example:

```xml
<!-- recordTarget is the patient / injured worker information
Address use attribute values refers to HL7 document section Table 17: PostalAddressUse Value Set
     -->
     <recordTarget>
          <patientRole>
                  <!-- OHP UAT OID for L&I -->
                  <id root="1.3.6.1.4.1.38630.2.1.1.46" extension="f5tp1v01" />
                  <!-- Fake Sender organization using OHP OID -->
                  <id root="1.3.6.1.4.1.38630.2.1.1.15.3" extension="7uycso03"/>
                  <!-- Fake Social Security Number using the actual SSN OID. -->
                  <id root="2.16.840.1.113883.4.1" extension="111-00-1234" />
                  <!--id  extension represents PatientID and root represents the Unique
identifier for the patient from Sender system.
                   PatientID can be alphanumeric       -->
                  <id root="2.16.840.1.113883.19.5.99999.2" extension="D1222398991" />
                  <!-- Mailing Address -->
                  <!-- use=PST: Postal Address -->
                  <!-- Add additional <streetAddressLine> for multiple street lines
                       ROA Document supports maximum of 3 address lines -->
                  <addr use="PST">
                          <streetAddressLine>1234 Main Street</streetAddressLine>
                          <streetAddressLine>Apt 12C</streetAddressLine>
                          <streetAddressLine>PO Box 1111</streetAddressLine>
                          <city>Olympia</city>
                          <state>WA</state>
                          <postalCode>98512</postalCode>
                          <country>US</country>
                  </addr>

                  <!--HP - Primary Home  -->
                  <telecom value="(360)123-4567" use="HP"/>
                  <!--WP - Work Place  -->
                  <telecom value="(360)123-1234" use="WP" extension="12345" />
                  <!--MC - Mobile Contact  -->
                  <telecom value="(360)123-4534" use="MC"/>

                  <patient>
                  <!-- L is "Legal" from EntityNameUse-->
                  <name use="L">
                  <prefix>Mrs</prefix>
                  <!-- If given tag is used second time it represents Middle name -->
                          <given>Jane</given>
                          <given>H.</given>
                          <!-- Last name -->
                          <family>Doe</family>
                          </name>
```

10

```xml
                                <administrativeGenderCode code="F"
codeSystem="2.16.840.1.113883.5.1" displayName="Female"/>
                                <!--Code: M-Married  D-Divorced  W-Widowed L-Legally Separated S-
Never Married T-Registered Domestic Partner -->
                                <maritalStatusCode code="M" displayName="Married"
codeSystem="2.16.840.1.113883.5.2" codeSystemName="MaritalStatusCode"/>
                                <birthTime value="19980501"/>
                                <!-- Home Address -->
                                <!-- use=H: Home address-->
                                <birthplace>
                                        <place>
                                         <addr use="H">
                                           <streetAddressLine>1234 Main Street</streetAddressLine>
                                           <city>Olympia</city>
                                           <state>WA</state>
                                           <postalCode>98512</postalCode>
                                           <country>US</country>
                                          </addr>
                                        </place>
                                </birthplace>
                                <languageCommunication>
                                   <languageCode code="eng"/>
                                   <!-- "eng" is ISO 639-2 alpha-3 code for "English" -->
                                   <modeCode code="ESP" displayName="Expressed spoken"
           codeSystem="2.16.840.1.113883.5.60" codeSystemName="LanguageAbilityMode"/>
                                   <proficiencyLevelCode code="E" displayName="Excellent"
          codeSystem="2.16.840.1.113883.5.61" codeSystemName="LanguageAbilityProficiency"/>
                                     <preferenceInd value="true"/>
                                </languageCommunication>
                        </patient>
                        <providerOrganization>
                                <id extension="173681" root="2.16.840.1.113883.4.6"/>
                                <!-- 15a. Name of the hospital or clinic where patient was
treated -->
                                <name>Good Health Clinic</name>
                                <telecom use="WP" value="781-555-1212"/>
                                <!-- Address of the Healthcare Provider. -->
                                <addr>
                                        <streetAddressLine>21 North Ave</streetAddressLine>
                                        <streetAddressLine>Suite 10A</streetAddressLine>
                                        <streetAddressLine>PO Box 1212</streetAddressLine>
                                        <city>Burlington</city>
                                        <state>MA</state>
                                        <postalCode>02368</postalCode>
                                        <country>US</country>
                                </addr>
                        </providerOrganization>
                </patientRole>
        </recordTarget>
```

2.2.6 participant (Support) - (*Optional*)

The **participant** header represents the family and dependent information for the the patient / injured worker from the ROA form. The participant element identifies other supporting participants, including parents, relatives, caregivers, insurance policyholders, guarantors, and other participants related in some way to the patient.

A supporting person or organization is an individual or an organization with a relationship to the patient. A supporting person who is playing multiple roles would be recorded in multiple participants (e.g., emergency contact and next-of-kin).

This element is optional, it contains following:

✓ <participant> node with @typeCode set to "IND", as Individual

- typeCode='IND'
- Contains <associatedEntity> with @classCode to identify dependent as "PRS" personal relationship.
- *Add <associatedEntity> for the appropriate information to be added based on the <code> attribute value.* Dependent information can have following as per the ROA Form:
  - Children – *can have multiple <associatedEntity> for ROA Document.*
  - Name of Spouse or Registered Domestic Partner – *only one <associatedEntity> for ROA Document*
  - Name and Address of children's legal guardian – *only one <associatedEntity> > for ROA Document*
- *<associatedEntity>* contains following elements
  - Contains <code> element with @code attribute with value

@Code	Code System	Print Name
DS	Dependent Information	Dependent Children Legal
DN	Dependent Information	Dependent Children Not Legal
SR	Dependent Information	Name of Spouse or Registered Partner
DL	Dependent Information	Name of Legal guardian

  - an *<addr>* node
    - ***NOTE: nodes beneath the <addr> node contain the address information for the legal guardian;*
  - a *<telecom>* node with **@value** and **@use** attributes set to phone number and phone number type respectively;
  - a *<associatedPerson>* node with name information;
    - <suffix> element to identify Legal / Not Legal for dependent children (Q11)
    - <suffix> element to identify Legal guardian for Legal guardian (Q13)
  - For Dependent children (Q11)
    - a *<birthTime>* node (accurate to date);
    - a <relationship> node

Example:

```
<!-- Dependent Children and Name of the Spouse or Registered Partner Detail
     Dependent Information Q11 /12/13-->
  <!-- PRS-Personal Relationship -->

  <participant typeCode='IND'>
      <!--added multiple associatedEntity for child more than one -->
      <!--Q11 – ROA Form -->
      <associatedEntity classCode='PRS'>
          <!--Code: DS-Dependent Children Legal Yes DN-Dependent Not Legal-->
          <code code='DS' codeSystem='2.16.840.1.113883.5.111'/>
```

```
                <birthTime value="19980501"/>
                <associatedPerson>
                        <name>
                                <given>Julie</given>
                                <family>Doe</family>
                                <relationship>Daughter</relationship>
                                <suffix>Legal</suffix>
                        </name>
                </associatedPerson>
        </associatedEntity>
        <associatedEntity classCode='PRS'>
                <!--Q12 – ROA Form -->
                <code code='SR' codeSystem='2.16.840.1.113883.5.111'/>
                <associatedPerson>
                        <name>
                                <prefix>Mr</prefix>
                                <given>Marvin</given>
                                <family>Doe</family>
                        </name>
                </associatedPerson>
        </associatedEntity>
        <associatedEntity classCode='PRS'>
                <!--Q13 – ROA Form -->
                <code code='DL' codeSystem='2.16.840.1.113883.5.111'/>
                <addr>
                                <streetAddressLine>1234 Oak Street</streetAddressLine>
                                <city>Olympia</city>
                                <state>MA</state>
                                <postalCode>98506</postalCode>
                                <country>US</country>
                </addr>
                <!--WP - Work Place  -->
                <telecom value="(360)123-1234" use="WP"/>
                <associatedPerson>
                        <name>
                                <prefix>Mrs</prefix>
                                <given>Martha</given>
                                <family>Mum</family>
                                <suffix>Legal guardian</suffix>
                        </name>
                </associatedPerson>
        </associatedEntity>
    </participant>
```

2.2.7   author (*Required*)

The **author** header represents the author information for the ROA form, including the attending provider L&I Provider Number and name. It may also be a device (which is represented by the *<assignedAuthoringDevice>* node below). The **author** header must have following:

✓ an *<author>* node with:

- a <time> node with @value attribute containing Date of Service or ROA form "This exam date" (Q15b). (*required*)
- an *<assignedAuthor>* node with:
  - at least one *<id>* node with (*required*):

13

- **@extension** attribute set to the assigned person id (e.g., L&I provider ID only – Q14) in sender system and
- **@root** attribute set to the naming system
  - (e.g., 2.16.840.1.113883.3.4819.12.1.1 for L&I Issued Provider ID)
    - *<telecom>* node with:
      - appropriate **@use** and **@value** attributes set for author's phone number.
    - an *<assignedPerson>* node with author's name (Q13). (***required***)
    - The *<assignedAuthoringDevice>* node *is optional* and may contain information to identify the system information from the providers Electronic Medical Records system for the document that is being processed. ***(optional)***

author Example:

```
<author>
  <time value="201402131320-0800"/>
  <assignedAuthor>
   <!—ID containing extension having L&I Provider ID Only (Q14)-->
    <id extension="173681" root="2.16.840.1.113883.4.6"/>

    <telecom use="WP" value="360-102-3435"/>
    <assignedPerson>
      <name>
        <given>GUO JIN</given>
        <family>LIANG PA</family>
      </name>
    </assignedPerson>
<!-- optional to identify EMR system -->
        <assignedAuthoringDevice>
<manufacturerModelName>Good Health Medical Device</manufacturerModelName>
<softwareName>Good Health Report Generator</softwareName>
        </assignedAuthoringDevice>
    </assignedAuthor>
</author>
```

*optional

2.2.8   Custodian *(Required)*

The **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 (e.g., 1234567) for the Clinic/Healthcare Facility. This ID will be different than the author ID for providers who work for a Clinic/Healthcare organization.

- ***Business name of the Employer*** appears in the Employment Information section of the ROA form.

Sample:
```
<custodian>
<assignedCustodian>
<representedCustodianOrganization>
<!—- ID extension 1947-L&I Issued Provider ID-for Clinic/Healthcare Facility->
<id extension="1947" root="2.16.840.1.113883.4.6"/>
<!-- ID extension AX12345 – Claim number -->
<id extension="AX12345" root="2.16.840.1.113883.3.4819.12.1.1"/>

<!-- Reported Employer Details organization/person. -->
<name> Reported Employer Business name</name>
```

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

2.2.9   legalAuthenticator

The **legalAuthenticator** identifies the single person legally responsible for the document and must be present if the document has been legally authenticated.The sample XML document provided in the Appendix of this guide contains a legalAuthenticator header to illustrate the structure. Currently, legalAuthenticator header in the HIE ROA document 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>re
    <telecom use="WP" value="360-123-3456"/>
            <assignedPerson>
                <name>
                    <given>Legal</given>
                    <family>Authenticator</family>
                </name>
            </assignedPerson>
    </assignedEntity>
    </legalAuthenticator>
```

2.3   Data Conformance – ROA Acceptance

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

ROA documents failing to meet these "acceptance" criteria 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 the ROA, Assessment and Plan sections must be presented separately. This is a constraint on the Progress Note

schema where Assessment and Plan sections must be present either separately or in one "Assessment and Plan" section.

For the successful submission of the ROA document to L&I, the Assessment and Plan sections of the HIE ROA document are required as described below, and must be submitted separately.

Implementation Guideline:

1. In the ROA document, structuredBody/Assessment section (identified by fixed templateId/@root="2.16.840.1.113883.10.20.22.2.8") must be present.

2. In the ROA document, structuredBody/Plan section (identified by fixed templateId/@root="2.16.840.1.113883.10.20.22.2.10") must be present.

2.3.2 Assessment and Plan Section Requirements for Acceptance

The Assessment and Plan section in the HIE ROA document must have valid values from the Injury Information and Health Care Provider Information sections of the ROA form.

Note: The sample below is shown with **text , attributes, and elements** for the section. These values follow a specific pattern for locally "codifying" the narrative text. Each <*element*>/<*attribute*> is explained in detail for the acceptance requirement.

✓ The claim number must be valid, meaning it conforms to the following requirements:
  - Must be 7 characters in length
  - Cannot contain special characters
  - The following format will be accepted:

    [a-ruxyzA-RUXYZ][a-zA-Z0-9][0-9][0-9][0-9][0-9][0-9]

    Example: AW09910

  - Currently we <u>do not accept</u> self-insured claims, these start with [S,T,W]

2.3.2.1 Assessment Section (Required)

The assessment section in the ROA document must have <u>at least the required entries</u> from the Injury Information, Employment Information and Health Care Provider Information sections of the ROA form with applicable values and valid date values.

These are Assessment section *required* fields as per the ROA Form:

✓ Injury Information Section
  - Date of Injury (Q14)
  - Describe in detail how your injury or exposure occurred (Q19b)
✓ Employment Information Section
  - List your job title and describe your job duties (Q35)
✓ Health Care Provider Information

- Date you first saw patient for this condition (Q3)
- Is this condition due to a specific incident? (Q4)
- Was the diagnosed condition caused by injury/exposure? (Q7)
- Will the condition cause the patient to miss work? (Q8)

Sample 1: Assessment Section

```xml
<!—ASSESSMENT – Injury Information *********************** -->
    <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 INJURED WORKER AND PROVIDER INFORMATION</title>
         <text>
           <table ID="roa.injuredWorker.assessment">
           <tbody>
            <tr>
              <td ID="assessment.injuredWorker.DateOfInjury">201402131320-0800</td>
              <td ID="assessment.injuredWorker.Shift">Day</td>
              <td ID="assessment.injuredWorker.TreatmentSameOrSimilar">YES</td>
              <td ID="assessment.injuredWorker.IncidentSpecificCondition">YES</td>
              <td ID="assessment.injuredWorker.BodyPartExposed">lower back and right
arm</td>
              <td ID="assessment.injuredWorker.DetailDescription">fell off ladder</td>
              <td ID="assessment.injuredWorker.RegularJob">YES</td>
              <td ID="assessment.injuredWorker.InjuryOccurrence">Employer Premises</td>
             <td ID="assessment.injuredWorker.WhereInjuryOccurred">
                 <content ID="nameofBusiness">XYZ Business</content>
                 <content ID="address">10 ST</content>
                 <content ID="city">Olympia</content>
                 <content ID="state">WA</content>
                 <content ID="zip">98512</content>
                 <content ID="county">Thurston</content>
                 <content ID="country">UNITED STATES</content>
             </td>
              <td ID="assessment.injuredWorker.InjuryCause">YES</td>
              <td ID="assessment.injuredWorker.ListWitness">
                 <content ID="witnessName">Janet Smith</content>
                 <content ID="witnessPhone">3602224444</content>
                 <content ID="witnessPhoneExtn">12345</content>
             </td>
              <td ID="assessment.injuredWorker.DateReturnToWork">20140217</td>
             <td ID="assessment.injuredWorker.DateOfLastWork">20140213</ td>
             <td ID="assessment.injuredWorker.ReportToEmployer">Yes</td>
             <td ID="assessment.injuredWorker.ReportToEmployerYes">
                 <content ID="name">Roger Jones</content>
                  <content ID="title">Manager</content>
                 <content ID="phone">3602224444</content>
                 <content ID="extension">12345</content>

             </td>
             <td ID="assessment.injuredWorker.DateReported">20140213</td>
             <td ID="assessment.injuredWorker.EmployerPaidBenefit">YES</td>
              </tr>
           </tbody>
         </table>
<!--***********************************
ASSESSMENT - Employment Information
*********************************** -->
        <table ID="roa.injuredWorkerEmploymentInfo.assessment">
            <tbody>
```

```xml
            <tr>
                <td ID="assessment.injuredWorkerEmploymentInfo.BusinessType">Painter</td>
                <td ID="assessment.injuredWorkerEmploymentInfo.WorkedFor">
                    <content ID="year">1</content>
                    <content ID="month">2</content>
                    <content ID="weeks">0</content>
                    <content ID="days">0</content>
                </td>
        <td ID="assessment.injuredWorkerEmploymentInfo.TitleDescription">Maintenance
Manager</td>
            <td ID="assessment.injuredWorkerEmploymentInfo.JobDutyDescription">Maintain and
support team in resolving issues with tools and take appropriate actions.</td>

            <td ID="assessment.injuredWorkerEmploymentInfo.PayRate">
                    <content ID="$">200</content>
                    <content ID="hour">NO</content>
                    <content ID="week">YES</content>
                    <content ID="day">NO</content>
                    <content ID="month">NO</content>
                    <content ID="MoreThanOne">NO</content>
        </td>
                <td ID="assessment.injuredWorkerEmploymentInfo.HoursPerDay">8</td>
                <td ID="assessment.injuredWorkerEmploymentInfo.DaysPerWeek">5</td>
                <td ID="assessment.injuredWorkerEmploymentInfo.AdditionalEarnings">
                    <content ID="$">200</content>
                    <content ID="pieceWork">NO</content>
                    <content ID="regularOT">YES</content>
                    <content ID="commission">NO</content>
                    <content ID="shiftDiff">NO</content>
                    <content ID="tips">NO</content>
                    <content ID="bonuses">NO</content>
        </td>
                <td ID="assessment.injuredWorkerEmploymentInfo.NoOfPayingJobs">1</td>
<!--Owner/Partner/Corp Officer/Corp ShareHolder/Corp Director/Optional Coverage/Does not apply
to me -->
                <td ID="assessment.injuredWorkerEmploymentInfo.WhoamI">
                    <content ID="Owner">NO</content>
                    <content ID="Partner">NO</content>
                    <content ID="Corp Officer">YES</content>
                    <content ID="Corp ShareHolder">NO</content>
                    <content ID="Corp Director">NO</content>
                    <content ID="Optional Coverage">NO</content>
                    <content ID="Does not apply to me">NO</content>
                </td>
            </tr>
            </tbody>
        </table>
<!--***********************************
    ASSESSMENT - Provider Information
    *********************************** -->
    <table ID="roa.provider.assessment">
            <tbody>
                <tr>
                    <td ID="assessment.provider.DatePatientFirstVisit">201402131320-0800</td>
                    <td ID="assessment.provider.IncidentSpecificCondition">YES</td>
                    <td ID="assessment.provider.DiagnosedConditionCause">YES</td>
                    <td ID="assessment.provider.WillPatientMissWork">YES</td>
                    <td ID="assessment.provider.WrkMissEstimateDays">5</td>
                    <td ID="assessment.provider.WrkMissEstimateDaysText">TL Text</td>
                    <td ID="assessment.provider.PreExistingImpairment">YES</td>
                    <td ID="assessment.provider.PreExistingImpairmentDesc">recovering from knee
replacement</td>
                    <td ID="assessment.provider.TreatmentSameOrSimilar">YES</td>
                    <td ID="assessment.provider.TreatmentProviderDetails">
```

```xml
                                <content ID="nameofProvider">Dr. Dragon</content>
                                <content ID="city">Olympia</content>
                                <content ID="year">2015</content>
                            </td>
                            <td ID="assessment.provider.SlowRecovery">YES</td>
                            <td ID="assessment.provider.SlowRecoveryDesc">xyz</td>
                            <td ID="assessment.provider.TreatmentReferToMPNProvider">YES</td>
                            <td ID="assessment.provider.TreatmentReferredMPNProviderName">Dr. Smith</td>
                            <td ID="assessment.provider.TreatmentReferredMPNProviderDetails">
                                <content ID="nameofProvider">St. Peters</content>
                                <content ID="phoneNumber">3601115555</content>
                                <content ID="extension">55222</content>
                                <content ID="city">Olympia</content>
                                <content ID="LNIMedicalNWProvider">YES</content> <!-- YES/NO/UNKNOWN -->
                            </td>
                        </tr>
                    </tbody>
                </table>
            </text>
        </section>
    </component>
```

2.3.2.2   Assessment Section Mapping and CDA XML Constraints

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:

```xml
<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

- ✓ roa.injuredWorker.assessment
- ✓ roa.injuredWorkerEmploymentInfo.assessment
- ✓ roa.provider.assessment

as shown here. All possible values for cell identifiers are provided in the table below.

Injury Information Section Mapping

attribute @Id (ROA CDA XML Document)	Injury Information Section Questions (ROA Form)	Possible Values
assessment.injuredWorker.DateOfInjury *(required)*	14. Date Of Injury 15. Time of Injury (optional)	Date and Time
assessment.injuredWorker.Shift	16. Shift	Day / Swing / Night
assessment.injuredWorker.TreatmentSameOrSimilar	17. Have you ever been treated for the same or similar conditions?	YES / NO
assessment.injuredWorker.IncidentSpecificCondition	18. Is this condition due to a specific incident ?	YES / NO
assessment.injuredWorker.BodyPartExposed	19a. Body parts injured or exposed:	String (max: 100 char)

assessment.injuredWorker.DetailDescription *(required)*	19b. Describe in detail how your injury or exposure occurred.	String (max: 500 char)
assessment.injuredWorker.RegularJob	20. Were you doing your regular job?	YES / NO
assessment.injuredWorker.InjuryOccurrence	21. Where did the injury or exposure occur?	• Employer Premises • Jobsite • Other-*(provide information) (max: 20 char)*
assessment.injuredWorker.WhereInjuryOccurred	22. Where did the injury / expose occur?	*Answer the sub-query below*
• **nameofBusiness**	22. Name of business	String (max: 20 char)
• **Address**	22. Address	String (max: 30 char)
• **City**	22. City	String (max: 14 char)
• **State**	22. State	String (max: 2 char)
• **Zip**	22. Zip	String (max: 9 char)
• **County**	22. County	String (max: 20 char)
• **Country**	Country (*Not on form*)	String (max: 18 char)
assessment.injuredWorker.InjuryCause	23. Injury caused by a faulty machine, product or person other than my employer or co-worker?	YES / NO / POSSIBLY
assessment.injuredWorker.ListWitness	24. List any witness	*Answer the sub-query below*
• **witnessName**	Name of the Witness	String (max: 50 char)
• **witnessPhoneNum**	Phone number	String (max: 12 char)
• **witnessPhoneExtn**	Phone Extension	String (max: 5 char)
assessment.injuredWorker.DateReturnToWork	25. When will you return to work?	Date (yyyymmdd)
assessment.injuredWorker.DateOfLastWork	26. When did you last work?	Date *(yyyymmdd)*
assessment.injuredWorker.ReportToEmployer	27. Did you report the incident to your employer?	YES / NO
assessment.injuredWorker.ReportToEmployerYes	27. If "yes" write name and title	*Answer the sub-query below*
▪ **Name**	Name of the Employer	String (max: 50 char)
▪ **Title**	Title	String (max: 20 char)
▪ **Phone**	Phone (*Not on form*)	String (max: 12 char)
▪ **Extension**	Extension (*Not on form*)	String (max: 5 char)
assessment.injuredWorker.DateReported	28. Date you reported it?	Date *(yyyymmdd)*
assessment.injuredWorker.EmployerPaidBenefit	29. Did you have a employer paid health care benefits on the day injured ?	YES / NO

Employment Information Section Mapping

attribute @Id (ROA CDA XML Document)	Employment Information Section Questions (ROA Form)	Possible Values
assessment.injuredWorkerEmploymentInfo.BusinessType	31. Type of Business	String (max: 50 char)
assessment.injuredWorkerEmploymentInfo.WorkedFor • **year** • **month** • **weeks** • **days**	32. How long have you worked here?	Numeric value for options year / month / weeks (max: 2 digits) / days (max: 3 digits)
assessment.injuredWorkerEmploymentInfo.TitleDescription *(required)*	35. List your job title and describe your job duties	String (max: 40 chars)
assessment.injuredWorkerEmploymentInfo.JobDutyDescription *(required)*	35. List your job title and describe your job duties	String (max: 75 chars)
assessment.injuredWorkerEmploymentInfo.PayRate • **$** • **hour** • **week** • **day** • **month** • **MoreThanOne**	36. Rate of pay at this job (check one)	Numeric value @ $ Mention YES / NO for hour / week /day/month/more then 1 rate of pay
assessment.injuredWorkerEmploymentInfo.HoursPerDay	37. Hours per day	Numeric value (accepted digits between 1 to 24)
assessment.injuredWorkerEmploymentInfo.DaysPerWeek	38. Days per week	Numeric value (accepted digitsbetween 1 to 7 only)
assessment.injuredWorkerEmploymentInfo.AdditionalEarnings • **$** • **pieceWork** • **regularOT** • **commission** • **tips** • **shiftDiff** • **bonuses**	39. Additional Earnings (daily average) (check all that apply)	Numeric value @ $ Mention YES / NO for all the option that apply
assessment.injuredWorkerEmploymentInfo.NoOfPayingJobs	40. How many paying jobs do you have?	Numeric value

attribute @Id (ROA CDA XML Document)	Health Care Information Section Questions (ROA Form)	Possible Values
assessment.injuredWorkerEmploymentInfo.WhoamI • **Owner** • **Partner** • **Corp Officer** • **Corp ShareHolder** • **Corp Director** • **Optional Coverage** • **Does not apply to me**	41. I am a	Mention YES / NO for the applicable choices

Health Care Provider Information Section Mapping

attribute @Id (ROA CDA XML Document)	Health Care Information Section Questions (ROA Form)	Possible Values
assessment.provider.DatePatientFirstVisit *(required)*	3. Date you first saw patient for this condition	Date *(yyyymmdd)*
assessment.provider.IncidentSpecificCondition *(required)*	4. Is the condition due to a specific incident ?	YES NO
assessment.provider.DiagnosedConditionCause *(required)*	7. Was the diagnosed condition caused by this injury or exposure? (check one)	YES NO PROBABLY POSSIBLY
assessment.provider.WillPatientMissWork*(required)*	8. Will the condition cause the patient to miss work?	YES NO
assessment.provider.WrkMissEstimateDaysText	*Time Loss Days Text* *(not on ROA Form)*	String (max: 50 char)
assessment.provider.WrkMissEstimateDays	8. Will the condition cause the patient to miss work? If Yes, estimate the number of days	Numeric value
assessment.provider.PreExistingImpairment	9. Is there any pre-existing impairment of the injured area?	YES NO
assessment.provider.PreExistingImpairmentDesc	9. Is there any pre-existing impairment of the injured area? If Yes, describe briefly	String (max: 50 char)
assessment.provider.TreatmentSameOrSimilar	10. Has patient ever been treated for the same or similar condition?	YES NO
assessment.provider.TreatmentProviderDetails • **nameofProvider** • **city** • **year**	10. Has patient ever been treated for the same or similar condition? If Yes, provide details of Provider name, city and address	String (max: 75 char) (max: 14 char) (max: 4 char)

assessment.provider.SlowRecovery	11. Are there any conditions that will prevent or slow recovery?	YES NO
assessment.provider.SlowRecoveryDesc	11. Are there any conditions that will prevent or slow recovery? If Yes, describe briefly	String (max: 50 char)
assessment.provider. TreatmentReferToMPNProvider	12. Did you refer the patient to an L&I medical network provider for follow-up?	YES NO
assessment.provider. TreatmentReferredMPNProviderDetails • **nameofProvider** • **phoneNumber** • **extension** • **city** • **LNIMedicalNWProvider**	12. Did you refer the patient to an L&I medical network provider for follow-up? If Yes, Referred To: *(All attribute details are not on ROA Form)*	String (max: 40 char)

2.3.2.3 Plan Section (Required)

The Plan section in the ROA document must have at least one entry, including the ***required*** entries from the Health Care Provider Information section of the ROA form with applicable values and valid date values.

These ***required*** fields from the ROA Form are:

✓ Health Care Provider Information Section

• Is more treatment needed? (Q6a)

Sample 2: Plan Section

```
<!--********************************************************
PLAN OF CARE
*********************************************************-->
<component>
<section>
<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"/>
<title>PLANS</title>
<text>
                <table ID="roa.provider.plan">
                   <tbody>
                     <tr>
                       <td ID="roa.provider.IsMoreTreatmentNeeded">YES</td>
                       <td ID="roa.provider.TreatmentRecommendations">physical therapy and
massage</td>
                     </tr>
                   </tbody>
                </table>
```

```xml
      </text>
      </section>
      </component>
      </structuredBody>
      </component>
```

2.3.2.4 *Plan Section Mapping and CDA XML Constraints*

Plan of Care section of XML document identified by templateId `2.16.840.1.113883.10.20.22.2.10` maps following elements of ROA form:

- ✓ Is more Treatment Needed ? (Q6a) (***Required***)
- ✓ Treatment and Diagnostic testing recommendations (Q6b) *(optional)*

This section must have a templateId 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:

```xml
<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 roa.provider.plan (details below)

Field Mappings to table roa.provider.plan cell entries:

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

attribute @Id (ROA CDA XML Document)	Health Care Provider Information Section Questions (ROA Form)	Possible Values
roa.provider.IsMoreTreatmentNeeded *(required)*	6a. Is more treatment needed?	YES NO POSSIBLY
roa.provider.TreatmentRecommendations	6b. Treatment and diagnostic testing recommendations:	String (max: 100 char)

2.3.3   Objective Findings (*Optional*)

The Objective Findings section of the ROA document is optional. The section can list in detail the supporting findings for the diagnosis.

Sample:
```xml
<!--********************************************************
OBJECTIVE
********************************************************-->
           <component>
   <section>
```

```
<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 "/>
<title>OBJECTIVE FINDINGS</title>
  <text>
       <list ID="roa.provider.objectivefindings" listType="ordered">
             <item>Objective Finding supporting the Diagnosis</item>
       </list>
  </text>
</section>
</component>
```

2.3.3.1 Objective Finding Mapping and its CDA XML Constraints

Objective section of XML document identified by templateId 2.16.840.1.113883.10.20.21.2.1 maps following elements of the ROA form:

✓ Objective Findings supporting your diagnosis (Q5)

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 objective findings of the encounter in a list identified by id roa.provider.objectivefindings as shown below.

Entries in List:

Entry	Purpose/Description (ROA CDA XML)	Health Care Provider Information Section Questions (ROA Form)	Possible Values
item	Objective Finding supporting the Diagnosis	Objective Findings supporting your diagnosis (Include physical lab and X-Ray findings)	String (max: 100 char)

2.3.4 Problem List (*Required*)

The Problem List section in the ROA document is used to list out ICD Codes and their respective Diagnosis description. It is required to have at least one Diagnosis/ICD Code entry from the Health Care Provider Information section of the ROA form with applicable values. There may be multiple sets of ICD Diagnosis and ICD Codes:

✓ The list element identified using ID=roa.accepteddiagnosis can contain multiple <item> fields
✓ Each item field has attribute named as "icd" used for different ICD codes
✓ If the ICD Code is body side specific, an additional attribute "bodySide" should be added to the item
✓ Within each item the ICD code description for diagnosis can be provided

Sample:

```xml
<!-- PROBLEM LIST-->
        <component>
            <section>
            <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"/>
                <title>Accepted Diagnosis</title>
                <text>
                 <list ID="roa.accepteddiagnosis" listType="ordered">
                   <item bodySide="L" icd="J10">Influenza due to other identified influenza
virus</item>
                   <item bodySide="R" icd="M79.621">Pain Right Upper Arm</item>
                 </list>
            </text>
            </section>
        </component>
```

2.3.4.1   Problem List Mapping and CDA XML Constraints

The problem section of XML document identified by templateId 2.16.840.1.113883.10.20.22.2.5 maps to the following elements of the Health Care Provider Information section of the ROA form:

- ✓ Diagnosis (Q1)
- ✓ ICD (Q2)

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:

```xml
<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 roa.accepteddiagnosis as shown below.

Entries in List:

Entry (ROA CDA XML)	Health Care Provider Information Section Questions (ROA Form)	Possible Values
item (*value*) (*required*)	Diagnosis	String (max: 100 char)

Attribute (ROA CDA XML)	Health Care Provider Information Section Questions (ROA Form)	Possible Values
icd (*value*) (*required*)	ICD Codes	String (max: 9 char)
bodySide(value)	BodySide codes for ICD 9 and 10 ***Body Side attribute is not explicitly listed on the paper ROA Form. Provider may enter it as text.***	String (max: 5 char) (for ICD10) L, R, B or null and (for ICD9) Left, Right, Both or null;

2.3.5 Instruction Section (*Required*)

The Instruction section of the ROA document must have at least the required signature information from the Employment Information and Health Care Provider Information sections of the ROA form with applicable values.

These **required** fields are:

✓ Employment Information Section
- Signature (Q42 and Q43)

✓ Health Care Provider Information Section
- Signature (Q16)

Sample:

```xml
<!-- ********************************************************
INSTRUCTIONS
********************************************************-->
<component>
<section>
<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"/>
<title>COMMUNICATION</title>
                <text>
                 <table ID="roa.worker.communication">
                  <caption>Worker Communication</caption>
<tbody>
                        <tr>
<td ID="worker.communication.confirmedSgnedByPatient">YES</td>
<td ID="worker.communication.confirmedSgnedByPatientDate">20140213</td>
<td ID="worker.communication.SignatureImg">
<img src="data:image/png;base64," alt="signdigital.png"/></td>
<td ID="worker.communication.WrkerSgnAuthToESD">Yes</td>
<td ID="worker.communication.WrkerSgnAuthToESDDate">20140213</td>
<td ID="worker.communication.WrkerSgnAuthSignatureImg"><img
      src="data:image/png;base64," alt="signdigital.png"/>
</td>
                        </tr>
                      </tbody>
                   </table>
                   <table ID="roa.provider.communication">
                    <caption>ProviderCommunication</caption>
<tbody>
                        <tr>
                         <td ID="provider.communication.Signature">YES</td>
                         <td ID="provider.communication.SignatureDate">20140213</td>
                         <td ID="provider.communication.SignatureImg">
<img src="data:image/png;base64,"alt="signdigital.png"/></td>
                       </tr>
                     </tbody>
                   </table>
                 </text>
   </section>
               </component>
             </structuredBody>
             </component>
```

2.3.5.1 Instruction Section Mapping and CDA XML Constraint

Instructions section of XML document identified by templateId 2.16.840.1.113883.10.20.22.2.45 maps following elements of the ROA form:

✓ Worker Employment Information: 42. Signature: "*I declare these statements are true to the best of my knowledge and belief. In signing this form, I permit health care providers, hospitals, or clinics to release relevant medical reports, which they or others produce, to the Dept. of Labor & Industries*"

✓ Worker Employment Information: 43. Signature: "*I authorize the Department of Labor &Industries, or others acting on their behalf, to obtain confidential employment records from the Employment Securities Department (ESD) to assist in determining workers' compensation benefits.*"

✓ Health Care Provider Information: 16. Signature (*NOTE: Licensed health care provider must sign*)

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 table identified by roa.worker.communication (details below)
✓ A table identified by roa.provider.communication (details below)

Field Mappings to tables roa.worker.communicaton and roa.provider.communication cell entries:

Id (ROA CDA XML)	Worker Employment Information Section Questions	Possible Values
worker.communication.confirmedSgnedByPatient *(required)*	42. Signature	YES NO
worker.communication.confirmedSgnedByPatientDate *(required)*	42. Signature Date	Date *(yyyymmdd)*
worker.communication.SignatureImg	*(Only in HIE)*	Base64 Digital image additional option
worker.communication.WrkerSgnAuthToESD *(required)*	43. Signature	YES NO
worker.communication.WrkerSgnAuthToESDDate *(required)*	43. Signature Date	Date *(yyyymmdd)*
worker.communication.WrkerSgnAuthSignatureImg	*(Only in HIE)*	Base64 Digital image additional option

Id (ROA CDA XML)	Health care provider Information Section Questions	Possible Values
provider.communication.Signature *(required)*	16. Signature	YES NO
provider.communication.SignatureDate *(required)*	16. Signature Date	Date *(yyyymmdd)*
provider.communication.SignatureImg	*(Only in HIE)*	Base64 Digital image additional option

2.3.6   Vital Signs (*Optional*)

The Vital Signs section of the ROA document is optional. The section can be used to provide the details of Height and Weight of the patient from the Worker Information section of the ROA form.

Sample:

```
<!--
*********************************************************
VITAL SIGNS TO RECORD PATIENT's BODY WEIGHT AND HEIGHT
*********************************************************
 -->
    <component>
          <section>
                 <templateId root="2.16.840.1.113883.10.20.22.2.4"/>
                 <code code="8716-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="VITAL SIGNS"/>
                 <title>PATIENTS / INJURED VITAL SIGNS</title>
                 <text>
                       <table ID="roa.workerInformation.vitalSigns">
                             <tbody>
                                <tr>
                                   <td ID="Height" Qty="Feet">5</td>
                                   <td ID="Height" Qty="Inches">5</td>
                                   <td ID="Weight" Qty="Pounds">156</td>
                                   </tr>
                             </tbody>
                       </table>
                 </text>
          </section>
    </component>
```

2.3.6.1   Vital Signs Mapping and its CDA XML Constraints

Vital Signs section of XML document identified by templateId 2.16.840.1.113883.10.20.22.2.4 maps following elements of Worker Information section of the ROA form:

   ✓ Height (Q7)
   ✓ Weight (Q8)

This section must have a templateId node with root attribute set to 2.16.840.1.113883.10.20.22.2.4 and a code node with fixed code of 8716-3 and LOINC code system 2.16.840.1.113883.6.1 as shown below.

```
<templateId root="2.16.840.1.113883.10.20.22.2.4"/>
<code code="8716-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="VITAL
 SIGNS"/>
```

Text entry in this section contains following items:

- ✓ A table identified by `roa.workerInformation.vitalSigns` (details below).

Entries in Table:

Id (ROA CDA XML)	Qty(ROA CDA XML)	Worker Information Section Questions	Possible Values
Height *(optional)*	Feet	7. Height in Feet	Numeric
Height *(optional)*	Inches	7. Height in Inches	Numeric
Weight *(optional)*	Pounds	8. Weight	Numeric

2.4   Best Practice Conformance - ROA

*Note: ROA completeness measures may vary by best practices program. 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 organization. To ensure that best practice conformance 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 ROA 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 <table>, <list> etc.).

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

ROA template further "codifies" these narrative texts using locally defined ids for various text elements. ROA section mappings and 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 the ROA document follow **yyyymmdd** format with optional HHMMSS section for 24 hr. time.

2.5.2 Section Mappings

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

ROA Paper Form Segment	ROA Paper Form Fields	CDA R2 Progress Note Headers/Templates	Template ID (where applicable)
Worker Information	Language preference	Header: recordTarget	N/A
	Claim Number	Header: id Header: setId	N/A
	Worker's Name	Header: recordTarget	N/A
	Gender	Header: recordTarget	N/A
	SSN	Header: recordTarget	N/A
	Home Phone	Header: recordTarget	N/A
	Birth Date	Header: recordTarget	N/A
	Home Address	Header: recordTarget	N/A
	Height/Weight	Template: Vital Signs	2.16.840.1.113883.10.20.22.2.4
	Mailing Address	Header: recordTarget	N/A
	Family Status	Header: recordTarget	N/A
Dependent Information	Dependent Children	Header: participant	N/A
	Spouse's Name		N/A
	Name & Address of Children's Legal guardian	Header: participant	N/A
Injury Information	(All Fields)	Template Assessment Section	2.16.840.1.113883.10.20.22.2.8
Employment Information	Business name of the employer	Header: custodian	N/A
	Employer's Address	Header: custodian	N/A
	L&I Provider	Header: custodian	2.16.840.1.113883.4.6
	Other fields	Template: Assessment Section	2.16.840.1.113883.10.20.22.2.8
	Signature	Template: Capacities Section	2.16.840.1.113883.10.20.22.2.45

Health Care Provider Information	Signature	Template: Capacities Section	2.16.840.1.113883.10.20.22.2.45
	Claim Number		
	Diagnosis ICD Codes	Template: Problem Section	2.16.840.1.113883.10.20.22.2.5
	Objective Findings	Template: Objective Section	2.16.840.1.113883.10.20.21.2.1
	Treatment Diagnostic	Template: Plan	2.16.840.1.113883.10.20.22.2.10
	Treatment Required	Template: Plan	2.16.840.1.113883.10.20.22.2.10
	Provider Name	Header: author	N/A
	Claim Number	Header: id Header: setId	N/A
	Hospital/ Clinic Name	Header: recordTarget	N/A
	Hospital/ Clinic Address	Header: recordTarget	N/A
	Other Fields	Template: Assessment Section	2.16.840.1.113883.10.20.22.2.8

2.6   Consolidated ROA HIE Transaction field mapping details and restrictions

Refer to the separate document "ROA mapping details and restrictions" for a complete list of all transaction fields organized by CDA section. This document includes the format details, required fields, value restrictions, etc.

This document provides the details the Partner EMR will need to know in order to implement transaction validation prior to submitting the ROA document to L&I.

3   ROA Acknowledgements/Responses

HIE ROA documents sent to L&I will return two responses.

1) Sent from OHP HIE (HIE Acknowledgement) indicates successful delivery of the document to L&I.
2) Sent from L&I (L&I Claim Information Response) with information about processing of the received document.

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

The 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 received document, will be added in the response or other updates on the received document (e.g., successful processing, etc.).

The L & I Deferred Response also includes generated *New Claim ID* in cases when an ROA is submitted without claim number. (Section: 1.3.1 – Current Transactions Use Case D)

Refer to document "L&I ROA Acknowledgement scheme" for complete schema and details regarding the responses based on validation for document processing.

3.1   Sample OHP HIE Acknowledgement

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

Sample:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<OHPHIEack version="1.0">
 <Status>Delivered</Status>
 <Comments/>
 <HIEId>ZZOHPUAT</HIEId>
 <HIEName>OHP UAT</HIEName>
 <SenderId>f5tp1v00</SenderId>
 <SenderName>State of WA Dept of Labor &amp; Industries</SenderName>
 <ReceiverId>f5tp1v00</ReceiverId>
 <ReceiverName>State of WA Dept of Labor &amp; Industries</ReceiverName>
 <DeliveredTime>06-11-2014 14:19:21 PST</DeliveredTime>
 <DocumentType>ROA</DocumentType>
 <FileName>testfile.hl7</FileName>
</OHPHIEack>
```

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

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

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

3.2   ROA Sample CDA XML

In order to clarify the structure of the documents, samples of both the ROA CDA Request that is sent and the response from L&I are provided in the Appendix section of this implementation guide.

4   Appendix

4.1   Provider Request CDA XML and Generic XSD:

ROA_CDA-1.2.xml

ROA-cda-1.2.xsd

4.2   LNI Deferred Response (Success & Failed Sample)

LNIDefRes_Success.xml

LNIDefRes_Failed.xml

4.3 ROA Form

Report of Accident (Workplace Injury, Accident or Occupational Disease)

Language preference (check one) ☐ English ☐ Español/Spanish ☐ русский/Russian ☐ Tiếng Việt/Vietnamese ☐ 繁體中文/Chinese Traditional ☐ 简体中文/Chinese Simplified ☐ 한국어/Korean ☐ ខ្មែរ/Cambodian   Claim No. **Sample**

Document Header

Worker Information

1. Name (First-Middle-Last)   2. ☐ Male ☐ Female
3. Social Security Number   4. Home phone ( )   5. Birth date month / day / year
6. Home address   7. Height (Ft-In.)
City   State   ZIP Code   8. Weight
9. Mailing address (if different from home address)   10. Family status: ☐ Married ☐ Widowed ☐ Separated ☐ Single ☐ Divorced ☐ Registered Domestic Partner
City   State   ZIP Code

Document Header

Dependent Information

Family and dependent eligibility: You may be required to show proof of marriage, domestic partnership registration, or dependent eligibility.
11. Dependent children Include unborn; estimate birth date. Benefits will be based in part on number of legally dependent children. If you don't have legal custody, complete Box 13.
12. Name of Spouse or Registered Domestic Partner:

Name	Relationship	Legal Custody	Birth date
		☐ YES ☐ NO	/ /
		☐ YES ☐ NO	/ /
		☐ YES ☐ NO	/ /
		☐ YES ☐ NO	/ /
		☐ YES ☐ NO	/ /

Document Header

13. Name & address of children's legal guardian
Name   Address
City   State   ZIP Code

Injury Information

14. Date of injury or last occupational exposure / /   15. Time of injury: : ☐ AM ☐ PM   16. Shift (check one) ☐ Day ☐ Swing ☐ Night
17. Have you ever been treated for the same or similar condition? ☐ YES ☐ NO
18. Is this condition due to a specific incident? ☐ YES ☐ NO
19a. Body parts injured or exposed:
19b. Describe in detail how your injury or exposure occurred. (Include tools, machinery, chemicals or fumes that may have been involved)

20. Were you doing your regular job? ☐ YES   21. Where did the injury or exposure occur? ☐ Other:

Assessment Section

22. Where did the injury/exposure occur? Name of business:
Address   City   County   State   ZIP
23. Injury caused by a faulty machine, product or person other than my employer or co-worker? ☐ YES ☐ NO ☐ POSSIBLY
24. List any witnesses:
25. When will you return to work? / /   26. When did you last work? / /
27. Did you report the incident to your employer? ☐ YES ☐ NO If "yes" write name and title: 28. Date you reported it
29. Did you have employer-paid health care benefits on the day injured? ☐ YES ☐ NO

Employment Information

30. Business name of your employer   31. Type of business   32. How long have you worked there? ___ Years ___ Months ___ Weeks ___ Days   33. Employer's phone ( )
34. Your employer's address   35. List your job title and describe your job duties
City   State   ZIP Code

Assessment Section

36. Rate of pay at this job (check one) ☐ Hour ☐ Week ☐ Day ☐ Month $ 37. Hours per day   38. Days per week   39. Additional earnings (daily average) $
(check all that apply) ☐ Tips ☐ Piecework ☐ Shift diff. ☐ Regular overtime ☐ Bonuses in the
40. How many paying jobs do you have?   41. I am a: ☐ Corp. Shareholder ☐ Owner ☐ Corp. Director ☐ Partner ☐ Optional Coverage

42. Signature   Note: READ LEGAL NOTICES ON THE WORKER'S COPY OF THIS FORM
I declare these statements are true to the best of my knowledge and belief. In signing this form, I permit health care providers, hospitals, or clinics to release relevant medical reports, which they or others produce, to the Dept. of Labor & Industries.
X   Today's date / /

43. Signature I authorize the Department of Labor & Industries, or others acting on their behalf, to obtain confidential employment records from the Employment Security Department (ESD) to help determine workers' compensation benefits.
X   Today's date / /

Instruction Section

Health Care Provider Information

1. Diagnosis   2. ICD Codes   1. Diagnosis   2. ICD Codes

Problem List

3. Date you first saw patient for this condition. / /   Claim No. **Sample**
7. Was the diagnosed condition caused by this injury or exposure? Check one. ☐ YES ☐ PROBABLY (51% or more) ☐ NO ☐ POSSIBLY (Less than 50%)   8. Will the condition cause the patient to miss work? ☐ YES ☐ NO If yes, estimate the number of days:

4. Is the condition due to a specific incident? ☐ YES ☐ NO
5. Objective findings supporting your diagnosis (include physical, lab and X-ray findings)

Objective Findings

9. Is there any ☐ YES ☐ NO If YES, describe briefly or attach report.

Assessment Section

10. Has patient ever been treated for the same or similar condition? If YES, provider name, city & year: ☐ YES ☐ NO
Name   City   Year

6a. Is more treatment needed? ☐ YES ☐ NO ☐ POSSIBLY
6b. Treatment and diagnostic testing recommendations

Plan Section

11. Are there any conditions that will prevent or slow recovery? If YES, describe briefly or attach report. ☐ YES ☐ NO
12. Did you refer the patient to an L&I medical network provider for follow-up? Referred to: ☐ YES ☐ NO

13. Name of attending health care provider (Please print)   Patient's ID number, if available

Document Header

14. IMPORTANT: L&I Provider Number or NPI of provider listed in Box 13.

Document Header

15a. Name of hospital or clinic where patient was treated.
Name   Phone ( )
Address   City   State   ZIP

15b. This exam date / /
16. Signature (NOTE: Licensed health care provider must sign report.)
X   Today's date / /

Instruction Section

F242-130-000 Report Of Accident (Workplace Injury, Accident or Occupational Disease) 10-15   PROVIDER'S COPY

✦ Health Care Provider Information Question #4 is part of Assessment Section in ROA Document.