

Patient Education CDA Implementation Guide

Based on HL7 CDA Standard Release 2.0

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Revision History

Version	Release	Author	Changes
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1.2 Audience

1.3 Scope

1.4 Approach

1.5 Caveats and Assumptions

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1.7 Business Rules

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2 CDA Rules

- 2.1 CDA Document Sections**
- 2.2 CDA Document Levels**
- 2.3 Cardinality**
- 2.4 Mandatory/Optional/Required**
- 2.5 Data Types**

3 CDA Header Sections

3.1 <ClinicalDocument>

3.2 <code>

Set to LOINC code for “Education Summary”:

```
<code code="99999-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"  
displayName="Education Summary"/>
```

Figure 1 <code> sample

3.3 <title>

Set to “Patient Education Summary”

3.4 <recordTarget>

Identifies the patient. As a minimum it must contain a <patientRole> with an <id>:

```
<recordTarget>  
  <patientRole>  
    <id extension="..." root="..."/>  
  </patientRole>  
</recordTarget>
```

Figure 2 <recordTarget> sample

3.5 <author>

Identifies the author

3.6 <custodian>

Identifies the custodian

4 CDA Body Sections

4.1 Sections

The body must contain a section with the following structure:

```
<section>
    <title>Patient Education Summary List</title>
    <text> ... </text>
    <component> ... </component>
    <component> ... </component>
</section>
```

Figure 3 Education Summary section Example

The title must be provided.

The text must be provided with a human-readable version of the information in the components.

One or more components must be provided. Each component must be either an “Instructions” component or an “Education Item” component.

4.2 “Instructions” Component

An “Instructions” component comprises a section with a `<code>` element set to “Instructions” (LOINC 99999-1).

The section must have a `<title>` and a `<text>` element.

```
<component>
    <section>
        <code code="99999-2" codeSystem="2.16.840.1.113883.6.1" />
        <title>Patient Instructions</title>
        <text> ... </text>
    </section>
</component>
```

Figure 4 Instructions Component Example

4.3 “Education Item” Component

An “Education Item” component comprises a section with a `<code>` element set to “Education Item” (LOINC 99999-2).

The section can contain the following elements:

- `<code>` (required): LOINC 99999-2
- `<id>` (required): A vendor specific id uniquely identifying a document provided to the patient

- <title> (required): The title of the document
- <languageCode> (optional): The language of the document (e.g., “en-US”)
- <text> (optional): The text of the document, a summary of the document or a link to the document. Links to a document is provided by including <linkHtml> as the only element in the <text> element.

```
<component>
  <section>
    <id extension="hwid1:en-us:8.6.1.120" root="2.16.840.1.113883.3.342.1"/>
    <code code="99999-2" codeSystem="2.16.840.1.113883.6.1" />
    <title>Shortness of Breath: After Your Visit</title>
    <languageCode code="en-US"/>
  </section>
</component>
```

Figure 5 Education Item Component Example – no text provided

```
<component>
  <section>
    <id extension="hwid1:en-us:8.6.1.120" root="2.16.840.1.113883.3.342.1"/>
    <code code="99999-2" codeSystem="2.16.840.1.113883.6.1" />
    <title>Shortness of Breath: After Your Visit</title>
    <text>
      <paragraph>
        Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
        eiusmod tempor incididunt ut labore et
        dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation
        ullamco laboris nisi ut aliquip
        ex ea commodo consequat. Duis aute irure dolor in reprehenderit in
        voluptate velit esse cillum dolore eu
        fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident,
        sunt in culpa qui officia deserunt
        mollit anim id est laborum.
      </paragraph>
    </text>
    <languageCode code="en-US"/>
  </section>
</component>
```

Figure 6 Education Item Component Example – summary text provided

```
<component>
  <section>
    <id extension="hwid1:en-us:8.6.1.120" root="2.16.840.1.113883.3.342.1"/>
    <code code="99999-2" codeSystem="2.16.840.1.113883.6.1" />
    <title>Shortness of Breath: After Your Visit</title>
    <text>
      <linkHtml>https://api.healthwise.net/document/hwid3?lang=en-
      us&version=8.6.1.120&hw.key=xyzzy</linkHtml>
    </text>
    <languageCode code="en-US"/>
  </section>
</component>
```

Figure 7 Education Item Component Example – link to document provided

Appendix A — Validation

The Schema

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<!DOCTYPE schema [
```

Appendix B — Sample Conforming Document

The document below is a non-normative example of a Care Record Summary structuredBody that conforms to this specification.

```
<structuredBody>
  <component>
    <section>
      <code code='X-ADVDIR' codeSystem='2.16.840.1.113883.6.1'/>
      <title>Advance Directives</title>
      <text>
        <table border='1'>
          <thead>
            <tr>
              <th>Documentation</th>
              <th>Contact</th>
              <th>Effective Date</th>
              <th>Comments</th>
            </tr>
          </thead>
          <tbody>
            <tr>
              <td>Living Will</td>
              <td>Obtain from her Husband</td>
              <td>1994</td>
              <td>Copy on file</td>
            </tr>
            <tr>
              <td>Power of Attorney</td>
              <td>Obtain from her Husband</td>
              <td>1994</td>
              <td></td>
            </tr>
            <tr>
              <td>Organ Donor</td>
              <td>Massachusetts Registry of Motor Vehicles</td>
              <td>1/27/2004 - </td>
              <td>Registered Organ Donor</td>
            </tr>
          </tbody>
        </table>
      </text>
    </section>
  </component>
</structuredBody>
```