**1.4 CDA Extensibility**

**NOTE:**See [XML ITS - Informal Extensions](file:///C%3A%5Chl7%5CCDA_R2_NormativeWebEdition2005%5Cinfrastructure%5Citsxml%5Cmessaging-its-xml.htm#informalExtensions) for a complete discussion of V3 XML Extensibility rules.

Locally-defined XML markup may be used when local semantics have no corresponding representation in the CDA specification. CDA seeks to standardize the highest level of shared meaning while providing a clean and standard mechanism for tagging meaning that is not shared. In order to support local extensibility requirements, it is permitted to include additional XML elements and attributes that are not included in the CDA schema. These extensions should not change the meaning of any of the standard data items, and receivers must be able to safely ignore these elements. Document recipients must be able to faithfully render the CDA document while ignoring extensions.

Extensions may be included in the instance in a namespace other than urn:org-hl7:v3 namespace, but must not be included within an element of type ED (e.g., <text> within <procedure>) since the contents of an ED datatype within the conformant document may be in a different namespace. Since all conformant content (outside of elements of type ED) is in the HL7 namespace, the sender can put any extension content into a foreign namespace (any namespace other than the HL7 namespace). Receiving systems must not report an error if such extensions are present.

When these extension mechanisms markup content of general relevance, HL7 encourages users to get their requirements formalized in a subsequent version of the standard so as to maximize the use of shared semantics.

Appendix A.4 contains an example stylesheet that can be used to remove extensions from a CDA instance prior to schema validation.

1.4.1 Requirements of Extensions

An extension is a collection of element or attribute declarations and rules for their application within the CDA standard.

1. Extensions must be defined in a namespace other than urn:hl7-org:v3. The namespace urn:hl7-org:sdtc is reserved by the Structured Documents workgroup of HL7 for the creation and maintenance of extensions by that workgroup.
2. Extensions can add information but are not permitted to change the semantics of an existing element.
3. Extensions should be optional.
4. Extensions should be based on existing class attributes found in the HL7 Reference Information Model.
5. Extensions should use the same HL7 vocabularies and data types as are used by the CDA standard.
6. Extension elements should appear at the end of a class to support schema validation

### A.4 Style Sheet to Remove Extension Elements and Attributes

This is a sample CDA XSLT style sheet that can be used to transform a CDA instance into one that can be validated using the supplied XML Schema:

<?xml version="1.0" encoding="UTF-8"?>

<xsl:stylesheet

 xmlns:xsl="http://www.w3.org/1999/XSL/Transform"

 xmlns:cda="urn:hl7-org:v3"

 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

 version="1.0"

>

 <xsl:template match='cda:\*'>

 <xsl:copy>

 <xsl:apply-templates select='@\*|@xsi:type'/>

 <xsl:apply-templates select='cda:\*'/>

 </xsl:copy>

 </xsl:template>

</xsl:stylesheet>