Designation: E 2182 – 02

Standard Specification for
Clinical XML DTDs in Healthcare[1]

This standard is issued under the fixed designation E 2182; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification defines an electronic representation that includes the varying information required for broad exchange in health care both today and in the future. eXtensible Markup Language (XML) is a convergence of data processing, communication, and publishing technology. XML is a platform, vendor, and application independent technology for describing document content and structure in tags or elements. The names of the tags and the rules for using them are contained in the Document Type Definition (DTD). The DTD describes the structure of the document and defines the names of tags it contains. Additionally the DTD declares the order in which the tags occur and how often the tags can appear; that is, the DTD defines the hierarchy of the tags. A DTD for a prescription might contain structural elements for the medication prescribed <medication>, the dosage <dosage>, the form <form>, the quantity <quantity>, and so forth. This specification is in the form of a set of standard XML DTDs that match the electronic document requirements in the health care industry.

1.2 This specification refers to and makes use of recommendations from the World Wide Web consortium, the W3C (http://www.w3.org).

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory requirements prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*
E 1239 Guide for Description of Reservation/Registration-Admission, Discharge, Transfer (R-ADT) Systems for Automated Patient Care Information Systems[2]
E 1384 Guide for Content and Structure of the Electronic Health Record (EHR)[2]

E 1633 Specification for Coded Values Used in the Electronic Health Record[2]
E 2183 Guide for XML DTD Design, Architecture and Implementation[2]
2.2 *W3C World Wide Web Consortium Recommendations,* (http://www.w3.org)
XML 1.0 Recommendation, http://www.w3.org/TR/REC-xml
XHTML Basic Recommendation, http://www.w3.org/TR/xhtml-basic
XML Linking (Xlink) 1.0 Recommendation, http://www.w3.org/TR/xlink
XML Namespaces Recommendation, http://www.w3.org/TR/REC-xml-names
XPointer, http://www.w3.org/TR/xptr
XSLT, http://www.w3.org/TR/xslt
2.3 *HL7 Standards,* (http://www.HL7.org)
Informative Document: Using XML as an Alternative Message Syntax for HL7 Version 2.3.x
Clinical Document Architecture: Level 1
2.4 *IETF Specifications,* (http://www.ietf.org)
RFC 2396: Uniform Resource Indentifiers (URI), http://ietf.org/rfc/rfc2396

3. Terminology

3.1 *Definitions:*

3.1.1 *clinical document*, *n*—defined in terms of the native XML architecture. The Document Type Definition (DTD) is the base method of defining the structure of a clinical document. XML schema languages such as the W3C XML Schema Language and the OASIS RELAXNG Schema language provide alternative methods of defining clinical document structures.

3.1.2 *document type definition (DTD)*, *n*—the formal definition of the elements, structures, and rules for enabling platform independent data access via XML or for marking up a given type of SGML document.

3.1.3 *extensible markup language (XML)*, *n*—a standard from the World Wide Web Consortium (W3C) that provides for tagging of information content within documents, offering a means for representation of content in a format which is both human and machine readable. Through the use of customizable style sheets and schemas, information can be represented in a

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[2] *Annual Book of ASTM Standards*, Vol 14.01.

uniform way, allowing for interchange of both content (data) and format (metadata).

3.1.4 *Health Level 7 (HL7)*, *n*—a standards organization traditionally focused on message-oriented standards for healthcare. HL7 messages are the dominant standard for peer-to-peer exchange of clinical, text-based information. HL7 has recently introduced a document-oriented standard, the *Clinical Document Architecture*.

3.1.5 *HL7 clinical document architecture (CDA)*, *n*—the HL7 CDA is a document markup standard for the structure and semantics of exchanged clinical documents. A clinical document is a documentation of observations and other services with the following characteristics: Persistence, Stewardship, Potential for Authentication, Wholeness, and Human Readability. A clinical document is a defined and complete information object that can exist outside of a message, and can include text, sounds, and other multimedia content.

3.1.6 *hypertext markup language (HTML)*, *n*—the language used in creating a web page. Its origin is an implementation of SGML DTD, but whose most recent update is defined in XML (XHTML). It provides tags regarding the way a document should be displayed in the text of an HTML document, which act as commands that a browser interprets when downloading an HTML file.

3.1.7 *namespaces*, *n*—a simple method for qualifying element and attribute names used in XML documents. This method is accomplished by associating a particular tag set by associating a prefix with a URI reference. XML Namespaces provides a mechanism for authoring compound documents (documents consisting of elements and attributes from multiple DTDs or schemas) in such a way that will provide global identification without collisions of names that are the same but are used differently.

3.1.8 *parser*, *n*—a specialized software program that recognizes markup in a document and differentiates the content from the markup. A parser that reads a DTD and checks and reports on markup errors is a validating XML parser. A parser can be built into an XML editor to prevent incorrect tagging and to check whether a document contains all the required elements.

3.1.9 *schema*, *n*—defines the elements that can appear within the document and the attributes that can be associated with an element. It also defines the structure of the document: which elements are child elements of others, the sequence in which the child elements can appear, and the number of child elements. It defines whether an element is empty or can include text. The schema can also define default values for attributes. Schema is a W3C term for the next generation of DTDs.

3.1.10 *stylesheet*, *n*—the XSL Transformations (XSLT) describes a vocabulary recognized by an XSLT processor to transform information from an organization in the source file into a different organization suitable for continued downstream processing. The Extensible Stylesheet Language (XSL) describes a vocabulary recognized by a rendering agent to reify abstract expressions of format into a particular medium of presentation.

3.1.11 *URI*—identifies a Web resource according to IETF RFC 2396. Used in practice to form links between, to name and to locate web documents. Also used to name XML namespaces.

3.1.12 *valid XML document*, *n*—well-formed with internal or DOCTYPE reference to element definition of tags within the document.

3.1.13 *World Wide Web Consortium, (W3C)*, *n*—develops interoperable technologies (specifications, guidelines, software, and tools) to lead the Web to its full potential as a forum for information, commerce, communication, and collective understanding.

3.1.14 *well-formed XML document*, *n*—a XML document that conforms to the syntax as specified by the W3C XML 1.0 recommendation.

3.1.15 *XHTML*, *n*—HTML documents that are well formed and can be processed by an XML parser.

3.1.16 *XLINK*—the W3C XML Linking Language defines a method for specifying links between documents and parts of documents using URIs. Links may be simple, representing a 1:1 mapping or extended, representing an *N:N* mapping.

3.1.17 *XPointer*, *n*—the XML Pointer Language, defines how individual parts of a document are addressed. XLinks point to a URI (in practice, a URL) that specifies a particular resource. The URL may include an XPointer part that more specifically identifies the desired part or section of the targeted resource or document. XPointer, the XML Pointer Language, defines an addressing scheme for individual parts of an XML document. XLinks point to a URI (in practice, a URL) that specifies a particular resource. The URI may include an XPointer part that more specifically identifies the desired part or element of the targeted resource or document. XPointers use the same XPath syntax familiar to XSL transformations to identify the parts of the document they point to, along with a few additional pieces.

4. Scope

4.1 *Clinical XML DTDs*—This specification defines standard XML DTDs (see Annex A1) for:

4.1.1 Admission Notes,

4.1.2 Discharge Summaries,

4.1.3 History and Physical Examinations,

4.1.4 Operative Reports,

4.1.5 Pathology Reports,

4.1.6 Radiology Reports, and

4.1.7 Radiation Therapy Summaries.

5. Significance and Use

5.1 *Conformance*—A document is tested for conformance to this specification by a validating XML parser according to the W3C XML 1.0 recommendation, http://www.w3.org/TR/2000/REC-xml-20001006. A conformant document must validate without either well-formedness or validity errors according to XML 1.0. A conformant document must also conform to constraints expressed within the prose of this specification; however, this specification does not express a formal means of testing conformance to such additional constraints. A document must validate according to one of the DTDs specified in this specification in order to conform to this specification.

6. Procedure

6.1 *Clinical Document Structure*—The architecture of the clinical document is described in a companion ASTM standard, Guide E 2183. Each clinical document has a header and a body. The structure of the clinical header is the same across the clinical DTDs defined in this specification. The structure of the clinical body is unique to each document type. The clinical header format is defined in "clinical.header.dtd." Elements of the clinical body may contain content or serve as XLinks to external content. Additionally, the DTDs may make use of namespaces to resolve conflicts with other XML standards and XHTML tags.

6.2 *Content*—The DTDs define templates for clinical content. Clinical content may take the form of character data or elements from the XHTML Basic 1.0 DTD. For interoperability with XHTML Basic and possible future content vocabularies, these DTDs have defined namespaces though the elements are not prefixed. Although the DTDs provide namespace defaulting, for interoperability with non-validating parsers (which need not default attribute values present in an external DTD), namespace declarations must be explicitly declared in the document element. XHTML Basic elements must always be namespace qualified in the XHTML Namespace (http://www.w3.org/1999/xhtml).

6.3 *History and Physical Module*—The Admission Note, Discharge Summary, History, and Physical DTDs are modularized. They allow flexibility in the document structure containing character data, XHTML, or more highly structured data. When allowing for either character data or elements as content, an XML DTD may not constrain child element order. In many cases, clinical documents have a natural order, which should be followed. For example, a physical examination is usually documents roughly from head to toe, in that order. In many cases, the structures are widespread, such as the vasculature, and the order may be arbitrary, but in other cases the order is natural. For example, the chest is documented before the abdomen. Such constraints are not expressible in XML DTDs but may be expressed in schemata. Later versions of this specification may contain such schemata. This version of DTDs is designed for pediatric applications.

6.4 *Operative Report, Pathology Report, Radiology Report, Radiation Therapy Summary*—These specialty reports are structured according to common practice.

7. Precision and Bias

7.1 *Architecture*—Precision to the DTD architecture is determined by XML validating parsers and conformance to this specification.

7.2 *Testing*—The DTDs have been tested against several validators. An online XML document validator produced by the Brown University Scholarly Technology Group (STG) is available at the URL: http://www.stg.brown.edu/service/xmlvalid/. Other online validators include:

7.2.1 Language Technology Group at University of Edinburgh: http://www.ltg.ed.ac.uk/~richard/xml-check.html.

7.2.2 The W3C web validator: http://validator.w3.org.

7.3 *Facilitation of Validation*—In order to facilitate such online testing, the DTDs and sample documents have been placed in the directory http://www.openhealth.org/ASTM/; for example, operative.report.example.xml. This directory will contain links software demonstrating use of the E 2182 DTDs and Schemata as they are developed.

7.4 *XML Tools*—There is a good deal of inconsistency in parsing and validating against the W3C XHTML Basic 1.0 recommendation. In particular, XML Authority 2.0 reports many warnings as errors (for example, undefined elements). Many warnings are generated from the XHTML Basic DTDs, for example, regarding DTD defaulted namespace declarations. These are correctly warnings, not errors, and do not affect document validity.

7.5 *XML Browsers*—Furthermore, Microsoft's IE5 frequently hangs when attempting to parse XML files with external DTD subsets. The solution is to remove the declaration when browsing XML files using IE5 and use the MSXML as a non-validating parser. For this reason, compliant documents must not depend on DTD attribute defaulting and must explicitly include attribute values for #FIXED attributes.

8. Keywords

8.1 architecture; DTD; health care; healthcare; namespaces; XHTML; XLink; XML; XPointer

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ANNEXES

(Mandatory Information)

A1. CLINICAL DTDS

A1.1 Clinical Header

```
<!--
    PUBLIC ″-//ASTM//DTD Clinical Header 1.0//EN″
    SYSTEM ″http://www.openhealth.org/ASTM/clinical.header.dtd
    This DTD defines an ASTM E 2182 Clinical Document Header,
    this DTD is included by the Base ASTM DTD.
-->

<!ENTITY % NS.prefixed ″IGNORE″>
<!ENTITY % CH.prefixed ″%NS.prefixed;″>
```

```
<!ENTITY % astm-xlink.mod
   PUBLIC ″-//ASTM//ENTITIES XLink 1.0//EN″
   ″astm-xlink.mod″>
%astm-xlink.mod;
<!ENTITY % ch.namespace.uri ″'http://www.openhealth.org/
ASTM/clinical.header'″>
<!ENTITY % ch ″ch″>

<![ %CH.prefixed; [
<!ENTITY % ch.prefix ″%ch;:″>
<!ENTITY % ch.namespace.attrib ″
xmlns:%ch; CDATA #FIXED 'http://www.openhealth.org/ASTM/
clinical.header'
″>
]]>

<!ENTITY % ch.prefix ″ ″>
<!ENTITY % ch.namespace.attrib ″
xmlns CDATA #FIXED 'http://www.openhealth.org/ASTM/
clinical.header'
″>

<!ENTITY % ch.attrib ″
   ID ID #IMPLIED
      confidentiality IDREF #IMPLIED
   note CDATA #IMPLIED
   xml:lang NMTOKEN #IMPLIED
″>
<!--<!ENTITY % ch.xmlns.attrib.name ″xmlns:%ch;″>-->
<!ENTITY % ch-qname.mod
   PUBLIC ″–//ASTM//ENTITIES Clinical Header QName Module
   1.0//EN″
   ″clinical.header-qname-1.mod″>
%ch-qname.mod;

<!ENTITY % ch.person.type
″%person.name.qname;,(%id.qname;)*,(%addr.qname;)*″>
<!ENTITY % ch.organization.type
″(%organization.name.qname;)?,(%id.qname;)*,(%addr.qname;)*″>
<!ENTITY % ch.actor.type
″%ch.person.type;,(%type.code.qname;)?,(%date.time.qname;)?″>
<!ENTITY % ch.authenticator.type
″%ch.actor.type;,(%signature.qname;)?″>

<!ENTITY % ch.datetime.model ″(#PCDATA)″>
<!ENTITY % coded.value.model ″(#PCDATA)″>
<!ENTITY % coded.value.attrib.list ″
   code.system NMTOKEN #IMPLIED
   code.system.name CDATA #IMPLIED
   version NMTOKEN #IMPLIED
″>

<!ENTITY % clinical.header.model ″(
   (%id.qname;)*,
   (%version.number.qname;)?,
   (%confidentiality.code.qname;)*,
   (%patient.encounter.qname;)?,
   (%authenticator.qname;)*,
   (%legal.authenticator.qname;)*,
   (%intended.recipient.qname;)*,
   (%originator.qname;)?,
   (%originating.organization.qname;)?,
   (%transcriptionist.qname;)?,
   (%provider.qname;)+,
   (%service.actor.qname;)*,
   %patient.qname;,
   (%events.qname;)?,
   (%codes.qname;)?,
   (%related.document.qname;)*
)″>

<!ENTITY % text.model ″(#PCDATA)″>
<!ENTITY % id.attribs ″%ch.attrib;
   root CDATA #IMPLIED
   authority CDATA #IMPLIED
   type CDATA #IMPLIED
   valid.time CDATA #IMPLIED ″>
```

```
<!ENTITY % patient.encounter.model "(
(%id.qname;)?,
(%practice.setting.qname;)?,
(%date.time.qname;)?,
(%location.qname;)?
)">
<!ENTITY % patient.encounter.attrib "%ch.attrib;">
<!ENTITY % service.actor.model "(
(%person.name.qname;|%organization.name.qname;),
    (%id.qname;)*,
    (%addr.qname;)*,
    (%type.code.qname;)?,
    (%function.qname;)?,
    (%date.time.qname;)? )">
<!ENTITY % provider.model
"(%ch.actor.type;,(%function.qname;)?
)">
<!ENTITY % service.target.model "(%ch.actor.type;,
    (%birth.date.qname;)?,
    (%gender.qname;)?
)">
<!ENTITY % events.model "(%event.qname;)*">
<!ENTITY % event.model
"(%event.name.qname;,%date.time.qname;,(%staff.qname;)?,(%comments.qname;)?)">
<!ENTITY % person.name.model "(
    %family.qname;|
    %given.qname;|
    %middle.qname;|
    %prefix.qname;|
    %suffix.qname;|
    %delimiter.qname;
)*
">
<!ENTITY % addr.model "(
    %country.qname;|
    %city.qname;|
    %state.qname;|
    %street.qname;|
    %zip.qname;|
    %house.number.qname;|
    %direction.qname;|
    %post.office.box.qname;|
    %telephone.qname;|
    %uri.qname;|
    %delimiter.qname;
    )*"
>

<!ELEMENT %clinical.header.qname; %clinical.header.model;>
<!ATTLIST %clinical.header.qname;
    %ch.attrib;
    %ch.namespace.attrib;
>
<!-- id -->
<!ELEMENT %id.qname; %text.model;>
<!ATTLIST %id.qname; %id.attribs; %xlink.attrib;>
<!ELEMENT %version.number.qname; %text.model;>
<!ATTLIST %version.number.qname; %ch.attrib;>

<!ELEMENT %confidentiality.code.qname;
%coded.value.model;>
<!ATTLIST %confidentiality.code.qname; %ch.attrib;
%coded.value.attrib.list;>
<!ELEMENT %patient.encounter.qname;
%patient.encounter.model;>
<!ATTLIST %patient.encounter.qname;
%patient.encounter.attrib;>
<!-- service actors -->
<!ELEMENT %authenticator.qname; (%ch.authenticator.type;)>
<!ATTLIST %authenticator.qname; %ch.attrib;>
<!ELEMENT %legal.authenticator.qname;
(%ch.authenticator.type;)>
<!ATTLIST %legal.authenticator.qname; %ch.attrib;>
<!ELEMENT %originator.qname; (%ch.actor.type;)>
<!ATTLIST %originator.qname; %ch.attrib;>
<!ELEMENT %intended.recipient.qname; (%ch.actor.type;)>
<!ATTLIST %intended.recipient.qname; %ch.attrib;>
<!ELEMENT %transcriptionist.qname; (%ch.actor.type;)>
```

```
<!ATTLIST %transcriptionist.qname; %ch.attrib;>
<!ELEMENT %provider.qname; %provider.model;>
<!ATTLIST %provider.qname; %ch.attrib;>
<!ELEMENT %service.actor.qname; %service.actor.model;>
<!ATTLIST %service.actor.qname; %ch.attrib; %xlink.attrib;>
<!-- service targets -->
<!ELEMENT %patient.qname; %service.target.model;>
<!ATTLIST %patient.qname; %ch.attrib; %xlink.attrib;>
<!ELEMENT %events.qname; %events.model;>
<!ATTLIST %events.qname; %ch.attrib;>
<!ELEMENT %codes.qname; (%coded.value.qname;)*>
<!ATTLIST %codes.qname; %ch.attrib;>
<!ELEMENT %related.document.qname; ANY>
<!ATTLIST %related.document.qname; %xlink.simple.attrib;>
<!ELEMENT %practice.setting.qname; %text.model;>
<!ATTLIST %practice.setting.qname; %ch.attrib;>
<!ELEMENT %date.time.qname; %ch.datetime.model;>
<!ATTLIST %date.time.qname; %ch.attrib;>
<!ELEMENT %location.qname; %text.model;>
<!ATTLIST %location.qname; %ch.attrib;>

<!ELEMENT %event.qname; %event.model;>
<!ATTLIST %event.qname; %ch.attrib;>
<!ELEMENT %event.name.qname; %text.model;>
<!ATTLIST %event.name.qname; %ch.attrib;>
<!ELEMENT %staff.qname; (%ch.person.type;)>
<!ATTLIST %staff.qname; %ch.attrib;>
<!ELEMENT %comments.qname; %text.model;>
<!ATTLIST %comments.qname; %ch.attrib;>
<!--
  person.name
-->
<!ELEMENT %person.name.qname; %person.name.model;>
<!ATTLIST %person.name.qname; %ch.attrib; type CDATA
#IMPLIED>
<!ELEMENT %family.qname; %text.model;>
<!ATTLIST %family.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %given.qname; %text.model;>
<!ATTLIST %given.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %middle.qname; %text.model;>
<!ATTLIST %middle.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %prefix.qname; %text.model;>
<!ATTLIST %prefix.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %suffix.qname; %text.model;>
<!ATTLIST %suffix.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %delimiter.qname; %text.model;>
<!ATTLIST %delimiter.qname; %ch.attrib; type CDATA
#IMPLIED>
<!--
  organization
-->
<!ELEMENT %organization.name.qname; %text.model;>
<!ATTLIST %organization.name.qname; %ch.attrib;>
<!--
  addr
-->
<!ELEMENT %addr.qname; %addr.model;>
<!ATTLIST %addr.qname; %ch.attrib; type CDATA #IMPLIED>
<!--
  elements required for addr
-->
<!ELEMENT %country.qname; %text.model;>
<!ATTLIST %country.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %city.qname; %text.model;>
<!ATTLIST %city.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %state.qname; %text.model;>
<!ATTLIST %state.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %zip.qname; %text.model;>
<!ATTLIST %zip.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %street.qname; %text.model;>
<!ATTLIST %street.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %house.number.qname; %text.model;>
<!ATTLIST %house.number.qname; %ch.attrib; type CDATA
#IMPLIED>
<!ELEMENT %direction.qname; %text.model;>
<!ATTLIST %direction.qname; %ch.attrib; type CDATA
#IMPLIED>
<!ELEMENT %address.locator.qname; %text.model;>
```

```
<!ATTLIST %address.locator.qname; %ch.attrib; type CDATA
#IMPLIED>
<!ELEMENT %post.office.box.qname; %text.model;>
<!ATTLIST %post.office.box.qname; %ch.attrib; type CDATA
#IMPLIED>
<!--
  allows <uri type="email">jonathan@openhealth.org</uri>
    <uri type="homepage">http://www.openhealth.org</uri>

  alternatively
    <uri type="home">mailto:jonathan@openhealth.org</uri>
    <uri type="work">mailto:jborden@lifespan.org</uri>
-->
<!ELEMENT %uri.qname; %text.model;>
<!ATTLIST %uri.qname; %ch.attrib; type CDATA #IMPLIED>
<!ELEMENT %telephone.qname; %text.model;>
<!ATTLIST %telephone.qname; %ch.attrib; type CDATA
#IMPLIED>

<!ELEMENT %coded.value.qname; %coded.value.model;>
<!ATTLIST %coded.value.qname; %ch.attrib;
%coded.value.attrib.list; %xlink.attrib;>

<!ELEMENT %signature.qname; %coded.value.model;>
<!ATTLIST %signature.qname; %ch.attrib;
%coded.value.attrib.list;>

<!ELEMENT %type.code.qname; %coded.value.model;>
<!ATTLIST %type.code.qname; %ch.attrib;
%coded.value.attrib.list; %xlink.attrib;>
<!ELEMENT %function.qname; %coded.value.model;>
<!ATTLIST %function.qname; %ch.attrib; %coded.value.attrib.list;
%xlink.attrib;>

<!ELEMENT %birth.date.qname; %ch.datetime.model;>
<!ATTLIST %birth.date.qname; %ch.attrib;>
<!ELEMENT %gender.qname; %text.model;>
<!ATTLIST %gender.qname; %ch.attrib;>

<!ELEMENT %originating.organization.qname;
(%ch.organization.type;)>
<!ATTLIST %originating.organization.qname; %ch.attrib;>
```

A1.2 Clinical Header Qname Module

```
<!--
  PUBLIC "-//ASTM//DTD ASTM XHTML Clinical Header Qname
  Module 1.0//EN" SYSTEM "http://www.openhealth.org/ASTM/
  clinical.header.qname.mod"
-->
<!ENTITY % clinical.header.qname "%ch.prefix;clinical.header">
<!ENTITY % id.qname "%ch.prefix;id">
<!ENTITY % version.number.qname "%ch.prefix;version.number">
<!ENTITY % confidentiality.code.qname
"%ch.prefix;confidentiality.code">
<!ENTITY % patient.encounter.qname
"%ch.prefix;patient.encounter">
<!ENTITY % authenticator.qname "%ch.prefix;authenticator">
<!ENTITY % legal.authenticator.qname
"%ch.prefix;legal.authenticator">
<!ENTITY % intended.recipient.qname
"%ch.prefix;intended.recipient">
<!ENTITY % originator.qname "%ch.prefix;originator">
<!ENTITY % originating.organization.qname
"%ch.prefix;originating.organization">
<!ENTITY % transcriptionist.qname "%ch.prefix;transcriptionist">
<!ENTITY % provider.qname "%ch.prefix;provider">
<!ENTITY % service.actor.qname "%ch.prefix;service.actor">
<!ENTITY % patient.qname "%ch.prefix;patient">
<!ENTITY % events.qname "%ch.prefix;events">
<!ENTITY % codes.qname "%ch.prefix;codes">
<!ENTITY % related.document.qname
"%ch.prefix;related.document">
<!ENTITY % date.time.qname "%ch.prefix;date.time">
<!ENTITY % event.qname "%ch.prefix;event">
<!ENTITY % event.name.qname "%ch.prefix;event.name">
```

```
<!ENTITY % staff.qname "%ch.prefix;staff">
<!ENTITY % comments.qname "%ch.prefix;comments">
<!ENTITY % related.document.qname
"%ch.prefix;related.document">
<!ENTITY % person.name.qname "%ch.prefix;person.name">
<!ENTITY % given.qname "%ch.prefix;given">
<!ENTITY % middle.qname "%ch.prefix;middle">
<!ENTITY % prefix.qname "%ch.prefix;prefix">
<!ENTITY % suffix.qname "%ch.prefix;suffix">
<!ENTITY % delimiter.qname "%ch.prefix;delimiter">
<!ENTITY % family.qname "%ch.prefix;family">
<!ENTITY % organization.name.qname
"%ch.prefix;organization.name">
<!ENTITY % addr.qname "%ch.prefix;addr">
<!ENTITY % country.qname "%ch.prefix;country">
<!ENTITY % city.qname "%ch.prefix;city">
<!ENTITY % state.qname "%ch.prefix;state">
<!ENTITY % street.qname "%ch.prefix;street">
<!ENTITY % zip.qname "%ch.prefix;zip">
<!ENTITY % house.number.qname "%ch.prefix;house.number">
<!ENTITY % post.office.box.qname "%ch.prefix;post.office.box">
<!ENTITY % direction.qname "%ch.prefix;direction">
<!ENTITY % telephone.qname "%ch.prefix;telephone">
<!ENTITY % uri.qname "%ch.prefix;uri">
<!ENTITY % address.locator.qname "%ch.prefix;address.locator">
<!ENTITY % coded.value.qname "%ch.prefix;coded.value">
<!ENTITY % practice.setting.qname "%ch.prefix;practice.setting">
<!ENTITY % location.qname "%ch.prefix;location">
<!ENTITY % type.code.qname "%ch.prefix;type.code">
<!ENTITY % signature.qname "%ch.prefix;signature">
<!ENTITY % function.qname "%ch.prefix;function">
<!ENTITY % birth.date.qname "%ch.prefix;birth.date">
<!ENTITY % gender.qname "%ch.prefix;gender">

<!ENTITY % xlink.type.qname "%XLINK.prefix;type">
<!ENTITY % xlink.arcrole.qname "%XLINK.prefix;arcrole">
<!ENTITY % xlink.href.qname "%XLINK.prefix;href">
```

A1.3 Admission Discharge Module

```
<!--
    This module includes element and content definitions for
    general history and physical exam related documents.

    %astm.content defaults to (#PCDATA | %Flow.mix;)* and is a
    candidate for addition of extended coded vocabularies.
    Modules which include this module can override content models
    on an element by element basis by defining
    <!ENTITY % xxx.model "...">

    PUBLIC "–//ASTM//DTD Admission/Discharge Summary Module
    1.0//EN"
    SYSTEM "http://www.openhealth.org/ASTM/
    admission.dischage.module.dtd"
-->
<!-- summary of situation at admission
    admitting diagnosis (by admitting physician)
    chief complaint (by patient or relatives)
    reason for admission (by referring physician)
    summary of history
        history of present illness
        past history
        family history
        social history
    summary of physical examination
    summary of lab data
    known allergies

-->
<!ENTITY % NS.prefixed "IGNORE">
<!ENTITY % ADS.prefixed "%NS.prefixed;">

<!ENTITY % ASTM.base.module PUBLIC "–//ASTM//DTD E2182
Base 1.0//EN"
"ASTM.E2182.dtd">
```

```
<!ENTITY % astm.physical.exam.module PUBLIC ″–//ASTM//DTD
Physical Examination Module 1.0//EN″
″physical.examination.module.dtd″>
<!ENTITY % astm.history.module PUBLIC ″–//ASTM//DTD History
Module 1.0//EN″
″history.module.dtd″>
<!ENTITY % ads.namespace.uri
″http://www.openhealth.org/ASTM/admission.discharge.summary″>

%ASTM.base.module;

<!ENTITY % astm.content ″(#PCDATA)″>

<!ENTITY % ads ″ads″>

<![ %ADS.prefixed; [
<!ENTITY % ads.prefix ″%ads;:″>
<!ENTITY % ADS.xmlns.attrib ″xmlns:ads CDATA #FIXED
'http://www.openhealth.org/ASTM/
admission.discharge.summary'″>
]]>

<!ENTITY % ADS.xmlns.attrib ″xmlns CDATA #FIXED
'http://www.openhealth.org/ASTM/
admission.discharge.summary'″>

<!ENTITY % ads.prefix ″″>
<!ENTITY % ads.xmlns.attrib.name ″xmlns:%ads;″>

<!ENTITY % admission.note.qname
″%ads.prefix;admission.note″>
<!ENTITY % discharge.summary.qname
″%ads.prefix;discharge.summary″>
<!ENTITY % history.and.physical.examination.qname
″%ads.prefix;history.and.physical.examination″>
<!ENTITY % clinical.body.qname ″%ads.prefix;clinical.body″>

<!ENTITY % admission.qname ″%ads.prefix;admission″>
<!ENTITY % diagnoses.qname ″%ads.prefix;diagnoses″>
<!ENTITY % diagnosis.qname ″%ads.prefix;diagnosis″>
<!ENTITY % chief.complaint.qname ″%ads.prefix;chief.complaint″>
<!ENTITY % reason.for.admission.qname
″%ads.prefix;reason.for.admission″>

<!ENTITY % history.of.present.illness.qname
″%ads.prefix;history.of.present.illness″>
<!--
<!ENTITY % history.qname ″%ads.prefix;history″>

<!ENTITY % past.medical.history.qname
″%ads.prefix;past.medical.history″>
<!ENTITY % past.surgical.history.qname
″%ads.prefix;past.surgical.history″>
<!ENTITY % family.history.qname ″%ads.prefix;family.history″>
<!ENTITY % social.history.qname ″%ads.prefix;social.history″>
<!ENTITY % review.of.systems.qname
″%ads.prefix;review.of.systems″>
<!ENTITY % known.allergies.qname
″%ads.prefix;known.allergies″>
<!ENTITY % medications.qname ″%ads.prefix;medications″>
<!ENTITY % medication.qname ″%ads.prefix;medication″>
<!ENTITY % physical.examination.qname
″%ads.prefix;physical.examination″>
-->

<!ENTITY % laboratory.data.qname ″%ads.prefix;laboratory.data″>
<!ENTITY % diagnostic.studies.qname
″%ads.prefix;diagnostic.studies″>

<!-- hospital course
  diagnoses
    main diagnosis
    secondary diagnosis
  operations and procedures
  complications
  consultations
-->
```

```
<!ENTITY % hospital.course.qname
″%ads.prefix;hospital.course″>
<!ENTITY % description.qname ″%ads.prefix;description″>
<!ENTITY % procedures.qname ″%ads.prefix;procedures″>
<!ENTITY % complications.qname ″%ads.prefix;complications″>
<!ENTITY % consultations.qname ″%ads.prefix;consultations″>
<!ENTITY % procedure.qname ″%ads.prefix;procedure″>
<!ENTITY % complication.qname ″%ads.prefix;complication″>
<!ENTITY % consultation.qname ″%ads.prefix;consultation″>
<!--
situation at discharge
   status of patient
      cause of death
      diagnosis at discharge
   medications at discharge
discharge plans
   medication plan
   follow-up activities
instructions to patient and family
   diet and physical activity (restrictions)
   return to work
-->

<!ENTITY % discharge.qname ″%ads.prefix;discharge″>
<!ENTITY % patient.status.qname ″%ads.prefix;patient.status″>
<!ENTITY % cause.of.death.qname ″%ads.prefix;cause.of.death″>
<!ENTITY % discharge.plan.qname ″%ads.prefix;discharge.plan″>
<!ENTITY % medication.plan.qname
″%ads.prefix;medication.plan″>
<!ENTITY % followup.qname ″%ads.prefix;followup″>
<!ENTITY % restrictions.qname ″%ads.prefix;restrictions″>
<!ENTITY % return.to.work.qname ″%ads.prefix;return.to.work″>
<!-- for admission note -->

<!ENTITY % assessment.model ″%astm.content;″>
<!ENTITY % plan.model ″%astm.content;″>
<!ENTITY % problem.list.model ″(%problem.qname;)*″>
<!ENTITY % problem.description.model ″%astm.content;″>
<!ENTITY % problem.model
″(%problem.description.qname;,(%assessment.qname;)?,(%plan.qname;)?)″>
<!ENTITY % assessment.and.plan.model ″(
#PCDATA | %Flow.mix; |
%assessment.qname; | %plan.qname;
)*″>
<!ENTITY % assessment.qname ″%ads.prefix;assessment″>
<!ENTITY % plan.qname ″%ads.prefix;plan″>
<!ENTITY % problem.list.qname ″%ads.prefix;problem.list″>
<!ENTITY % problem.qname ″%ads.prefix;problem″>
<!ENTITY % problem.description.qname
″%ads.prefix;problem.description″>
<!ENTITY % assessment.and.plan.qname
″%ads.prefix;assessment.and.plan″>
<!ENTITY % history.and.physical.qname
″%ads.prefix;history.and.physical″>

<!-- include physical exam vocabulary -->
%astm.physical.exam.module;
<!-- include history vocabulary -->
%astm.history.module;
<!-- now define models -->
<!ENTITY % history.and.physical.mix ″
   %chief.complaint.qname;,
   %history.of.present.illness.qname;,
   %known.allergies.qname;,
   %medications.qname;,
   %history.qname;,
   %physical.examination.qname;,
   (%laboratory.data.qname;)?,
   (%diagnostic.studies.qname;)? ″ >
<!ENTITY % admission.model ″(
   %history.and.physical.mix;,
   %diagnoses.qname;,
   (%reason.for.admission.qname;)?
)″>

<!ENTITY % history.and.physical.model
″(%history.and.physical.mix;)″>
<!ENTITY % diagnoses.model ″(%diagnosis.qname;)*″>
```

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```
<!ENTITY % diagnosis.model ″%astm.content;″>
<!ENTITY % chief.complaint.model ″(#PCDATA)″>
<!ENTITY % reason.for.admission.model ″%astm.content;″>

<!ENTITY % history.of.present.illness.model ″%astm.content;″>
<!ENTITY % past.medical.history.model ″%astm.content;″>
<!ENTITY % past.surgical.history.model ″%astm.content;″>
<!ENTITY % family.history.model ″%astm.content;″>
<!ENTITY % social.history.model ″%astm.content;″>
<!ENTITY % review.of.systems.model ″%astm.content;″>
<!ENTITY % known.allergies.model ″%astm.content;″>
<!ENTITY % medications.model ″(#PCDATA | %ASTM.Mix; |
%medication.qname; )*″>
<!ENTITY % medication.model ″%astm.content;″>
<!ENTITY % physical.examination.model ″%astm.content;″>
<!ENTITY % laboratory.data.model ″%astm.content;″>
<!ENTITY % diagnostic.studies.model ″%astm.content;″>

<!ENTITY % hospital.course.model ″(
   %description.qname;,
   (%diagnoses.qname;)?,
   (%procedures.qname;)?,
   (%complications.qname;)?,
   (%consultations.qname;)?
)″>
<!ENTITY % description.model ″%astm.content;″>
<!ENTITY % procedures.model ″(%procedure.qname;)*″>
<!ENTITY % complications.model ″(%complication.qname;)*″>
<!ENTITY % consultations.model ″(%consultation.qname;)*″>
<!ENTITY % procedure.model ″%astm.content;″>
<!ENTITY % complication.model ″%astm.content;″>
<!ENTITY % consultation.model ″%astm.content;″>

<!ENTITY % discharge.model ″(
   (%assessment.and.plan.qname;)?,
   (%patient.status.qname;)?,
   (%diagnoses.qname;)?,
   (%cause.of.death.qname;)?,
   (%medications.qname;)?,
   (%discharge.plan.qname;)?,
)″>

<!ENTITY % patient.status.model ″%astm.content;″>
<!ENTITY % cause.of.death.model ″%astm.content;″>
<!ENTITY % discharge.plan.model ″(
   (%description.qname;)?,
   (%medication.plan.qname;)?,
   (%followup.qname;)?,
   (%restrictions.qname;)?,
   (%return.to.work.qname;)?
)″>

<!ENTITY % medication.plan.model ″%astm.content;″>
<!ENTITY % followup.model ″%astm.content;″>
<!ENTITY % restrictions.model ″%astm.content;″>
<!ENTITY % return.to.work.model ″%astm.content;″>
<!ENTITY % assessment.model ″%astm.content;″>
<!ENTITY % plan.model ″%astm.content;″>
<!ENTITY % problem.list.model ″(%problem.qname;)*″>
<!ENTITY % problem.description.model ″%astm.content;″>
<!ENTITY % problem.model
″(%problem.description.qname;,(%diagnosis.qname;)?,(%assessment.qname;)?,(%plan.qname;)?)″>
<!ENTITY % assessment.and.plan.model ″(
   #PCDATA | %ASTM.Mix;|
   %diagnosis.qname;|
   %assessment.qname;|
   %plan.qname;|
   %problem.qname;)*″>

<!ELEMENT %admission.note.qname;
(%clinical.header.qname;,%clinical.body.qname;)>
<!ATTLIST %admission.note.qname;
   %astm.document.attrib;
   %ADS.xmlns.attrib;
>

<!ELEMENT %admission.qname; %admission.model;>
<!ELEMENT %diagnoses.qname; %diagnoses.model;>
```

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```
<!ELEMENT %diagnosis.qname; %diagnosis.model;>
<!ELEMENT %chief.complaint.qname; %chief.complaint.model;>
<!ELEMENT %reason.for.admission.qname;
%reason.for.admission.model;>
<!ELEMENT %history.qname; %history.model;>
<!ELEMENT %history.of.present.illness.qname;
%history.of.present.illness.model;>
<!ELEMENT %past.medical.history.qname;
%past.medical.history.model;>
<!ELEMENT %past.surgical.history.qname;
%past.surgical.history.model;>
<!ELEMENT %family.history.qname; %family.history.model;>
<!ELEMENT %social.history.qname; %social.history.model;>
<!ELEMENT %review.of.systems.qname;
%review.of.systems.model;>
<!ELEMENT %known.allergies.qname; %known.allergies.model;>
<!ELEMENT %medications.qname; %medications.model;>
<!ELEMENT %medication.qname; %medication.model;>
<!ELEMENT %physical.examination.qname;
%physical.examination.model;>
<!ELEMENT %laboratory.data.qname; %laboratory.data.model;>
<!ELEMENT %diagnostic.studies.qname;
%diagnostic.studies.model;>
<!ELEMENT %hospital.course.qname; %hospital.course.model;>
<!ELEMENT %description.qname; %description.model;>
<!ELEMENT %procedures.qname; %procedures.model;>
<!ELEMENT %complications.qname; %complications.model;>
<!ELEMENT %consultations.qname; %consultations.model;>
<!ELEMENT %procedure.qname; %procedure.model;>
<!ELEMENT %complication.qname; %complication.model;>
<!ELEMENT %consultation.qname; %consultation.model;>
<!ELEMENT %discharge.qname; %discharge.model;>
<!ELEMENT %patient.status.qname; %patient.status.model;>
<!ELEMENT %cause.of.death.qname; %cause.of.death.model;>
<!ELEMENT %discharge.plan.qname; %discharge.plan.model;>
<!ELEMENT %medication.plan.qname; %medication.plan.model;>
<!ELEMENT %followup.qname; %followup.model;>
<!ELEMENT %restrictions.qname; %restrictions.model;>
<!ELEMENT %return.to.work.qname; %return.to.work.model;>
<!ELEMENT %problem.list.qname; %problem.list.model;>
<!ELEMENT %problem.qname; %problem.model;>
<!ELEMENT %problem.description.qname;
%problem.description.model;>
<!ELEMENT %assessment.qname; %assessment.model;>
<!ELEMENT %plan.qname; %plan.model;>
<!ELEMENT %assessment.and.plan.qname;
%assessment.and.plan.model;>
<!ELEMENT %history.and.physical.qname;
%history.and.physical.model;>

<!ATTLIST %admission.qname; %astm.content.attrib;>
<!ATTLIST %diagnoses.qname; %astm.content.attrib;>
<!ATTLIST %diagnosis.qname; %astm.content.attrib;>
<!ATTLIST %chief.complaint.qname; %astm.content.attrib;>
<!ATTLIST %reason.for.admission.qname; %astm.content.attrib;>
<!ATTLIST %history.qname; %astm.content.attrib;>
<!ATTLIST %history.of.present.illness.qname;
%astm.content.attrib;>
<!ATTLIST %past.medical.history.qname; %astm.content.attrib;>
<!ATTLIST %past.surgical.history.qname; %astm.content.attrib;>
<!ATTLIST %family.history.qname; %astm.content.attrib;>
<!ATTLIST %social.history.qname; %astm.content.attrib;>
<!ATTLIST %review.of.systems.qname; %astm.content.attrib;>
<!ATTLIST %known.allergies.qname; %astm.content.attrib;>
<!ATTLIST %medications.qname; %astm.content.attrib;>
<!ATTLIST %medication.qname; %astm.content.attrib;>
<!ATTLIST %physical.examination.qname; %astm.content.attrib;>
<!ATTLIST %laboratory.data.qname; %astm.content.attrib;>
<!ATTLIST %diagnostic.studies.qname; %astm.content.attrib;>
<!ATTLIST %hospital.course.qname; %astm.content.attrib;>
<!ATTLIST %description.qname; %astm.content.attrib;>
<!ATTLIST %procedures.qname; %astm.content.attrib;>
<!ATTLIST %complications.qname; %astm.content.attrib;>
<!ATTLIST %consultations.qname; %astm.content.attrib;>
<!ATTLIST %procedure.qname; %astm.content.attrib;>
<!ATTLIST %complication.qname; %astm.content.attrib;>
<!ATTLIST %consultation.qname; %astm.content.attrib;>
<!ATTLIST %discharge.qname; %astm.content.attrib;>
```

```
<!ATTLIST %patient.status.qname; %astm.content.attrib;>
<!ATTLIST %cause.of.death.qname; %astm.content.attrib;>
<!ATTLIST %discharge.plan.qname; %astm.content.attrib;>
<!ATTLIST %medication.plan.qname; %astm.content.attrib;>
<!ATTLIST %followup.qname; %astm.content.attrib;>
<!ATTLIST %restrictions.qname; %astm.content.attrib;>
<!ATTLIST %return.to.work.qname; %astm.content.attrib;>
<!ATTLIST %problem.list.qname; %astm.content.attrib;>
<!ATTLIST %problem.qname; %astm.content.attrib;>
<!ATTLIST %problem.description.qname; %astm.content.attrib;>
<!ATTLIST %assessment.qname; %astm.content.attrib;>
<!ATTLIST %plan.qname; %astm.content.attrib;>
<!ATTLIST %assessment.and.plan.qname; %astm.content.attrib;>
<!ATTLIST %history.and.physical.qname; %astm.content.attrib;>
```

A1.4 History Module

```
<!--
   PUBLIC ″-//ASTM//DTD History Module 1.0//EN″
-->
<!ENTITY % ADS.prefixed ″IGNORE″>

<!ENTITY % his ″his″>

<!ENTITY % his.namespace.uri ″http://www.openhealth.org/ASTM/
history″>
<![ %ADS.prefixed; [
<!ENTITY % his.prefix ″%his;:″>
]]>

<!ENTITY % his.prefix ″″>
<!ENTITY % not.questioned.qname ″%his.prefix;not.questioned″>
<!ENTITY % normal.qname ″%his.prefix;normal″>
<!ENTITY % ASTM.HIS.Mix ″%ASTM.Mix; | %normal.qname; |
%not.questioned.qname;″>
<!ENTITY % astm.his.content ″(#PCDATA | %ASTM.HIS.Mix; )*″>

<!ENTITY % history.qname ″%his.prefix;history″>
<!ENTITY % past.medical.history.qname
″%his.prefix;past.medical.history″>
<!ENTITY % past.surgical.history.qname
″%his.prefix;past.surgical.history″>
<!ENTITY % psychiatric.history.qname
″%his.prefix;psychiatric.history″>
<!ENTITY % obstetrical.gynecologic.history.qname
″%his.prefix;obstetrical.gynecologic.history″>
<!ENTITY % habits.qname ″%his.prefix;habits″>
<!ENTITY % family.history.qname ″%his.prefix;family.history″>
<!ENTITY % social.history.qname ″%his.prefix;social.history″>
<!ENTITY % dental.history.qname ″%his.prefix;dental.history″>
<!ENTITY % perinatal.history.qname ″%his.prefix;perinatal.history″>
<!ENTITY % medication.history.qname
″%his.prefix;medication.history″>
<!ENTITY % immunizations.qname ″%his.prefix;immunizations″>
<!ENTITY % substance.abuse.qname
″%his.prefix;substance.abuse″>
<!ENTITY % diet.qname ″%his.prefix;diet″>
<!ENTITY % education.qname ″%his.prefix;education″>
<!ENTITY % work.history.qname ″%his.prefix;work.history″>

<!ENTITY % known.allergies.qname ″%his.prefix;known.allergies″>
<!ENTITY % drug.allergies.qname ″%his.prefix;drug.allergies″>
<!ENTITY % food.allergies.qname ″%his.prefix;food.allergies″>
<!ENTITY % environmental.allergies.qname
″%his.prefix;environmental.allergies″>
<!ENTITY % other.allergies.qname ″%his.prefix;other.allergies″>
<!ENTITY % allergy.types ″
   patient-reported (y|n) #IMPLIED
   clinician-reported (y|n) #IMPLIED
   family-reported (y|n) #IMPLIED
″>
<!ENTITY % allergy.qname ″%his.prefix;allergy″>

<!ENTITY % medications.qname ″%his.prefix;medications″>
<!ENTITY % medication.qname ″%his.prefix;medication″>
```

```
<!ENTITY % review.of.systems.qname
"%his.prefix;review.of.systems">
<!ENTITY % general.qname "%his.prefix;general">
<!ENTITY % skin.qname "%his.prefix;skin">
<!ENTITY % head.qname "%his.prefix;head">
<!ENTITY % eyes.qname "%his.prefix;eyes">
<!ENTITY % ears.qname "%his.prefix;ears">
<!ENTITY % nose.qname "%his.prefix;nose">
<!ENTITY % mouth.and.throat.qname
"%his.prefix;mouth.and.throat">
<!ENTITY % neck.qname "%his.prefix;neck">
<!ENTITY % breasts.qname "%his.prefix;breasts">
<!ENTITY % respiratory.qname "%his.prefix;respiratory">
<!ENTITY % cardiac.qname "%his.prefix;cardiac">
<!ENTITY % gastrointestinal.qname "%his.prefix;gastrointestinal">

<!ENTITY % urinary.qname "%his.prefix;urinary">
<!ENTITY % genital.qname "%his.prefix;genital">
<!ENTITY % musculoskeletal.qname
"%his.prefix;musculoskeletal">
<!ENTITY % peripheral.vascular.qname
"%his.prefix;peripheral.vascular">
<!ENTITY % neurologic.qname "%his.prefix;neurologic">
<!ENTITY % hematologic.qname "%his.prefix;hematologic">
<!ENTITY % endocrine.qname "%his.prefix;endocrine">
<!ENTITY % psychiatric.qname "%his.prefix;psychiatric">
<!-- model definitions-->
<!ENTITY % history.model "(
  (%past.medical.history.qname;)?,
  (%past.surgical.history.qname;)?,
  (%obstetrical.gynecologic.history.qname;)?,
  (%habits.qname;)?,
  (%family.history.qname;)?,
  (%social.history.qname;)?,
  (%dental.history.qname;)?,
  (%perinatal.history.qname;)?,
  (%medication.history.qname;)?,
  (%immunizations.qname;)?,
  (%substance.abuse.qname;)?,
  (%diet.qname;)?,
  (%education.qname;)?,
  (%work.history.qname;)?,
  (%review.of.systems.qname;)?
)">

<!ENTITY % past.medical.history.model "%astm.his.content;">
<!ENTITY % past.surgical.history.model "%astm.his.content;">
<!ENTITY % psychiatric.history.model "%astm.his.content;">
<!ENTITY % obstetrical.gynecologic.history.model
"%astm.his.content;">
<!ENTITY % habits.model "%astm.his.content;">
<!ENTITY % family.history.model "%astm.his.content;">
<!ENTITY % social.history.model "%astm.his.content;">
<!ENTITY % dental.history.model "%astm.his.content;">
<!ENTITY % perinatal.history.model "%astm.his.content;">
<!ENTITY % medication.history.model "%astm.his.content;">
<!ENTITY % immunizations.model "%astm.his.content;">
<!ENTITY % substance.abuse.model "%astm.his.content;">
<!ENTITY % diet.model "%astm.his.content;">
<!ENTITY % education.model "%astm.his.content;">
<!ENTITY % work.history.model "%astm.his.content;">
<!ENTITY % ASTM.Allergies.Mix "
  drug.allergies.qname;|
  %food.allergies.qname;|
  %environmental.allergies.qname;|
  %other.allergies.qname;">

<!ENTITY % known.allergies.model "(#PCDATA | %ASTM.HIS.Mix;
|
%ASTM.Allergies.Mix;)*
">
<!ENTITY % ASTM.allergies.model "(#PCDATA | %ASTM.HIS.Mix;
| %allergy.qname;
)*">
<!ENTITY % drug.allergies.model "%ASTM.allergies.model;">
<!ENTITY % food.allergies.model "%ASTM.allergies.model;">
<!ENTITY % environmental.allergies.model
"%ASTM.allergies.model;">
```

```
<!ENTITY % other.allergies.model "%ASTM.allergies.model;">
<!ENTITY % allergy.model "%astm.his.content;">

<!ENTITY % medications.model "(#PCDATA | %ASTM.HIS.Mix; |
%medication.qname;)*">
<!ENTITY % medication.model "%astm.his.content;">

<!ENTITY % review.of.systems.model "(
  #PCDATA | %ASTM.HIS.Mix; |
  %general.qname;|%skin.qname;|%head.qname;|
  %eyes.qname;|%ears.qname;|%nose.qname;|
  %mouth.and.throat.qname;|%neck.qname;|%breasts.qname;|
  %respiratory.qname;|%cardiac.qname;|%gastrointestinal.qname;|
  %urinary.qname;|%musculoskeletal.qname;|%peripheral.vascular.qname;|
  %neurologic.qname;|%endocrine.qname;|%psychiatric.qname;)*
">
<!ENTITY % general.model "%astm.his.content;">
<!ENTITY % skin.model "%astm.his.content;">
<!ENTITY % head.model "%astm.his.content;">
<!ENTITY % eyes.model "%astm.his.content;">
<!ENTITY % ears.model "%astm.his.content;">
<!ENTITY % nose.model "%astm.his.content;">
<!ENTITY % mouth.and.throat.model "%astm.his.content;">
<!ENTITY % neck.model "%astm.his.content;">
<!ENTITY % breasts.model "%astm.his.content;">
<!ENTITY % respiratory.model "%astm.his.content;">
<!ENTITY % cardiac.model "%astm.his.content;">
<!ENTITY % gastrointestinal.model "%astm.his.content;">

<!ENTITY % urinary.model "%astm.his.content;">
<!ENTITY % genital.model "%astm.his.content;">
<!ENTITY % musculoskeletal.model "%astm.his.content;">
<!ENTITY % peripheral.vascular.model "%astm.his.content;">
<!ENTITY % neurologic.model "%astm.his.content;">
<!ENTITY % hematologic.model "%astm.his.content;">
<!ENTITY % endocrine.model "%astm.his.content;">
<!ENTITY % psychiatric.model "%astm.his.content;">
<!-- element definitions -->
<!ELEMENT %past.medical.history.qname;
%past.medical.history.model;>
<!ELEMENT %past.surgical.history.qname;
%past.surgical.history.model;>
<!ELEMENT %psychiatric.history.qname;
%psychiatric.history.model;>
<!ELEMENT %obstetrical.gynecologic.history.qname;
%obstetrical.gynecologic.history.model;>
<!ELEMENT %habits.qname; %habits.model;>
<!ELEMENT %family.history.qname; %family.history.model;>
<!ELEMENT %social.history.qname; %social.history.model;>
<!ELEMENT %dental.history.qname; %dental.history.model;>
<!ELEMENT %perinatal.history.qname; %perinatal.history.model;>
<!ELEMENT %medication.history.qname;
%medication.history.model;>
<!ELEMENT %immunizations.qname; %immunizations.model;>
<!ELEMENT %substance.abuse.qname;
%substance.abuse.model;>
<!ELEMENT %diet.qname; %diet.model;>
<!ELEMENT %education.qname; %education.model;>
<!ELEMENT %work.history.qname; %work.history.model;>

<!ELEMENT %known.allergies.qname; %known.allergies.model;>
<!ELEMENT %drug.allergies.qname; %drug.allergies.model;>
<!ELEMENT %food.allergies.qname; %food.allergies.model;>
<!ELEMENT %environmental.allergies.qname;
%environmental.allergies.model;>
<!ELEMENT %other.allergies.qname; %other.allergies.model;>

<!ELEMENT %allergy.qname; %allergy.model;>
<!ATTLIST %allergy.qname;
  %allergy.types;
>
<!ELEMENT %medications.qname; %medications.model;>
<!ELEMENT %medication.qname; %medication.model;>

<!ELEMENT %review.of.systems.qname;
%review.of.systems.model;>
<!ELEMENT %general.qname; %general.model;>
<!ELEMENT %skin.qname; %skin.model;>
```

```
<!ELEMENT %head.qname; %head.model;>
<!ELEMENT %eyes.qname; %eyes.model;>
<!ELEMENT %ears.qname; %ears.model;>
<!ELEMENT %nose.qname; %nose.model;>
<!ELEMENT %mouth.and.throat.qname;
%mouth.and.throat.model;>
<!ELEMENT %neck.qname; %neck.model;>
<!ELEMENT %breasts.qname; %breasts.model;>
<!ELEMENT %respiratory.qname; %respiratory.model;>
<!ELEMENT %cardiac.qname; %cardiac.model;>
<!ELEMENT %gastrointestinal.qname; %gastrointestinal.model;>

<!ELEMENT %urinary.qname; %urinary.model;>
<!ELEMENT %genital.qname; %genital.model;>
<!ELEMENT %musculoskeletal.qname; %musculoskeletal.model;>
<!ELEMENT %peripheral.vascular.qname;
%peripheral.vascular.model;>
<!ELEMENT %neurologic.qname; %neurologic.model;>
<!ELEMENT %hematologic.qname; %hematologic.model;>
<!ELEMENT %endocrine.qname; %endocrine.model;>
<!ELEMENT %psychiatric.qname; %psychiatric.model;>

<!ELEMENT %normal.qname; EMPTY>
<!ELEMENT %not.questioned.qname; EMPTY>

<!-- attribute definitions -->

<!ATTLIST %past.medical.history.qname; %astm.content.attrib;>
<!ATTLIST %past.surgical.history.qname; %astm.content.attrib;>
<!ATTLIST %psychiatric.history.qname; %astm.content.attrib;>
<!ATTLIST %obstetrical.gynecologic.history.qname;
%astm.content.attrib;>
<!ATTLIST %habits.qname; %astm.content.attrib;>
<!ATTLIST %family.history.qname; %astm.content.attrib;>
<!ATTLIST %social.history.qname; %astm.content.attrib;>
<!ATTLIST %dental.history.qname; %astm.content.attrib;>
<!ATTLIST %perinatal.history.qname; %astm.content.attrib;>
<!ATTLIST %medication.history.qname; %astm.content.attrib;>
<!ATTLIST %immunizations.qname; %astm.content.attrib;>
<!ATTLIST %substance.abuse.qname; %astm.content.attrib;>
<!ATTLIST %diet.qname; %astm.content.attrib;>
<!ATTLIST %education.qname; %astm.content.attrib;>
<!ATTLIST %work.history.qname; %astm.content.attrib;>

<!ATTLIST %known.allergies.qname; %astm.content.attrib;>
<!ATTLIST %drug.allergies.qname; %astm.content.attrib;>
<!ATTLIST %food.allergies.qname; %astm.content.attrib;>
<!ATTLIST %environmental.allergies.qname;
%astm.content.attrib;>
<!ATTLIST %other.allergies.qname; %astm.content.attrib;>

<!ATTLIST %allergy.qname; %astm.content.attrib;>

<!ATTLIST %medications.qname; %astm.content.attrib;>
<!ATTLIST %medication.qname; %astm.content.attrib;>

<!ATTLIST %review.of.systems.qname; %astm.content.attrib;>
<!ATTLIST %general.qname; %astm.content.attrib;>
<!ATTLIST %skin.qname; %astm.content.attrib;>
<!ATTLIST %head.qname; %astm.content.attrib;>
<!ATTLIST %eyes.qname; %astm.content.attrib;>
<!ATTLIST %ears.qname; %astm.content.attrib;>
<!ATTLIST %nose.qname; %astm.content.attrib;>
<!ATTLIST %mouth.and.throat.qname; %astm.content.attrib;>
<!ATTLIST %neck.qname; %astm.content.attrib;>
<!ATTLIST %breasts.qname; %astm.content.attrib;>
<!ATTLIST %respiratory.qname; %astm.content.attrib;>
<!ATTLIST %cardiac.qname; %astm.content.attrib;>
<!ATTLIST %gastrointestinal.qname; %astm.content.attrib;>

<!ATTLIST %urinary.qname; %astm.content.attrib;>
<!ATTLIST %genital.qname; %astm.content.attrib;>
<!ATTLIST %musculoskeletal.qname; %astm.content.attrib;>
<!ATTLIST %peripheral.vascular.qname; %astm.content.attrib;>
<!ATTLIST %neurologic.qname; %astm.content.attrib;>
<!ATTLIST %hematologic.qname; %astm.content.attrib;>
<!ATTLIST %endocrine.qname; %astm.content.attrib;>
<!ATTLIST %psychiatric.qname; %astm.content.attrib;>
```

A1.5 Physical Examination Module

```
<!--
    PUBLIC ″-//ASTM//DTD Physical Examination Module 1.0//EN″
    SYSTEM ″http://www.openhealth.org/ASTM/
    physical.examination.module.dtd″
-->

<!ENTITY % ADS.prefixed ″IGNORE″>
<!ENTITY % PE.prefixed ″%ADS.prefixed;″>

<!ENTITY % pe ″pe″>

<!ENTITY % pe.namespace.uri
″http://www.openhealth.org/ASTM/physical.examination″>
<![ %PE.prefixed; [
<!ENTITY % pe.prefix ″%pe;:″>
]]>

<!ENTITY % pe.prefix ″″>
<!ENTITY % pe.xmlns.attrib.name ″xmlns:%pe;″>
<!-- define terms here -->
<!ENTITY % pe.normal.in.detail.qname ″%pe.prefix;normal.in.detail″>
<!ENTITY % pe.normal.qname ″%pe.prefix;normal″>
<!ENTITY % pe.grossly.normal.qname ″%pe.prefix;grossly.normal″>
<!ENTITY % pe.not.tested.qname ″%pe.prefix;not.tested″>
<!ENTITY % ASTM.PE.Mix ″%ASTM.Mix; |
%pe.normal.qname;|%pe.normal.in.detail.qname;|%pe.grossly.normal.qname;|%pe.not.tested.qname;″>
<!ENTITY % astm.pe.content ″(#PCDATA | %ASTM.PE.Mix;)*″>

<!-- vocabulary -->
<!ENTITY % physical.examination.qname
″%pe.prefix;physical.examination″>
<!ENTITY % general.qname ″%pe.prefix;general″>
<!ENTITY % vital.signs.qname ″%pe.prefix;vital.signs″>
<!ENTITY % skin.qname ″%pe.prefix;skin″>
<!ENTITY % HEENT.qname ″%pe.prefix;HEENT″>
<!ENTITY % lymph.nodes.qname ″%pe.prefix;lymph.nodes″>
<!ENTITY % chest.qname ″%pe.prefix;chest″>
<!ENTITY % lungs.qname ″%pe.prefix;lungs″>
<!ENTITY % breasts.qname ″%pe.prefix;breasts″>
<!ENTITY % cardiovascular.qname ″%pe.prefix;cardiovascular″>
<!ENTITY % abdomen.qname ″%pe.prefix;abdomen″>
<!ENTITY % genitalia.qname ″%pe.prefix;genitalia″>
<!ENTITY % anorectal.qname ″%pe.prefix;anorectal″>
<!ENTITY % musculoskeletal.qname ″%pe.prefix;musculoskeletal″>
<!ENTITY % neurologic.qname ″%pe.prefix;neurologic″>

<!ENTITY % eyes.qname ″%pe.prefix;eyes″>
<!ENTITY % ears.qname ″%pe.prefix;ears″>
<!ENTITY % nose.qname ″%pe.prefix;nose″>
<!ENTITY % mouth.and.throat.qname
″%pe.prefix;mouth.and.throat″>
<!ENTITY % neck.qname ″%pe.prefix;neck″>
<!ENTITY % lymph.nodes.qname ″%pe.prefix;lymph.nodes″>

<!ENTITY % heart.qname ″%pe.prefix;heart″>
<!ENTITY % peripheral.vascular.qname
″%pe.prefix;peripheral.vascular″>

<!ENTITY % mental.status.qname ″%pe.prefix;mental.status″>
<!ENTITY % cranial.nerves.qname ″%pe.prefix;cranial.nerves″>
<!ENTITY % motor.qname ″%pe.prefix;motor″>
<!ENTITY % sensory.qname ″%pe.prefix;sensory″>
<!ENTITY % reflexes.qname ″%pe.prefix;reflexes″>
<!ENTITY % general.mental.status.qname
″%pe.prefix;general.mental.status″>
<!ENTITY % emotion.qname ″%pe.prefix;emotion″>
<!ENTITY % perception.qname ″%pe.prefix;perception″>
<!ENTITY % thought.process.qname ″%pe.prefix;thought.process″>
<!ENTITY % orientation.qname ″%pe.prefix;orientation″>
<!ENTITY % memory.qname ″%pe.prefix;memory″>
<!ENTITY % impulse.control.qname ″%pe.prefix;impulse.control″>
<!ENTITY % judgement.qname ″%pe.prefix;judgement″>
<!ENTITY % insight.qname ″%pe.prefix;insight″>
<!ENTITY % reliability.qname ″%pe.prefix;reliability″>
```

```
<!ENTITY % physical.examination.model "(
  #PCDATA | %ASTM.PE.Mix;|
  %general.qname;|
  %vital.signs.qname;|
  %skin.qname;|
  %HEENT.qname;|
  %lymph.nodes.qname;|
  %chest.qname;|
  %lungs.qname;|
  %breasts.qname;|
  %cardiovascular.qname;|
  %abdomen.qname;|
  %genitalia.qname;|
  %anorectal.qname;|
  %musculoskeletal.qname;|
  %neurologic.qname;)*
">

<!ENTITY % general.model "%astm.pe.content;">
<!ENTITY % vital.signs.model "%astm.pe.content;">
<!ENTITY % skin.model "%astm.pe.content;">
<!ENTITY % HEENT.model "(#PCDATA | %ASTM.PE.Mix;|
  %eyes.qname;|%ears.qname;|%nose.qname;|
  %mouth.and.throat.qname;|
  %neck.qname;
)*">
<!ENTITY % eyes.model "%astm.pe.content;">
<!ENTITY % ears.model "%astm.pe.content;">
<!ENTITY % nose.model "%astm.pe.content;">
<!ENTITY % mouth.and.throat.model "%astm.pe.content;">
<!ENTITY % neck.model "%astm.pe.content;">
<!ENTITY % lymph.nodes.model "%astm.pe.content;">
<!ENTITY % chest.model "%astm.pe.content;">
<!ENTITY % lungs.model "%astm.pe.content;">
<!ENTITY % breasts.model "%astm.pe.content;">
<!ENTITY % cardiovascular.model "
(#PCDATA | %ASTM.PE.Mix;|
  %heart.qname;|%peripheral.vascular.qname;
)*">
<!ENTITY % heart.model "%astm.pe.content;">
<!ENTITY % peripheral.vascular.model "%astm.pe.content;">
<!ENTITY % abdomen.model "%astm.pe.content;">
<!ENTITY % genitalia.model "%astm.pe.content;">
<!ENTITY % anorectal.model "%astm.pe.content;">
<!ENTITY % musculoskeletal.model "%astm.pe.content;">
<!ENTITY % neurologic.model "(
  #PCDATA | %ASTM.PE.Mix;|
  %mental.status.qname;|%cranial.nerves.qname;|%motor.qname;|%sensory.qname;
|%reflexes.qname;
)*">
<!ENTITY % cranial.nerves.model "%astm.pe.content;">
<!ENTITY % motor.model "%astm.pe.content;">
<!ENTITY % sensory.model "%astm.pe.content;">
<!ENTITY % reflexes.model "%astm.pe.content;">

<!ENTITY % mental.status.model "(#PCDATA | %ASTM.PE.Mix;|
  %general.mental.status.qname;|
  %emotion.qname;|
  %perception.qname;|
  %thought.process.qname;|
  %orientation.qname;|
  %memory.qname;|
  %impulse.control.qname;|
  %judgement.qname;|
  %insight.qname;|
  %reliability.qname;
)*">

<!ENTITY % general.mental.status.model "%astm.pe.content;">
<!ENTITY % emotion.model "%astm.pe.content;">
<!ENTITY % perception.model "%astm.pe.content;">
<!ENTITY % thought.process.model "%astm.pe.content;">
<!ENTITY % orientation.model "%astm.pe.content;">
<!ENTITY % memory.model "%astm.pe.content;">
<!ENTITY % impulse.control.model "%astm.pe.content;">
<!ENTITY % judgement.model "%astm.pe.content;">
<!ENTITY % insight.model "%astm.pe.content;">
<!ENTITY % reliability.model "%astm.pe.content;">
```

```
<!--<!ELEMENT %physical.examination.qname; "%physical.examination.model;">-->
<!ELEMENT %general.qname; %general.model;>
<!ELEMENT %vital.signs.qname; %vital.signs.model;>
<!ELEMENT %skin.qname; %skin.model;>
<!ELEMENT %HEENT.qname; %HEENT.model;>
<!ELEMENT %eyes.qname; %eyes.model;>
<!ELEMENT %ears.qname; %ears.model;>
<!ELEMENT %nose.qname; %nose.model;>
<!ELEMENT %mouth.and.throat.qname; %mouth.and.throat.model;>
<!ELEMENT %neck.qname; %neck.model;>
<!ELEMENT %lymph.nodes.qname; %lymph.nodes.model;>
<!ELEMENT %chest.qname; %chest.model;>
<!ELEMENT %lungs.qname; %lungs.model;>
<!ELEMENT %breasts.qname; %breasts.model;>
<!ELEMENT %cardiovascular.qname; %cardiovascular.model;>
<!ELEMENT %heart.qname; %heart.model;>
<!ELEMENT %peripheral.vascular.qname; %peripheral.vascular.model;>
<!ELEMENT %abdomen.qname; %abdomen.model;>
<!ELEMENT %genitalia.qname; %genitalia.model;>
<!ELEMENT %anorectal.qname; %anorectal.model;>
<!ELEMENT %musculoskeletal.qname; %musculoskeletal.model;>
<!ELEMENT %neurologic.qname; %neurologic.model;>
<!ELEMENT %mental.status.qname; %mental.status.model;>
<!ELEMENT %cranial.nerves.qname; %cranial.nerves.model;>
<!ELEMENT %motor.qname; %motor.model;>
<!ELEMENT %sensory.qname; %sensory.model;>
<!ELEMENT %reflexes.qname; %reflexes.model;>

<!ELEMENT %general.mental.status.qname; %general.mental.status.model;>
<!ELEMENT %emotion.qname; %emotion.model;>
<!ELEMENT %perception.qname; %perception.model;>
<!ELEMENT %thought.process.qname; %thought.process.model;>
<!ELEMENT %orientation.qname; %orientation.model;>
<!ELEMENT %memory.qname; %memory.model;>
<!ELEMENT %impulse.control.qname; %impulse.control.model;>
<!ELEMENT %judgement.qname; %judgement.model;>
<!ELEMENT %insight.qname; %insight.model;>
<!ELEMENT %reliability.qname; %reliability.model;>

<!ELEMENT %pe.normal.qname; EMPTY>
<!ELEMENT %pe.normal.in.detail.qname; EMPTY>
<!ELEMENT %pe.grossly.normal.qname; EMPTY>
<!ELEMENT %pe.not.tested.qname; EMPTY>

<-- attlist -->
<!ATTLIST %general.qname; %astm.content.attrib;>
<!ATTLIST %vital.signs.qname; %astm.content.attrib;>
<!ATTLIST %skin.qname; %astm.content.attrib;>
<!ATTLIST %HEENT.qname; %astm.content.attrib;>
<!ATTLIST %eyes.qname; %astm.content.attrib;>
<!ATTLIST %ears.qname; %astm.content.attrib;>
<!ATTLIST %nose.qname; %astm.content.attrib;>
<!ATTLIST %mouth.and.throat.qname; %astm.content.attrib;>
<!ATTLIST %neck.qname; %astm.content.attrib;>
<!ATTLIST %lymph.nodes.qname; %astm.content.attrib;>
<!ATTLIST %chest.qname; %astm.content.attrib;>
<!ATTLIST %lungs.qname; %astm.content.attrib;>
<!ATTLIST %breasts.qname; %astm.content.attrib;>
<!ATTLIST %cardiovascular.qname; %astm.content.attrib;>
<!ATTLIST %heart.qname; %astm.content.attrib;>
<!ATTLIST %peripheral.vascular.qname; %astm.content.attrib;>
<!ATTLIST %abdomen.qname; %astm.content.attrib;>
<!ATTLIST %genitalia.qname; %astm.content.attrib;>
<!ATTLIST %anorectal.qname; %astm.content.attrib;>
<!ATTLIST %musculoskeletal.qname; %astm.content.attrib;>
<!ATTLIST %neurologic.qname; %astm.content.attrib;>
<!ATTLIST %mental.status.qname; %astm.content.attrib;>
<!ATTLIST %cranial.nerves.qname; %astm.content.attrib;>
<!ATTLIST %motor.qname; %astm.content.attrib;>
<!ATTLIST %sensory.qname; %astm.content.attrib;>
<!ATTLIST %reflexes.qname; %astm.content.attrib;>

<!ATTLIST %general.mental.status.qname; %astm.content.attrib;>
<!ATTLIST %emotion.qname; %astm.content.attrib;>
<!ATTLIST %perception.qname; %astm.content.attrib;>
<!ATTLIST %thought.process.qname; %astm.content.attrib;>
<!ATTLIST %orientation.qname; %astm.content.attrib;>
```

```
<!ATTLIST %memory.qname; %astm.content.attrib;>
<!ATTLIST %impulse.control.qname; %astm.content.attrib;>
<!ATTLIST %judgement.qname; %astm.content.attrib;>
<!ATTLIST %insight.qname; %astm.content.attrib;>
<!ATTLIST %reliability.qname; %astm.content.attrib;>
```

A1.6 Admission Notes

```
<!--
   Admission Note is a modularized DTD from the Admission/
   Discharge Module PUBLIC "-//ASTM//DTD Admission Note 1.0//
EN"
   SYSTEM "http://www.openhealth.org/ASTM/admission.note.dtd"
-->
<!ENTITY % admission.discharge.module PUBLIC "-//ASTM//DTD
Admission/Discharge Module 1.0//EN"
"admission.discharge.module.dtd">
%admission.discharge.module;
<!ENTITY % clinical.body.model "(
   %admission.qname;,
   %assessment.and.plan.qname;
)">

<!ELEMENT %admission.note.qname;
(%clinical.header.qname;,%clinical.body.qname;)>
<!ATTLIST %admission.note.qname;
   %astm.document.attrib;
   %ADS.xmlns.attrib;
>
<!ELEMENT %clinical.body.qname; %clinical.body.model;>
<!ATTLIST %clinical.body.qname; %ch.attrib;>
```

A1.7 Discharge Summaries

```
<!--
   Copyright (c) 2000 Jonathan Borden, M.D., The Open Healthcare
   Group Licensed upder http://www.openhealth.org/license
   PUBLIC "-//ASTM//DTD Discharge Summary 1.0//EN"
   SYSTEM "http://www.openhealth.org/ASTM/
discharge.summary.dtd"
-->

<!ENTITY % admission.discharge.module PUBLIC "-//ASTM//DTD
Admission-Discharge Module 1.0//EN"
"admission.discharge.module.dtd">
%admission.discharge.module;

<!ENTITY % clinical.body.model "(
   %admission.qname;,
   %hospital.course.qname;,
   %discharge.qname;
)">

<!ELEMENT %discharge.summary.qname;
(%clinical.header.qname;,%clinical.body.qname;)>
<!ATTLIST %discharge.summary.qname;
   %astm.document.attrib;
   %ADS.xmlns.attrib;
>
<!ELEMENT %clinical.body.qname; %clinical.body.model;>
<!ATTLIST %clinical.body.qname; %ch.attrib;>
```

A1.8 History and Physical Examinations

```
<!--
  Copyright (c) 2000 Jonathan Borden, M.D., The Open Healthcare
  Group Licensed upder http://www.openhealth.org/license

  PUBLIC "-//ASTM//DTD History and Physical Exam 1.0//EN"
  SYSTEM "http://www.openhealth.org/ASTM/history.physical.dtd"
-->
<!ENTITY % admission.discharge.module PUBLIC "-//ASTM//DTD
Admission-
Discharge Module 1.0//EN" "admission.discharge.module.dtd">
%admission.discharge.module;

<!ENTITY % clinical.body.model "(
  %history.and.physical.qname;,
  %assessment.and.plan.qname;
)">

<!ELEMENT %history.and.physical.examination.qname;
(%clinical.header.qname;,%clinical.body.qname;)>
<!ATTLIST %history.and.physical.examination.qname;
  %astm.document.attrib;
  %ADS.xmlns.attrib;
>
<!ELEMENT %clinical.body.qname; %clinical.body.model;>
<!ATTLIST %clinical.body.qname; %ch.attrib;>
```

A1.9 Operative Reports

```
<!--
  PUBLIC "-//ASTM//DTD Operative Report 1.0//EN"
  SYSTEM "http://www.openhealth.org/ASTM/operative.report.dtd"
  This DTD defines an ASTM E 2182 standard Operative Report
-->

<!--
  include the base ASTM E 2182 module
  by default namespace prefixes are not enabled.
  Namespace prefixes are controlled by the ENTITY %
  use.namespace which is defined as
    <!ENTITY % use.namespace "IGNORE">
  To enable namespace prefixes define <!ENTITY %
  use.namespace "INCLUDE">
  prior to including this DTD
  (e.g. in the internal subset)
-->

<!ENTITY % ASTM.base.module PUBLIC "-//ASTM//DTD E2182
Base 1.0//EN"
"ASTM.E2182.dtd">
<!ENTITY % ON.xmlns "'http://www.openhealth.org/ASTM/
operative.report'">

%ASTM.base.module;

<!ENTITY % NS.prefixed "IGNORE">
<!ENTITY % OR.prefixed "%NS.prefixed;">

<![ %OR.prefixed; [
<!ENTITY % on "or">
<!ENTITY % on.prefix "%on;:">
<!ENTITY % ON.xmlns.attrib "xmlns:or CDATA #FIXED
'http://www.openhealth.org/ASTM/operative.report'">
]]>

<!ENTITY % on ' '>
<!ENTITY % on.prefix ' '>
<!ENTITY % ON.xmlns.attrib "xmlns CDATA #FIXED
'http://www.openhealth.org/ASTM/operative.report'">
<!--
  a "qname" is an XML qualified name, when namespace support is
disabled the ENTITY
  "on.prefix" is null
-->
```

```
<!ENTITY % operative.report.qname "%on.prefix;operative.report">
<!ENTITY % clinical.body.qname "%on.prefix;clinical.body">
<!ENTITY % preoperative.diagnosis.qname
"%on.prefix;preoperative.diagnosis">
<!ENTITY % postoperative.diagnosis.qname
"%on.prefix;postoperative.diagnosis">
<!ENTITY % procedure.qname "%on.prefix;procedure">
<!ENTITY % surgeon.qname "%on.prefix;surgeon">
<!ENTITY % anesthesia.qname "%on.prefix;anesthesia">
<!ENTITY % indications.qname "%on.prefix;indications">
<!ENTITY % prep.qname "%on.prefix;prep">
<!ENTITY % medications.qname "%on.prefix;medications">
<!ENTITY % description.qname "%on.prefix;description">
<!ENTITY % findings.qname "%on.prefix;findings">
<!ENTITY % specimens.qname "%on.prefix;specimens">
<!ENTITY % closure.qname "%on.prefix;closure">
<!ENTITY % complications.qname "%on.prefix;complications">
<!ENTITY % pathology.intraoperative.qname
"%on.prefix;pathology.intraoperative">

<!ENTITY % pathology.permanent.qname
"%on.prefix;pathology.permanent">
<!ENTITY % drains.qname "%on.prefix;drains">
<!ENTITY % counts.qname "%on.prefix;counts">
<!ENTITY % estimated.blood.loss.qname
"%on.prefix;estimated.blood.loss">
<!ENTITY % fluids.qname "%on.prefix;fluids">
<!ENTITY % patient.condition.qname "%on.prefix;patient.condition">
<!ENTITY % disposition.qname "%on.prefix;disposition">
<!ENTITY % followup.qname "%on.prefix;followup">
<!ENTITY % medication.qname "%on.prefix;medication">
<!ENTITY % fluid.qname "%on.prefix;fluid">

<!ENTITY % operative.report.model "(
    %clinical.header.qname;,
    %clinical.body.qname;
)">
<!ENTITY % clinical.body.model "(
   %preoperative.diagnosis.qname;,
   %postoperative.diagnosis.qname;,
   %procedure.qname;,
   %anesthesia.qname;,
   %indications.qname;,
   (%prep.qname;)?,
   (%medications.qname;)?,
   %description.qname;,
   (%findings.qname;)?,
   (%specimens.qname;)?,
   (%closure.qname;)?,
   (%complications.qname;)?,
   (%pathology.intraoperative.qname;)?,
   (%pathology.permanent.qname;)?,
   (%drains.qname;)?,
   (%counts.qname;)?,
   (%estimated.blood.loss.qname;)?,
   (%fluids.qname;)?,
   (%patient.condition.qname;)?,
   (%disposition.qname;)?,
   (%followup.qname;)?
)">
<!ELEMENT %operative.report.qname; %operative.report.model;>
<!ATTLIST %operative.report.qname;
   %astm.document.attrib;
   %ON.xmlns.attrib;
   >

<!ELEMENT %clinical.body.qname; %clinical.body.model;>
<!ATTLIST %clinical.body.qname; %ch.attrib;>

<!-- moved to clinical.header as providers role=""
   (%surgeon.qname;)+,
   (%assistant.qname;)*,
   (%anesthesiologist.qname;)*,
-->

<!ELEMENT %preoperative.diagnosis.qname; %text.model;>
<!ATTLIST %preoperative.diagnosis.qname; %astm.content.attrib;>
```

```
<!ELEMENT %postoperative.diagnosis.qname; %text.model;>
<!ATTLIST %postoperative.diagnosis.qname; %astm.content.attrib;>

<!ELEMENT %procedure.qname; %text.model;>
<!ATTLIST %procedure.qname; %astm.content.attrib;>

<!ELEMENT %anesthesia.qname; %text.model;>
<!ATTLIST %anesthesia.qname; %astm.content.attrib;>

<!ELEMENT %indications.qname; %astm.content;>
<!ATTLIST %indications.qname; %astm.content.attrib;>

<!ELEMENT %prep.qname; %astm.content;>
<!ATTLIST %prep.qname; %astm.content.attrib;>

<!ELEMENT %medications.qname; (#PCDATA | %ASTM.Mix; |
%medication.qname; )*>
<!ATTLIST %medications.qname; %astm.content.attrib;>
<!ELEMENT %medication.qname; (#PCDATA)>
<!ATTLIST %medication.qname; %astm.content.attrib;>

<!ELEMENT %description.qname; %astm.content;>
<!ATTLIST %description.qname; %astm.content.attrib;>

<!ELEMENT %findings.qname; %astm.content;>
<!ATTLIST %findings.qname; %astm.content.attrib;>

<!ELEMENT %specimens.qname; %astm.content;>
<!ATTLIST %specimens.qname; %astm.content.attrib;>

<!ELEMENT %closure.qname; %astm.content;>
<!ATTLIST %closure.qname; %astm.content.attrib;>

<!ELEMENT %complications.qname; %astm.content;>
<!ATTLIST %complications.qname; %astm.content.attrib;>

<!ELEMENT %drains.qname; %astm.content;>
<!ATTLIST %drains.qname; %astm.content.attrib;>

<!ELEMENT %counts.qname; %astm.content;>
<!ATTLIST %counts.qname; %astm.content.attrib;>

<!ELEMENT %pathology.intraoperative.qname; %astm.content;>
<!ATTLIST %pathology.intraoperative.qname; %astm.content.attrib;>

<!ELEMENT %pathology.permanent.qname; %astm.content;>
<!ATTLIST %pathology.permanent.qname; %astm.content.attrib;>

<!ELEMENT %estimated.blood.loss.qname; (#PCDATA)>
<!ATTLIST %estimated.blood.loss.qname; %astm.content.attrib;>

<!ELEMENT %fluids.qname; (%fluid.qname;)*>
<!ATTLIST %fluids.qname; %astm.content.attrib;>
<!ELEMENT %fluid.qname; (#PCDATA)>
<!ATTLIST %fluid.qname; %astm.content.attrib;
   status (given|loss) #REQUIRED
   volume CDATA #IMPLIED
   >

<!ELEMENT %patient.condition.qname; %astm.content;>
<!ATTLIST %patient.condition.qname; %astm.content.attrib;>

<!ELEMENT %disposition.qname; %astm.content;>
<!ATTLIST %disposition.qname; %astm.content.attrib;>

<!ELEMENT %followup.qname; %astm.content;>
<!ATTLIST %followup.qname; %astm.content.attrib;>
```

A1.10 Pathology Reports

```
<!--
   PUBLIC "-//ASTM//DTD Pathology Report 1.0//EN"
   SYSTEM "http://www.openhealth.org/ASTM/pathology.report.dtd"
```

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```
    This DTD defines an ASTM E 2182 standard Pathology Report
-->
<!--
    include the base ASTM E 2182 module
    by default namespaces are not enabled.
    Namespaces are controlled by the ENTITY % use.namespace
    which is defined as
        <!ENTITY % use.namespace ″IGNORE″>
    To enable namespaces define
    <!ENTITY % use.namespace ″INCLUDE″>
    prior to including this DTD
    (e.g. in the internal subset)
-->
<!ENTITY % ASTM.base.module PUBLIC ″-//ASTM//DTD E2182
Base 1.0//EN″
″ASTM.E2182.dtd″>
<!ENTITY % PATH.xmlns ″http://www.openhealth.org/ASTM/
pathology.report″>

%ASTM.base.module;

<!ENTITY % NS.prefixed ″IGNORE″>
<!ENTITY % PATH.prefixed ″%NS.prefixed;″>

<![ %PATH.prefixed; [
<!ENTITY % path ″pr″>
<!ENTITY % path.prefix ″%path;:″>
<!ENTITY % PATH.xmlns.attrib ″xmlns:pr CDATA #FIXED
'http://www.openhealth.org/ASTM/pathology.report'″>

]]>
<!ENTITY % path ″″>
<!ENTITY % path.prefix ″″>
<!ENTITY % PATH.xmlns.attrib ″xmlns CDATA #FIXED
'http://www.openhealth.org/ASTM/pathology.report'″>

<!ENTITY % pathology.report.qname
″%path.prefix;pathology.report″>
<!ENTITY % clinical.body.qname ″%path.prefix;clinical.body″>

<!ENTITY % clinical.history.qname ″%path.prefix;clinical.history″>
<!ENTITY % preoperative.diagnosis.qname
″%path.prefix;preoperative.diagnosis″>
<!ENTITY % postoperative.diagnosis.qname
″%path.prefix;postoperative.diagnosis″>
<!ENTITY % operative.procedure.qname
″%path.prefix;operative.procedure″>
<!ENTITY % operative.findings.qname
″%path.prefix;operative.findings″>
<!ENTITY % parts.qname ″%path.prefix;parts″>
<!ENTITY % pathology.staff.qname ″%path.prefix;pathology.staff″>
<!ENTITY % part.qname ″%path.prefix;part″>
<!ENTITY % gross.description.qname
″%path.prefix;gross.description″>
<!ENTITY % tissue.source.qname ″%path.prefix;tissue.source″>
<!ENTITY % diagnosis.qname ″%path.prefix;diagnosis″>
<!ENTITY % comment.qname ″%path.prefix;comment″>
<!ENTITY % block.qname ″%path.prefix;block″>
<!ENTITY % procedure.qname ″%path.prefix;procedure″>
<!ENTITY % ordering.physician.qname
″%path.prefix;ordering.physician″>
<!ENTITY % pathologist.qname ″%path.prefix;pathologist″>
<!ENTITY % gross.pathologist.qname
″%path.prefix;gross.pathologist″>
<!ENTITY % frozen.pathologist.qname
″%path.prefix;frozen.pathologist″>
<!ENTITY % piece.qname ″%path.prefix;piece″>
<!ENTITY % stain.qname ″%path.prefix;stain″>
<!ENTITY % ordering.date.time.qname
″%path.prefix;ordering.date.time″>
<!ENTITY % submitted.date.time.qname
″%path.prefix;submitted.date.time″>
<!ENTITY % interpretation.qname ″%path.prefix;interpretation″>
<!ENTITY % procedure.name.qname
″%path.prefix;procedure.name″>
```

```
<!ELEMENT %pathology.report.qname; (
  %clinical.header.qname;,
  %clinical.body.qname;
)>
<!ATTLIST %pathology.report.qname;
  %astm.document.attrib;
  %PATH.xmlns.attrib;
>
<!-- much of path report is in header i.e. accession number,
account number
can both be document ids
-->
<!ELEMENT %clinical.body.qname; (
  %clinical.history.qname;,
  %preoperative.diagnosis.qname;,
  %postoperative.diagnosis.qname;,
  (%operative.procedure.qname;)?,
  (%operative.findings.qname;)?,
  %parts.qname;
)>
<!ELEMENT %clinical.history.qname; %astm.content;>
<!ATTLIST %clinical.history.qname; %astm.content.attrib;>
<!ELEMENT %preoperative.diagnosis.qname; (#PCDATA)>
<!ATTLIST %preoperative.diagnosis.qname;
%astm.content.attrib;>
<!ELEMENT %postoperative.diagnosis.qname; (#PCDATA)>
<!ATTLIST %postoperative.diagnosis.qname;
%astm.content.attrib;>
<!ELEMENT %operative.procedure.qname; (#PCDATA)>
<!ATTLIST %operative.procedure.qname; %astm.content.attrib;>
<!ELEMENT %operative.findings.qname; %astm.content;>
<!ATTLIST %operative.findings.qname; %astm.content.attrib;>
<!ELEMENT %parts.qname; (%part.qname;)+>
<!ATTLIST %parts.qname; %astm.content.attrib;>
<!ELEMENT %part.qname; (
  (%pathology.staff.qname;)?,
  %gross.description.qname;,
  %tissue.source.qname;,
  %diagnosis.qname;,
  (%comment.qname;)?,
  (%block.qname;)*,
  (%procedure.qname;)*
)>
<!-- frozen = related frozen section to this permanent section -->
<!ATTLIST %part.qname;
  name NMTOKEN #REQUIRED
  frozen (y|n) #IMPLIED
  all-pieces-used (y|n) #IMPLIED
  %astm.content.attrib;
>

<!ELEMENT %block.qname; (
  %ordering.date.time.qname;,
  %ordering.physician.qname;,
  (%comment.qname;)?,
  (%stain.qname;)*,
  (%piece.qname;)*
)>
<!ATTLIST %block.qname; %astm.content.attrib;>
<!ELEMENT %ordering.physician.qname; (%ch.actor.type;)>
<!ATTLIST %ordering.physician.qname; %astm.content.attrib;>
<!ELEMENT %pathology.staff.qname;
((%pathologist.qname;)?,(%gross.pathologist.qname;)?,(%frozen.pathologist.qname;)?)>
<!ATTLIST %pathology.staff.qname; %astm.content.attrib;>
<!ELEMENT %pathologist.qname; (%ch.actor.type;)>
<!ATTLIST %pathologist.qname; %astm.content.attrib;>
<!ELEMENT %gross.pathologist.qname; (%ch.actor.type;)>
<!ATTLIST %gross.pathologist.qname; %astm.content.attrib;>
<!ELEMENT %frozen.pathologist.qname; (%ch.actor.type;)>
<!ATTLIST %frozen.pathologist.qname; %astm.content.attrib;>
<!ELEMENT %tissue.source.qname; (#PCDATA)>
<!ATTLIST %tissue.source.qname; %astm.content.attrib;>
<!ELEMENT %stain.qname; (#PCDATA)>
<!ATTLIST %stain.qname; %astm.content.attrib;>
<!ELEMENT %piece.qname; %astm.content;>
<!ATTLIST %piece.qname; %astm.content.attrib;>
<!ELEMENT %ordering.date.time.qname; %ch.datetime.model;>
<!ATTLIST %ordering.date.time.qname; %astm.content.attrib;>
```

```
<!ELEMENT %submitted.date.time.qname; %ch.datetime.model;>
<!ATTLIST %submitted.date.time.qname; %astm.content.attrib;>

<!ELEMENT %procedure.qname; (
   (%ordering.date.time.qname;)?,
   (%submitted.date.time.qname;)?,
   %pathologist.qname;,
   %procedure.name.qname;,
   %interpretation.qname;
)>
<!ATTLIST %procedure.qname; %astm.content.attrib;>
<!ELEMENT %diagnosis.qname; %astm.content;>
<!ATTLIST %diagnosis.qname; %astm.content.attrib;>
<!ELEMENT %comment.qname; %astm.content;>
<!ATTLIST %comment.qname; %astm.content.attrib;>
<!ELEMENT %interpretation.qname; %astm.content;>
<!ATTLIST %interpretation.qname; %astm.content.attrib;>
<!ELEMENT %gross.description.qname; %astm.content;>
<!ATTLIST %gross.description.qname; %astm.content.attrib;>

<!ELEMENT %procedure.name.qname; (#PCDATA)>
<!ATTLIST %procedure.name.qname; %astm.content.attrib;>
```

A1.11 Radiology Reports

```
<!--
   PUBLIC ″-//ASTM//DTD Radiology Report 1.0//EN″
   SYSTEM ″http://www.openhealth.org/ASTM/radiology.report.dtd″
   This DTD defines an ASTM E 2182 standard Radiology Report
-->
<!--
   include the base ASTM E 2182 module
   by default namespaces are not enabled.
   Namespaces are controlled by the ENTITY % use.namespace
   which is defined as
      <!ENTITY % use.namespace ″IGNORE″>
   To enable namespaces define
   <!ENTITY % use.namespace ″INCLUDE″>
   prior to including this DTD
   (e.g. in the internal subset)
-->

<!ENTITY % ASTM.base.module PUBLIC ″-//ASTM//DTD E2182
Base 1.0//EN″
″ASTM.E2182.dtd″>
<!ENTITY % RAD.xmlns ″http://www.openhealth.org/ASTM/
radiology.report″>
<!ENTITY % XHTML.xmlns ″http://www.w3.org/1999/xhtml″ >

%ASTM.base.module;
<!-- by default disable DICOM SR -->
<!ENTITY % use.dicom.rad ″IGNORE″>

<!ENTITY % NS.prefixed ″IGNORE″>
<!ENTITY % RAD.prefixed ″%NS.prefixed;″>

<![ %RAD.prefixed; [
<!ENTITY % rad ″rad″>
<!ENTITY % rad.prefix ″%rad;″>
<!ENTITY % RAD.xmlns.attrib 'xmlns:%rad; CDATA #FIXED
″%RAD.xmlns;″'>
]]>

<!ENTITY % rad ″″>
<!ENTITY % rad.prefix ″″>
<!ENTITY % RAD.xmlns.attrib 'xmlns CDATA #FIXED
″http://www.openhealth.org/ASTM/radiology.report″'>

<![%use.dicom.rad;[
<!ENTITY % astm.dicom.rad.module PUBLIC ″–//ASTM//DTD
DICOMV3 1.0//EN″
″astm.dicom.dtd″>
%astm.dicom.rad.module;
```

```
<!ENTITY % astm.dicom.sr.module PUBLIC ″–//ASTM//DTD
DICOM SR 1.0//EN″
″DICOMSR.dtd″>
%astm.dicom.sr.module;

<!ELEMENT %dicom.sr.qname; (
   (%dicom.sr.document.content.module.qname;)?,
   (%dicom.sr.document.general.module.qname;)?,
   (%dicom.sr.document.series.module.qname;)?
)>
]]>


<!ENTITY % radiology.report.qname
″%rad.prefix;radiology.report″>
<!ENTITY % clinical.body.qname ″%rad.prefix;clinical.body″>
<!ENTITY % study.instance.uid.qname
″%rad.prefix;study.instance.uid″>
<!ENTITY % study.date.qname ″%rad.prefix;study.date″>
<!ENTITY % study.time.qname ″%rad.prefix;study.time″>
<!ENTITY % study.description.qname
″%rad.prefix;study.description″>
<!ENTITY % referenced.study.sequence.qname
″%rad.prefix;referenced.study.sequence″>
<!ENTITY % procedure.code.sequence.qname
″%rad.prefix;procedure.code.sequence″>
<!ENTITY % modality.qname; ″%rad.prefix;modality″>
<!ENTITY % laterality.qname ″%rad.prefix;laterality″>
<!ENTITY % protocol.name.qname ″%rad.prefix;protocol.name″>
<!ENTITY % body.part.examined.qname
″%rad.prefix;body.part.examined″>
<!ENTITY % reason.for.study.qname
″%rad.prefix;reason.for.study″>
<!ENTITY % contrast.bolus.agent.qname
″%rad.prefix;contrast.bolus.agent″>
<!ENTITY % interpretation.text.qname
″%rad.prefix;interpretation.text″>
<!ENTITY % impressions.qname ″%rad.prefix;impressions″>
<!ENTITY % interpretation.diagnosis.description.qname
″%rad.prefix;interpretation.diagnosis.description″>
<!ENTITY % interpretation.diagnosis.code.sequence.qname
″%rad.prefix;interpretation.diagnosis.code.sequence″>
<!ENTITY % interpretation.id.qname
″%rad.prefix;interpretation.id″>
<!ENTITY % dicom.sr.qname ″%rad.prefix;dicom.sr″>


<!ENTITY % study.instance.uid.model ″(#PCDATA)″>
<!ENTITY % study.date.model ″(#PCDATA)″>
<!ENTITY % study.time.model ″(#PCDATA)″>
<!ENTITY % study.description.model ″%astm.content;″>
<!ENTITY % referenced.study.sequence.model
″(%coded.value.qname;)*″>
<!ENTITY % procedure.code.sequence.model
″(%coded.value.qname;)*″>
<!ENTITY % modality.model ″(#PCDATA)″>
<!ENTITY % laterality.model ″(#PCDATA)″>
<!ENTITY % protocol.name.model ″(#PCDATA)″>
<!ENTITY % body.part.examined.model ″(#PCDATA)″>
<!ENTITY % reason.for.study.model ″%astm.content;″>
<!ENTITY % contrast.bolus.agent.model ″(#PCDATA)″>

<!ENTITY % interpretation.text.model ″%astm.content;″>
<!ENTITY % impressions.model ″%astm.content;″>
<!ENTITY % interpretation.diagnosis.description.model
″%astm.content;″>
<!ENTITY % interpretation.diagnosis.code.sequence.model
″(%coded.value.qname;)*″>
<!ENTITY % interpretation.id.model ″(#PCDATA)″>
```

```
<!-- gone to header
   %dcm;ReferringPhysicianName?,
   %dcm;StudyID?,
   %dcm;AccessionNumber?,
   %dcm;OperatorsName?,
   %dcm;physicianOfRecord?,
   %dcm;RequestingPhysician?,
   %dcm;PerformingPhysicianName?,
   %dcm;NameOfPhysicianReadingStudy?,
   %dcm;InterpretationTranscriptionDate?,
   %dcm;InterpretationAuthor?,
-->

<!ENTITY % clinical.body.model ″(
   (%study.instance.uid.qname;)?,
   (%study.date.qname;)?,
   (%study.time.qname;)?,
   (%study.description.qname;)?,
   (%referenced.study.sequence.qname;)?,
   (%procedure.code.sequence.qname;)?,
   %modality.qname;,
   (%laterality.qname;)?,
   (%protocol.name.qname;)?,
   (%body.part.examined.qname;)?,
   (%reason.for.study.qname;)?,
   (%contrast.bolus.agent.qname;)?,
   (%interpretation.text.qname;)?,
   (%impressions.qname;)?,
   (%interpretation.diagnosis.description.qname;)?,
   (%interpretation.diagnosis.code.sequence.qname;)?,
   (%interpretation.id.qname;)?,
   (%dicom.sr.qname;)*
)″>

<!ENTITY % radiology.report.model ″(
   %clinical.header.qname;,
   %clinical.body.qname;
)″>

<!ELEMENT %radiology.report.qname; %radiology.report.model;>
<!ATTLIST %radiology.report.qname;
   %astm.document.attrib;
   %RAD.xmlns.attrib;
>

<!ELEMENT %clinical.body.qname; %clinical.body.model;>
<!ATTLIST %clinical.body.qname; %ch.attrib;>

<!ELEMENT %study.instance.uid.qname;
%study.instance.uid.model;>
<!ATTLIST %study.instance.uid.qname; %astm.content.attrib;>

<!ELEMENT %study.date.qname; %study.date.model; >
<!ATTLIST %study.date.qname; %astm.content.attrib;>

<!ELEMENT %study.time.qname; %study.time.model; >
<!ATTLIST %study.time.qname; %astm.content.attrib;>

<!ELEMENT %study.description.qname;
%study.description.model; >
<!ATTLIST %study.description.qname; %astm.content.attrib;>

<!ELEMENT %referenced.study.sequence.qname;
%referenced.study.sequence.model; >

<!ATTLIST %referenced.study.sequence.qname;
%astm.content.attrib;>

<!ELEMENT %procedure.code.sequence.qname;
%procedure.code.sequence.model; >
<!ATTLIST %procedure.code.sequence.qname;
%astm.content.attrib;>

<!ELEMENT %modality.qname; %modality.model; >
<!ATTLIST %modality.qname; %astm.content.attrib;>

<!ELEMENT %laterality.qname; %laterality.model; >
<!ATTLIST %laterality.qname; %astm.content.attrib;>
```

```
<!ELEMENT %protocol.name.qname; %protocol.name.model; >
<!ATTLIST %protocol.name.qname; %astm.content.attrib;>

<!ELEMENT %body.part.examined.qname;
%body.part.examined.model; >
<!ATTLIST %body.part.examined.qname; %astm.content.attrib;>

<!ELEMENT %reason.for.study.qname; %reason.for.study.model;
>
<!ATTLIST %reason.for.study.qname; %astm.content.attrib;>

<!ELEMENT %contrast.bolus.agent.qname;
%contrast.bolus.agent.model; >
<!ATTLIST %contrast.bolus.agent.qname; %astm.content.attrib;>

<!ELEMENT %interpretation.text.qname;
%interpretation.text.model; >
<!ATTLIST %interpretation.text.qname; %astm.content.attrib;>

<!ELEMENT %impressions.qname; %impressions.model; >
<!ATTLIST %impressions.qname; %astm.content.attrib;>

<!ELEMENT %interpretation.diagnosis.description.qname;
%interpretation.diagnosis.description.model; >
<!ATTLIST %interpretation.diagnosis.description.qname;
%astm.content.attrib;>

<!ELEMENT %interpretation.diagnosis.code.sequence.qname;
%interpretation.diagnosis.code.sequence.model;>
<!ATTLIST %interpretation.diagnosis.code.sequence.qname;
%astm.content.attrib;>

<!ELEMENT %interpretation.id.qname; %interpretation.id.model;>
<!ATTLIST %interpretation.id.qname; %astm.content.attrib;>
```

A1.12 Radiation Therapy Summaries

```
!--
   PUBLIC ″-//ASTM//DTD Radiation Therapy Summary 1.0//EN″
   SYSTEM ″http://www.openhealth.org/ASTM/
   radiation.thereapy.summary.dtd″

   This DTD defines an ASTM E 2182 standard Radiation Therapy
   Summary
-->

<!ENTITY % ASTM.base.module PUBLIC ″-//ASTM//DTD E2182
Base 1.0/EN″ ″ASTM.E2182.dtd″>
<!ENTITY % astm.dicom.module PUBLIC ″-//ASTM//DTD DICOMV3
1.0//EN″ ″astm.dicom.dtd″>
<!ENTITY % astm.dicom.rt.module PUBLIC ″-//ASTM//DTD DICOM
RT 1.0//EN″ ″DICOMRT.dtd″>
<!ENTITY % XRT.xmlns ″http://www.openhealth.org/ASTM/
radiation.therapy.summary″>

%ASTM.base.module;

<!ENTITY % NS.prefixed ″IGNORE″>
<!ENTITY % XRT.prefixed ″%NS.prefixed;″>

<![ %XRT.prefixed; [
<!ENTITY % xrt ″xrt″>
<!ENTITY % xrt.prefix ″%xrt;:″>
<!ENTITY % XRT.xmlns.attrib ″xmlns:xrt CDATA #FIXED
'http://www.openhealth.org/ASTM/radiation.therapy.summary'″>
]]>
<!ENTITY % xrt ″xrt″>
<!ENTITY % xrt.prefix ″%xrt;:″>
<!ENTITY % XRT.xmlns.attrib ″xmlns:xrt CDATA #FIXED
'http://www.openhealth.org/ASTM/radiation.therapy.summary'″>

<!ENTITY % use.dicom ″IGNORE″>
```

```
<![%use.dicom;[
%astm.dicom.module;
%astm.dicom.rt.module;
]]>

<!ENTITY % radiation.therapy.summary.qname
"%xrt.prefix;radiation.therapy.summary">
<!ENTITY % clinical.history.qname "%xrt.prefix;clinical.history">
<!ENTITY % treatments.qname "%xrt.prefix;treatments">
<!ENTITY % completion.report.qname
"%xrt.prefix;completion.report">
<!ENTITY % patient.followup.qname "%xrt.prefix;patient.followup">
<!ENTITY % clinical.body.qname "%xrt.prefix;clinical.body">
<!ENTITY % treatment.qname "%xrt.prefix;treatment">
<!ENTITY % region.treated.qname "%xrt.prefix;region.treated">
<!ENTITY % energy.MeV.qname "%xrt.prefix;energy.MeV">
<!ENTITY % tumor.dose.cGy.qname "%xrt.prefix;tumor.dose.cGy">
<!ENTITY % start.date.qname "%xrt.prefix;start.date">
<!ENTITY % end.date.qname "%xrt.prefix;end.date">
<!ENTITY % number.of.fractions.qname
"%xrt.prefix;number.of.fractions">
<!ENTITY % fraction.dose.cGy.qname
"%xrt.prefix;fraction.dose.cGy">
<!ENTITY % dicom.rt.treatment.summary.record.module.qname
"%xrt.prefix;dicom.rt.treatment.summary.record.module">

<!ELEMENT %radiation.therapy.summary.qname; (
   %clinical.header.qname;,
   %clinical.body.qname;
)>

<!ATTLIST %radiation.therapy.summary.qname;
   %astm.document.attrib;
   %XRT.xmlns.attrib;
>
<!ELEMENT %clinical.body.qname; (
   %clinical.history.qname;,
   %treatments.qname;,
   %completion.report.qname;,
   (%patient.followup.qname;)?,
   (%dicom.rt.treatment.summary.record.module.qname;)?
)>
<!ATTLIST %clinical.body.qname; %ch.attrib;>

<!ELEMENT %clinical.history.qname; %astm.content;>
<!ATTLIST %clinical.history.qname; %astm.content.attrib;>
<!ELEMENT %completion.report.qname; %astm.content;>
<!ATTLIST %completion.report.qname; %astm.content.attrib;>
<!ELEMENT %patient.followup.qname; (#PCDATA)>
<!ATTLIST %patient.followup.qname; %astm.content.attrib;>
<!ELEMENT %treatments.qname; (%treatment.qname;)*>
<!ATTLIST %treatments.qname; %astm.content.attrib;>
<!ELEMENT %treatment.qname; (
   %region.treated.qname;,
   %energy.MeV.qname;,
   %tumor.dose.cGy.qname;,
   %start.date.qname;,
   %end.date.qname;,
   %number.of.fractions.qname;,
   %fraction.dose.cGy.qname;
)>
<!ATTLIST %treatment.qname; %astm.content.attrib;>
<!ELEMENT %region.treated.qname; (#PCDATA)>
<!ATTLIST %region.treated.qname; %astm.content.attrib;>
<!ELEMENT %energy.MeV.qname; (#PCDATA)>
<!ATTLIST %energy.MeV.qname; %astm.content.attrib;>
<!ELEMENT %tumor.dose.cGy.qname; (#PCDATA)>
<!ATTLIST %tumor.dose.cGy.qname; %astm.content.attrib;>
<!ELEMENT %start.date.qname; (#PCDATA)>
<!ATTLIST %start.date.qname; %astm.content.attrib;>
<!ELEMENT %end.date.qname; (#PCDATA)>
<!ATTLIST %end.date.qname; %astm.content.attrib;>
<!ELEMENT %number.of.fractions.qname; (#PCDATA)>
<!ATTLIST %number.of.fractions.qname; %astm.content.attrib;>
<!ELEMENT %fraction.dose.cGy.qname; (#PCDATA)>
<!ATTLIST %fraction.dose.cGy.qname; %astm.content.attrib;>
```

A2. ASTM E 2182 ARCHITECTURE

A2.1 ASTM E 2182 Modularization of XHTML BASIC

```
<!-- file: astm-xhtml.dtd-->
<!-- This is the driver file for version 1.0 of the ASTM XHTML 1.0
     DTD as an extension of XHTML Basic 1.0.

     This DTD is identified by the PUBLIC and SYSTEM identifiers:

     PUBLIC: ″-//ASTM//DTD XHTML ASTM 1.0//EN″
     SYSTEM: ″http://www.openhealth.org/ASTM/astm-xhtml.dtd
-->

<!-- ASTM XHTML Basic 1.0 DTD

     This DTD is derived from the W3C XHTML Basic Driver DTD:

     This is XHTML Basic, a proper subset of XHTML.

     The Extensible HyperText Markup Language (XHTML)
     Copyright 1998-2000 World Wide Web Consortium
        (Massachusetts Institute of Technology, Institut National de
        Recherche en Informatique et en Automatique, Keio
        University).
        All Rights Reserved.

     Permission to use, copy, modify and distribute the XHTML
     Basic DTD and its accompanying documentation for any
     purpose and without fee is hereby granted in perpetuity,
     provided that the above copyright notice and this
     paragraph appear in all copies. The copyright holders
     make no representation about the suitability of the DTD
     for any purpose.

     It is provided ″as is″ without expressed or implied warranty.

        Editors: Murray M. Altheim <mailto:altheim@eng.sun.com>
        Peter Stark <mailto:Peter.Stark@ecs.ericsson.se>
        Revision: $Id: xhtml-basic10.dtd,v 2.13 2000/12/18 12:56:23
        mimasa
Exp $ SMI

-->

<!ENTITY % XHTML.version ″-//ASTM//DTD XHTML ASTM 1.0//EN″
>

<!-- Use this URI to identify the default namespace:
        ″http://www.w3.org/1999/xhtml″
     See the Qualified Names module for information
     on the use of namespace prefixes in the DTD.
-->
<!ENTITY % NS.prefixed ″IGNORE″ >
<!ENTITY % XHTML.prefix ″″ >

<!ENTITY % XLINK.prefix ″xlink″>
<!ENTITY % XLINK.prefixed ″INCLUDE″>
<!-- Reserved for use with the XLink namespace:
-->
<!ENTITY % XLINK.xmlns ″http://www.w3.org/1999/xlink″ >
<!--
   don't declare this because then it gets declared in
   Common.attrib rather put directly on the resource
   element (see below)
-->
<!ENTITY % XLINK.xmlns.attrib ″″ >

<!-- For example, if you are using XHTML Basic 1.0 directly, use
     the FPI in the DOCTYPE declaration, with the xmlns attribute
     on the document element to identify the default namespace:

<?xml version=″1.0″?>
<!DOCTYPE html PUBLIC ″-/W3C//DTD XHTML Basic 1.0//EN″
   ″http://www.w3.org/TR/xhtml-basic/xhtml-basic10.dtd″>
```

```
html xmlns="http://www.w3.org/1999/xhtml"
   xml:lang="en" >
...
</html>
-->

<!-- reserved for future use with document profiles -->
!ENTITY % XHTML.profile "" >

<!-- Bidirectional Text features
   This feature-test entity is used to declare elements
   and attributes used for bidirectional text support.
-->
<!ENTITY % XHTML.bidi "IGNORE" >

<?doc type="doctype" role="title" {ASTM XHTML Basic 1.0} ?>
<!-- don't include forms stuff -->
<!ENTITY % xhtml-form.module "IGNORE" >
<!ENTITY % xhtml-link.module "IGNORE" >
<!ENTITY % xhtml-meta.module "IGNORE" >
<!-- no need for html, head stuff-->
<!-- <!ENTITY % xhtml-struct.mod
   PUBLIC "-//W3C//ELEMENTS XHTML Document Structure
   1.0//EN"
     " " >
%xhtml-struct.mod;-->
<!ENTITY % title.element "IGNORE">
<!ENTITY % title.attlist "IGNORE">
<!ENTITY % head.element "IGNORE">
<!ENTITY % head.attlist "IGNORE">
<!ENTITY % body.element "IGNORE">
<!ENTITY % body.attlist "IGNORE">
<!ENTITY % html.element "IGNORE">
<!ENTITY % html.attlist "IGNORE">
<!-- ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
-->

<!ENTITY % xhtml-events.module "IGNORE" >
<!-- jb: XML names doesn't like PIs with colons e.g.
   <?IS10744:arch xhtml

   so default this out
-->
<!ENTITY % xhtml-arch.module "IGNORE" >
<!ENTITY % xhtml-bdo.module "%XHTML.bidi;" >

<!ENTITY % xhtml-basic10-module.dtd
   PUBLIC "-//W3C//DTD XHTML Basic 1.0//EN"
   "http://www.w3.org/TR/xhtml-basic/xhtml-basic10.dtd">
%xhtml-basic10-module.dtd;

<!-- end of ASTM XHTML Basic 1.0 DTD
......................................... -->
```

A2.2 ASTM E 2182 Base DTD

```
<!--
   PUBLIC "-//ASTM//DTD E2182 Base 1.0//EN"
   SYSTEM "http://www.openhealth.org/ASTM/ASTM.E2182.dtd"
-->

<!-- default: don't prefix elements -->
<!ENTITY % NS.prefixed "IGNORE">
<!-- prefix xlink attributes -->
<!ENTITY % XLINK.namespace.prefixed "INCLUDE">

<!-- include ASTM XHTML Basic Module -->
<!ENTITY % ASTM-XHTML-module.dtd PUBLIC "-//ASTM//DTD
ASTM XHTML 1.0//EN" "astm-xhtml.dtd">
%ASTM-XHTML-module.dtd;
<!-- define %astm.content as text or XHTML -->
<!ENTITY % ASTM.Mix "%Flow.mix;">
<!ENTITY % astm.content "(#PCDATA | %ASTM.Mix;)*">
```

```
<!ENTITY % ASTM.xlink-module.mod PUBLIC ″-//ASTM//
ENTITIES
XLink 1.0//EN″ ″astm-xlink.mod″>
%ASTM.xlink-module.mod;
<!-- end xlink-module -->
<!-- clinical header attributes -->
<!ENTITY % ch.attrib ″
   ID ID #IMPLIED
      confidentiality IDREF #IMPLIED
   note CDATA #IMPLIED
   xml:lang NMTOKEN #IMPLIED
″>
<!-- include clinical header module -->
<!ENTITY % ASTM.clinical.header.dtd PUBLIC ″-//ASTM//DTD
Clinical Header 1.0//EN″ ″clinical.header.dtd″>
%ASTM.clinical.header.dtd;

<!ENTITY % astm.content.attrib ″%ch.attrib; %xlink.attrib;″>
<!ENTITY % astm.document.attrib ″
   xml:base CDATA #IMPLIED
   xml:lang NMTOKEN #IMPLIED
   %xlink.namespace.attrib;
″>
```

A2.3 ASTM XLink Module

```
<!--
   The content of ASTM Healthcare documents may include XLinks
   PUBLIC -//ASTM//ENTITIES Xlink 1.0//EN″
   SYSTEM ″http://www.openhealth.org/ASTM/astm-xlink.mod″
-->
<!ENTITY % xlink.namespace.uri ″′http://www.w3.org/1999/xlink′″>

<!ENTITY % no.namespace.support ″IGNORE″>
<!ENTITY % XLINK.namespace.prefixed ″INCLUDE″>

<![ %no.namespace.support; [
<!ENTITY % xlink.namespace.attrib ″″>
]]>

<!ENTITY % xlink.namespace.attrib ″xmlns:xlink CDATA #FIXED
'http://www.w3.org/1999/xlink′″>

<![ %XLINK.namespace.prefixed; [
<!ENTITY % XLINK.pfx ″xlink:″>
<!ENTITY % XLINK.sfx ″:xlink″>
<!ENTITY % xlink.type.qname ″xlink:type″>
<!ENTITY % xlink.arcrole.qname ″xlink:arcrole″>
<!ENTITY % xlink.href.qname ″xlink:href″>

<!ENTITY % xlink.attrib ″
   xlink:type (simple|extended|locator|arc|resource|title) #IMPLIED
   xlink:arcrole CDATA #IMPLIED
   xlink:href CDATA #IMPLIED
   xlink:role CDATA #IMPLIED
   xlink:title CDATA #IMPLIED
″>
<!ENTITY % xlink.simple.attrib '
   xlink:type (simple|extended) ″simple″
   xlink:arcrole CDATA #IMPLIED
   xlink:href CDATA #IMPLIED
   xlink:role CDATA #IMPLIED
   xlink:title CDATA #IMPLIED
'>
<!ENTITY % xlink.extended.attrib '
   xlink:from CDATA #IMPLIED
   xlink:to CDATA #IMPLIED
   xlink:label CDATA #IMPLIED
'>
]]>

<!ENTITY % XLINK.pfx ″″>
<!ENTITY % XLINK.sfx ″″>

<!ENTITY % xlink.type.qname ″type″>
<!ENTITY % xlink.arcrole.qname ″arcrole″>
```

```
<!ENTITY % xlink.href.qname ″href″>

<!ENTITY % xlink.attrib ″
   type (simple|extended) #IMPLIED
   arcrole CDATA #IMPLIED
   href CDATA #IMPLIED
″>
<!ENTITY % xlink.simple.attrib '
   type (simple|extended) ″simple″
   arcrole CDATA #IMPLIED
   href CDATA #IMPLIED
'>
```

A2.4 Catalog File for E 2182 DTDs

```
-- ASTM E 2182 Healthcare Catalog Data File
   This is the catalog data file for various versions of the ASTM
   Healthcare DTDs.
   You do not need to use the file names listed here, and do not
   need to use the filename method of identifying storage objects
   at all.

   See ″Entity Management″, SGML Open Technical Resolution 9401
   for detailed information on supplying and using catalog data.
   This document is available from OASIS at URL:

<http://www.oasis-open.org/cover/tr9401.html>
--

-- ....................................................
--
-- SGML declaration associated with XHTML ........................
--

OVERRIDE YES

-- for use with non-Unicode compatible parsers: --
-- SGMLDECL ″xml1n.dcl″

-- uncomment for XML compatibility: --
SGMLDECL ″xml1.dcl″ --

-- ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
--
-- ASTM XHTML module
--
PUBLIC ″-//ASTM//DTD ASTM XHTML 1.0//EN″
″astm-xhtml.dtd″
PUBLIC ″-//ASTM//ENTITIES XLink 1.0//EN″
″astm-xlink.mod″
-- ASTM clinical header ....................................................
--
PUBLIC ″-//ASTM//DTD Clinical Header 1.0//EN″
″clinical.header.dtd″
PUBLIC ″-//ASTM//DTD Admission-Discharge Module 1.0//EN″
″admission.discharge.module.dtd″
PUBLIC ″-//ASTM//DTD History Module 1.0//EN″
″history.module.dtd″
PUBLIC ″-//ASTM//DTD Physical Examination Module 1.0//EN″
″physical.examination.module.dtd″
PUBLIC ″-//ASTM//DTD Discharge Summary 1.0//EN″
″discharge.summary.dtd″
PUBLIC ″-//ASTM//DTD History and Physical Exam 1.0//EN″
″history.physical.dtd″

PUBLIC ″-//ASTM//DTD Operative Report 1.0//EN″
″operative.report.dtd″
PUBLIC ″-//ASTM//DTD Pathology Report 1.0//EN″
″pathology.report.dtd″
PUBLIC ″-//ASTM//DTD Radiation Therapy Summary 1.0//EN″
″radiation.thereapy.summary.dtd″
PUBLIC ″-//ASTM//DTD Radiology Report 1.0//EN″
″radiology.report.dtd″

-- XHTML Basic DTD modular driver file .....................................
--
```

PUBLIC ″-//W3C//DTD XHTML Basic 1.0//EN″
″xhtml-basic10.dtd″

-- XHTML Basic framework module ....
--
PUBLIC ″-//W3C//ENTITIES XHTML Basic 1.0 Document Model
1.0//EN″
″xhtml-basic10-model-1.mod″

-- XHTML module ....
--
XHTML framework modules ....
--

PUBLIC ″-//W3C//ENTITIES XHTML Modular Framework 1.0//EN″
″xhtml-framework-1.mod″
PUBLIC ″-//W3C//NOTATIONS XHTML Notations 1.0//EN″
″xhtml-notations-1.mod″
PUBLIC ″-//W3C//ENTITIES XHTML Datatypes 1.0//EN″
″xhtml-datatypes-1.mod″
PUBLIC ″-//W3C//ENTITIES XHTML Qualified Names 1.0//EN″
″xhtml-qname-1.mod″
PUBLIC ″-//W3C//ENTITIES XHTML Common Attributes 1.0//EN″
″xhtml-attribs-1.mod″
PUBLIC ″-//W3C//ENTITIES XHTML Character Entities 1.0//EN″
″xhtml-charent-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Redeclarations 1.0//EN″
″xhtml-redecl-1.mod″

-- XHTML modules ....
--

PUBLIC ″-//W3C//ELEMENTS XHTML Document Structure 1.0//EN″
″xhtml-struct-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Text 1.0//EN″
″xhtml-text-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Hypertext 1.0//EN″
″xhtml-hypertext-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Lists 1.0//EN″
″xhtml-list-1.mod″

PUBLIC ″-//W3C//ELEMENTS XHTML Inline Structural 1.0//EN″
″xhtml-inlstruct-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Inline Presentation 1.0//EN″
″xhtml-inlpres-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Inline Phrasal 1.0//EN″
″xhtml-inlphras-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Block Structural 1.0//EN″
″xhtml-blkstruct-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Block Presentation 1.0//EN″
″xhtml-blkpres-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Block Phrasal 1.0//EN″
″xhtml-blkphras-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Ruby 1.0//EN″
″xhtml-ruby-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Java Applets 1.0//EN″
″xhtml-applet-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Base Architecture 1.0//EN″
″xhtml-arch-1.mod″
PUBLIC ″-//W3C//DTD XHTML Architecture 1.1//EN″
″xhtml11-arch.dtd″
PUBLIC ″-//W3C//ELEMENTS XHTML Param Element 1.0//EN″
″xhtml-param-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Presentation 1.0//EN″
″xhtml-pres-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Editing Elements 1.0//EN″
″xhtml-edit-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML BIDI Override Element 1.0//
EN″
″xhtml-bdo-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Basic Forms 1.0//EN″
″xhtml-basic-form-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Forms 1.0//EN″
″xhtml-form-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Basic Tables 1.0//EN″
″xhtml-basic-table-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Tables 1.0//EN″
″xhtml-table-1.mod″

PUBLIC ″-//W3C//ELEMENTS XHTML Images 1.0//EN″
″xhtml-image-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Client-side Image Maps 1.0//
EN″
″xhtml-csismap-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Server-side Image Maps 1.0//
EN″
″xhtml-ssismap-1.mod″
PUBLIC ″-//W3C//ENTITIES XHTML Intrinsic Events 1.0//EN″
″xhtml-events-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Metainformation 1.0//EN″
″xhtml-meta-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Scripting 1.0//EN″
″xhtml-script-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Stylesheets 1.0//EN″
″xhtml-style-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Link Element 1.0//EN″
″xhtml-link-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Base Element 1.0//EN″
″xhtml-base-1.mod″

PUBLIC ″-//W3C//ELEMENTS XHTML Legacy Redeclarations 1.0//
EN″
″xhtml-legacy-redecl-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Legacy Markup 1.0//EN″
″xhtml-legacy-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Embedded Object 1.0//EN″
″xhtml-object-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Frames 1.0//EN″
″xhtml-frames-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Target 1.0//EN″
″xhtml-target-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Inline Frame Element 1.0//
EN″
″xhtml-iframe-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Inline Style 1.0//EN″
″xhtml-inlstyle-1.mod″
PUBLIC ″-//W3C//ELEMENTS XHTML Name Identifier 1.0//EN″
″xhtml-nameident-1.mod″
-- XHTML entity sets ....
--

PUBLIC ″-//W3C//ENTITIES Latin 1 for XHTML//EN″
″xhtml-lat1.ent″
PUBLIC ″-//W3C//ENTITIES Special for XHTML//EN″
″xhtml-special.ent″
PUBLIC ″-//W3C//ENTITIES Symbols for XHTML//EN″
″xhtml-symbol.ent″
-- End of catalog data ....
--
-- ....
--