

HITSP Labor and Delivery Record Component

HITSP/C152



Healthcare Information Technology Standards Panel

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	5
1.1	Overview.....	5
1.2	Copyright Permissions.....	5
1.3	Reference Documents.....	5
1.4	Conformance	6
1.4.1	Conformance Criteria	6
1.4.2	Conformance Scoping, Subsetting and Options	6
2.0	COMPONENT DEFINITION.....	7
2.1	Context Overview	7
2.1.1	Component Dependencies	7
2.2	Rules for Implementing.....	7
2.2.1	Data Mapping	7
2.2.2	Guidelines and Examples.....	9
2.3	Standards	10
2.3.1	Regulatory Guidance	10
2.3.2	Selected Standards	10
2.3.3	Informative Reference Standards.....	11
3.0	APPENDIX	12
4.0	DOCUMENT UPDATES	13
4.1	November 9, 2009	13
4.2	January 18, 2010	13
4.3	January 25, 2010	13



FIGURES AND TABLES

Table 1-1 Reference Documents	5
Table 2-1 Component Dependencies	7
Table 2-2 Data Mapping - Labor and Deliver Record Content Modules.....	8
Table 2-3 IHE PCC LDR Table 6.2.x: LDR Folder Specifications	10
Table 2-4 Regulatory Guidance	10
Table 2-5 Selected Standards	10
Table 2-6 Informative Reference Standards	11



1.0 INTRODUCTION

1.1 OVERVIEW

The Healthcare Information Technology Standards Panel (HITSP) Labor and Delivery Record (LDR) Component contains information of the course of labor and delivery of a mother and her fetus(es). When an Antepartum Record (APR) exists, the Labor and Delivery Record is a continuation of the APR. LDR can include such information as the relevant maternal history and physical exams, evaluations, laboratory studies and plans of care. This Component supports this information via delivery record documents and a Labor and Delivery Summary document.

As stated in IHE PCC Technical Framework Supplement – Labor and Deliver Record:

The text for the IHE PCC-TF specification begins here:

The LDR provides comprehensive information regarding the course of labor and delivery to healthcare providers caring for both the mother and the newborn(s) in the postpartum period. For example, in cases such as chorioamnionitis or birth trauma, if the postpartum nurse or the attending obstetrician were not present at the birth, the LDR would be crucial for risk identification and appropriate inpatient postpartum care. The pediatrician uses the information present in the LDR to develop the infant's plan of care. The outpatient care is out of scope for this profile, as well as the newborn's discharge summary from the birthing facility.

The text for the IHE PCC-TF specification ends here.

1.2 COPYRIGHT PERMISSIONS

COPYRIGHT NOTICE

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1.3 REFERENCE DOCUMENTS

A list of key reference documents and background material is provided in the table below. HITSP-maintained reference documents can be retrieved from the [HITSP Web Site](http://www.ihe.net).

Table 1-1 Reference Documents

Reference Document	Document Description
HITSP Acronyms List	Lists and defines the acronyms used in this document
HITSP Glossary	Provides definitions for relevant terms used by HITSP documents
TN900 - Security and Privacy	TN900 is a reference document that provides the overall context for use of the HITSP Security and Privacy constructs
TN901 - Clinical Documents	TN901 is a reference document that provides the overall context for use of the HITSP Care Management and Health Records constructs
TN903 – Data Architecture	TN903 is a reference document that provides the overall context for use of the HITSP Data Architecture constructs



1.4 CONFORMANCE

This section describes the conformance criteria, which are objective statements of requirements that can be used to determine if a specific behavior, function, interface, or code set has been implemented correctly.

1.4.1 CONFORMANCE CRITERIA

In order to claim conformance to this construct specification, an implementation must satisfy all the requirements and mandatory statements listed in this specification, the associated HITSP Interoperability Specification or Capability, its associated construct specifications, as well as conformance criteria from the selected base and composite standards. A conformant system must also implement all of the required interfaces within the scope, subset or implementation option that is selected from the associated Interoperability Specification.

Claims of conformance may only be made for the overall HITSP Interoperability Specification or Capability with which this construct is associated.

1.4.2 CONFORMANCE SCOPING, SUBSETTING AND OPTIONS

A HITSP Interoperability Specification or Capability must be implemented in its entirety for an implementation to claim conformance to the specification. HITSP may define the permissibility for interface scoping, subsetting or implementation options by which the specification may be implemented in a limited manner. Such scoping, subsetting and options may extend to associated constructs, such as this construct. This construct must implement all requirements within the selected scope, subset or options as defined in the associated Interoperability Specification or Capability to claim conformance.



2.0 COMPONENT DEFINITION

2.1 CONTEXT OVERVIEW

As stated in IHE PCC Technical Framework Supplement – Labor and Deliver Record (LDR):

The text for the IHE PCC-TF specification begins here:

The information found in the LDR is important for continuation of care for the mother and the newborn, in both inpatient and outpatient settings, and should be available to all healthcare providers. Prior to discharge from the birthing facility, the mother receives a comprehensive assessment which provides the follow-up healthcare provider with the details of the labor and delivery, as well as a “snapshot” of the mother’s condition at discharge. The newborn’s status immediately following birth, while the newborn is still in the delivery room is also captured thus if any complications arise and the newborn is transferred to a specialized unit, this information is available.

The information collected varies according to the type of birthing facilities, their birthing practices and location, and also depends on the characteristics of mothers and newborns.

The text for the IHE PCC-TF specification ends here.

2.1.1 COMPONENT DEPENDENCIES

Table 2-1 Component Dependencies

HITSP Component	Depends On (Name of standard/HITSP Component that it depends on)	Dependency Type (Pre-condition, Post-condition, General)	Purpose (Reason for this dependency)
HITSP/C152 – Labor and Delivery Record (LDR)	HITSP/C83 – CDA Content Modules	General	Defines the content modules

2.2 RULES FOR IMPLEMENTING

2.2.1 DATA MAPPING

C152-[CT1-1] Implementations of this Component **SHALL** support the Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Supplement Labor and Deliver Record (LDR), Trial Implementation Supplement, August 10, 2009 as well as the HITSP constraints defined in Table 2-2

2.2.1.1 LABOR AND DELIVERY RECORD

The Labor and Delivery Record provides comprehensive information regarding the course of labor and delivery to healthcare providers caring for both the mother and the newborn in the postpartum period.

The following table defines the HITSP constraints for the record. In no case are the HITSP constraints below less strict than those defined by IHE.

The template identifier for this is [2.16.840.1.113883.3.88.11.152.1]

C152-[CT1-34] A CDA Document **SHALL** declare conformance to this specification by including a `<templateId>` element with the root attribute set to the value 2.16.840.1.113883.3.88.11.152.1



C152-[CT1-35] The CDA document **SHALL** declare conformance to one of the IHE LDR or APR documents, by including a <templateId> containing one of the following values:
 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.1, 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.2,
 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.3, 1.3.6.1.4.1.19376.1.5.3.1.1.16.1.1,
 1.3.6.1.4.1.19376.1.5.3.1.1.11.2, 1.3.6.1.4.1.19376.1.5.3.1.1.16.1.2 or
 1.3.6.1.4.1.19376.1.5.3.1.1.16.1.3

Table 2-2 Data Mapping - Labor and Deliver Record Content Modules

Constraint ID	Content Module	HITSP Optional Entry	HITSP Repeatable Entry	Specification Reference
C152-[CT2-1]	Active Problems	R	N	See HITSP/C83 Section 2.2.1.3 Active Problems
C152-[CT2-2]	Advance Directives	R	N	See HITSP/C83 Section 2.2.1.16 Advance Directives
C152-[CT2-3]	Allergies	R	N	See HITSP/C83 Section 2.2.1.2 Allergy and Other Adverse Reactions
C152-[CT2-4]	Hospital Admission Diagnosis	R	N	See HITSP/C83 Section 2.2.1.10 Hospital Admission Diagnosis
C152-[CT2-5]	Chief Complaint	R	N	See HITSP/C83 Section 2.2.1.5 Chief Complaint
C152-[CT2-6]	Current Meds	R	N	See HITSP/C83 Section 2.2.1.12 Medications
C152-[CT2-7]	Family History	R2	N	See HITSP/C83 Section 2.2.1.25 Family History
C152-[CT2-8]	Functional Status	R2	N	See HITSP/C83 Section 2.2.1.9 Functional Status
C152-[CT2-9]	History of Present Illness	R	N	See HITSP/C83 Section 2.2.1.7 History of Present Illness
C152-[CT2-10]	Pregnancy History	R	N	IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4
C152-[CT2-11]	Coded History of Infection	R	N	IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.1.16.2.1.1.1
C152-[CT2-12]	Prenatal Events	R	N	IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.2
C152-[CT2-13]	Coded Advanced Directives	R	N	See HITSP/C83 Section 2.2.1.16 Advanced Directives
C152-[CT2-14]	Estimated Delivery Dates	R	N	IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.1.11.2.2.1
C152-[CT2-15]	Labor and Delivery	C	N	SHALL be included if a child was delivered IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3
C152-[CT2-16]	Newborn Delivery Information	C	N	SHALL be included if a child was delivered IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.4
C152-[CT2-17]	Estimated Blood Loss	R2	N	IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.1.9.2
C152-[CT2-18]	Immunizations	R2	N	See HITSP/C83 Section 2.2.1.17 Immunizations
C152-[CT2-19]	List of Surgeries	R2	N	See HITSP/C83 Section 2.2.1.8 List of Surgeries
C152-[CT2-20]	Medical Equipment	R2	N	See HITSP/C83 Section 2.2.1.28 Medical Equipment
C152-[CT2-21]	Patient Administrative Identifiers	R	N	See HITSP/C83 Section 2.2.2.1 Person Information
C152-[CT2-22]	Person Information	R	N	See HITSP/C83 Section 2.2.2.1 Person Information



Constraint ID	Content Module	HITSP Optional Entry	HITSP Repeatable Entry	Specification Reference
C152-[CT2-23]	Pertinent Insurance Information	R2	N	See HITSP/C83 Section 2.2.1.1 Payers
C152-[CT2-24]	Pertinent Review of Systems	O	N	See HITSP/C83 Section 2.2.1.20 Review of Systems
C152-[CT2-25]	Physical Exam	R2	N	See HITSP/C83 Section 2.2.1.18 Physical Examination
C152-[CT2-26]	Plan of Care	R	N	See HITSP/C83 Section 2.2.1.24 Plan of Care
C152-[CT2-27]	Reason for Referral	R2	N	See HITSP/C83 Section 2.2.1.6 Reason for Referral
C152-[CT2-28]	Relevant Diagnostic Surgical Procedures/Clinical Reports and Relevant Diagnostic Test and Reports	R2	N	See HITSP/C83 Section 2.2.1.22 Diagnostic Results
C152-[CT2-29]	Coded Antenatal Testing and Surveillance	R2	N	IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1
C152-[CT2-30]	Resolved Problems	R2	N	See HITSP/C83 Section 2.2.1.4 History of Past Illness
C152-[CT2-31]	Social History	R2	N	See HITSP/C83 Section 2.2.1.26 Social History
C152-[CT2-32]	Vital Signs	R2	N	See HITSP/C83 Section 2.2.1.19 Vital Signs
C152-[CT2-33]	Discharge Diet	O	N	IHE templateId 1.3.6.1.4.1.19376.1.5.3.1.3.33

Optionality Legend: "R" for Required, "R2" for Required if Known or "O" for Optional, or "C" for Conditional.
Repeatable = "Y" for Yes, "N" for No

2.2.2 GUIDELINES AND EXAMPLES

The text for the IHE PCC-TF example begins here:

Guidelines

- The Labor and Delivery Record is intended as a collection of medical summaries with focused scope that can be used to fulfill a number of collaborative transfers of care

The information collected during labor, delivery and the immediate postpartum period is very important to follow-up care for both mother and infant whether the follow-up care is provided in an inpatient or outpatient facility. A physician's recommendation for a follow-up hematocrit test or evaluation of the incision in the office may be noted in the Labor and Delivery Record or in the Maternal Discharge Summary. These documents must be available in both inpatient and outpatient settings. Pertinent maternal information includes, but is not limited to: delivery type; labor type; anesthesia type; labor, delivery and postpartum complications; and specific maternal information such as medications, laboratory test results, allergies and plans for contraception. Pertinent neonatal information includes, but is not limited to: delivery method, gender, birth time, birth weight, gestational age at delivery, APGAR scores and medications received in the delivery room including immunizations. All this information can be obtained in different parts of the Labor and Delivery Record such as the Labor and Delivery Summary and the Maternal Discharge Summary.

The LDR folder is a container for all documents created as a result of an episode of labor and delivery care. In the case where an Antepartum Record (APR) is available, the document creator for the LDR



should link the existing documents from the APR to the LDR folder. The APR documents are included in the table below for completeness' sake.

Examples of LDR Content Folders may be found via the following links.

- Labor and Delivery Admission History and Physical Note:
<http://wiki.ihe.net/index.php?title=1.3.6.1.4.1.19376.1.5.3.1.1.21.1.1>
- Labor and Delivery Summary:
<http://wiki.ihe.net/index.php?title=1.3.6.1.4.1.19376.1.5.3.1.1.21.1.2>
- Maternal Discharge Summary:
<http://wiki.ihe.net/index.php?title=1.3.6.1.4.1.19376.1.5.3.1.1.21.1.3>
- Antepartum History and Physical:
<http://wiki.ihe.net/index.php?title=1.3.6.1.4.1.19376.1.5.3.1.1.16.1.1>

Table 2-3 IHE PCC LDR Table 6.2.x: LDR Folder Specifications

Document Name	Opt	Template ID
Labor and Delivery Admission History and Physical	R	1.3.6.1.4.1.19376.1.5.3.1.1.21.1.1
Labor and Delivery Summary	R	1.3.6.1.4.1.19376.1.5.3.1.1.21.1.2
Maternal Discharge Summary	R	1.3.6.1.4.1.19376.1.5.3.1.1.21.1.3
Antepartum History and Physical	C ¹	1.3.6.1.4.1.19376.1.5.3.1.1.16.1.1
Antepartum Summary	R2	1.3.6.1.4.1.19376.1.5.3.1.1.11.2
Antepartum Laboratory Report	R2	1.3.6.1.4.1.19376.1.5.3.1.1.16.1.2
Antepartum Education	R2	1.3.6.1.4.1.19376.1.5.3.1.1.16.1.3

¹LDHP should point to the Antepartum History and Physical Summary if this is available.

The text for the IHE PCC-TF example ends here.

2.3 STANDARDS

2.3.1 REGULATORY GUIDANCE

Table 2-4 Regulatory Guidance

Regulation	Description
No applicable regulatory guidance	

2.3.2 SELECTED STANDARDS

Table 2-5 Selected Standards

Standard	Description
Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2	The HL7 Clinical Document Architecture is an XML-based document markup standard that specifies the structure and semantics of clinical documents for the purpose of exchange. CDA is one instantiation of HL7's Version 3.0 Reference Information Model (RIM) into a specific message format. Of particular focus for HITSP Interoperability Specifications are message formats for Laboratory Results and Continuity of Care (CCD) documents. Release 2 of the HL7 Clinical Document Architecture (CDA) is an extension to the original CDA document markup standard that specifies the structure and semantics of clinical documents for the purpose of exchange. CDA R2 includes a prose document in HTML, XML schemas, data dictionary, and sample CDA documents. CDA R2 further builds upon other HL7 standards beyond just the Version 3.0 Reference Information Model (RIM) and incorporates Version 3.0 Data Structures, Vocabulary, and the XML Implementation Technology Specifications for Data Types and Structures. For more information visit www.hl7.org
Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC), Technical Framework Supplement, Labor and Delivery Record Trial Implementation Supplement, August 10, 2009	The IHE Patient Care Coordination Technical Framework (PCC TF) defines specific implementations (called Integration Profiles) of established standards to deal with integration issues that cross providers, patient problems or time. The Labor and Delivery Record (LDR) Supplement provides comprehensive information regarding the course of labor and delivery to healthcare providers caring for both the mother and the newborn in the postpartum period. For more information visit http://www.ihe.net/



2.3.3 INFORMATIVE REFERENCE STANDARDS

Table 2-6 Informative Reference Standards

Standard	Reason for Use
No applicable informative standard	



3.0 APPENDIX

The following sections include relevant materials referenced throughout this document:

Template Identifiers

See the relevant HL7 Implementation Guides and IHE Profiles for a complete listing of all other template identifiers that are required for declaring conformance to HITSP defined templates.

- 1.3.6.1.4.1.19376.1.5.3.1.1.21 HITSP/C161 Labor and Delivery Record



4.0 DOCUMENT UPDATES

This section provides the history of changes made to this document.

4.1 NOVEMBER 9, 2009

No changes. This is the first published version of the document.

4.2 JANUARY 18, 2010

Changes based upon Public Comments:

- 8070, 8748

The full text of the comments along with the Technical Committee's disposition can be reviewed on the [HITSP Public Web Site](#).

Changed the condition for Content Modules; Labor and Delivery, Newborn Delivery Information to "C" and Estimated Blood Loss to "R2"

Replaced the IHE OID with a HITSP OID for the Template identifier and added constraint to the HITSP OID

Added constraints C152-[CT1-34] and C152-[CT1-35] to clarify conformance to HITSP and IHE document template OIDs

Clarified text in Section 1.1 to note that LDR may be a continuation of the Antepartum Record

4.3 JANUARY 25, 2010

Upon approval by the HITSP Panel on January 25, 2010, this document is now Released for Implementation.

