Integrating the Healthcare Enterprise

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IHE Patient Care Coordination (PCC)

Technical Framework Supplement

**Labor and Delivery Profiles**

Public Comment

Date: June 01, 2010

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This page is standard language for all IHE supplements. The Introduction section following will list all other IHE documents that are modified by this supplement. This document is a supplement to the IHE Patient Care Coordination Technical Framework V5.0. The technical framework can be found at http://www.ihe.net/Technical\_Framework/index.cfm#pcc.

This and all IHE supplements are written as changes to a base document. The base document is normally one or more IHE Final Text documents. Supplements tell a technical editor and the reader how to modify the final text (additions, deletions, changes in wording). In order to understand this supplement, the reader needs to read and understand all of the base documents that are modified by this supplement.

In this supplement you will see “boxed” instructions similar to the following:

Replace Section X.X by the following:

These “boxed” instructions are for the author to indicate to the Volume Editor how to integrate the relevant section(s) into the overall Technical Framework.

This format means the reader has to integrate the base documents and the supplement. When the material in the supplement is considered ready for incorporation into the final text of the Technical Framework, the IHE committees will update the technical framework documents with the final text. Supplements are written in this format to avoid duplication material. This means that two IHE documents (one possibly final text, and the other a supplement) should not contain contradictory material.

Text in this document is not considered final for the Technical Framework. It becomes Final Text only after the IHE Patient Care Coordination Technical Committee ballots the supplement (after testing) and agrees that the material is ready for integration with the existing Technical Framework documents.

**It is submitted for Public Comment starting June 01, 2010.**

**Comments on this supplement may be submitted http://forums.rsna.org:**

1. Select the “IHE” forum
2. Select Patient Care Coordination Technical Framework
3. Select 2010 Supplements for Public Comment
4. Select Labor and Delivery Profiles

Please use the Public Comment Template provided there when starting your New Thread.

**Details about IHE may be found at:** www.ihe.net

**Details about the IHE Patient Care Coordination may be found at:** http://www.ihe.net/Domains/index.cfm

**Details about the structure of IHE Technical Frameworks and Supplements may be found at:** http://www.ihe.net/About/process.cfm and http://www.ihe.net/profiles/index.cfm

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## Introduction

This supplement is written for Public Comment. It is written as changes to the documents listed below. The reader should have already read and understood these documents:

1. [PCC Technical Framework Volume 1, Revision 5.0](http://www.ihe.net/Technical_Framework/index.cfm#PCC)
2. [PCC Technical Framework Volume 2, Revision 5.0](http://www.ihe.net/Technical_Framework/index.cfm#PCC)

This supplement also references other documents[[1]](#footnote-1). The reader should have already read and understood these documents:

1. [IT Infrastructure Technical Framework Volume 1, Revision 6.0](http://www.ihe.net/Technical_Framework/index.cfm#IT)
2. [IT Infrastructure Technical Framework Volume 2, Revision 6.0](http://www.ihe.net/Technical_Framework/index.cfm#IT)
3. [IT Infrastructure Technical Framework Volume 3, Revision 6.0](http://www.ihe.net/Technical_Framework/index.cfm#IT)
4. [The Patient Identifier Cross-Reference (PIX) and Patient Demographic Query (PDQ) HL7 v3 Supplement to the IT Infrastructure Technical Framework.](http://www.ihe.net/Technical_Framework/index.cfm#IT)
5. HL7 and other standards documents referenced in Volume 1 and Volume 2
6. Dilbert 2.0: 20 Years of Dilbert by Scott Adams, ISBN-10: 0740777351, ISBN-13: 978-0740777356

### How to read the Labor and Delivery Profiles supplement

This supplement contains 3 content profiles – Labor and Delivery History and Physical (LDHP), Labor and Delivery Summary (LDS), and Maternal Discharge Summary (MDS). Labor and Delivery Record (LDR) is no longer a profile as it has been subsumed by Perinatal Workflow (PW) profile.

Please see the below documents that will need to be referenced to fully understand the profiles in this supplement. Each document has a short description describing what is contained.

1. **Perinatal Workflow (PW):** makes use of the antepartum, labor and delivery, postpartum, and newborn delivery profiles (some are in this supplement and many are in other supplements).
2. **Content Modules Supplement:** This document contains all PCC Section Templates, Entry Templates, and Value Sets that are NOT in Final Text (that is, they are not in the Technical Framework Volume 2).
3. **PCC Technical Framework Volume 2, Revision 5.0 (published August 2008):** This contains all PCC Section Templates, Entry Templates and Value Sets (among other things) that ARE in Final Text.

### How to Access the Reference Material

To access Perinatal Workflow and Content Modules supplements refer to the same web page from which you accessed this supplement. In the event that has left your memory please follow these instructions:

* + Navigate to <http://www.ihe.net>
  + Click “Get Involved” on the top menu
  + Select “Public Comment”
  + Click the “Patient Care Coordination” link

To access the PCC Technical Framework Volume 2 Revision 5.0 follow this link: <http://www.ihe.net/Technical_Framework/upload/IHE_PCC_TF_50_Vol_2_2009-08-10.pdf>

## Open Issues and Questions

1. How should grouping be handled for sections that are reused from other profiles? For example several APHP sections are reused in LDHP and this should be called out somewhere, probably in the grouping section, but existing profiles use of the groupings section is not clear or consistent so a new table format should be explored. This could also be put in an appendix since it applies to several related profiles.
2. In sections X.7, Y.7, Z.7 (mappings to PCC Templates) the orgin of the groups of data elements needs to be called out to show that these data did in fact originate from some sort of standard or at the very least clinical consensus within PCC committee.

## Closed Issues

Volume 1 – Profiles

Add the following to section 1.1.5

### 1.1.5 Copyright Permissions

Add the following to section 2.5

## 2.5 Dependencies of the PCC Integration Profiles

|  |  |  |  |
| --- | --- | --- | --- |
| <Profile Name> | <?> | <?> | <-> |

Add the following to section 2.7

## 2.7 History of Annual Changes

Add Section X

# X Labor and Delivery History and Physical Content Profile (LDHP)

Labor and Delivery History and Physical is a content profile that defines the structure of the data that is often collected during the initial admission to the birthing facility. It includes, but is not limited to demographics, histories, allergies, physical examinations, vital signs, and care plans.

## X.1 Purpose and Scope

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 Summary 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.

## X.2 Process Flow

### X.2.1 Use Cases

Change referenced section numbering when merged into technical framework

For applicable use cases see Perinatal Workflow section X.2.1.

### X.2.2 Diagrams

Change referenced section numbering when merged into technical framework

For applicable diagrams see Perinatal Workflow section X.2.2.

## X.3 Actors/Transactions

There are two actors in this profile, the Content Creator and the Content Consumer. Content is created by a Content Creator and is to be consumed by a Content Consumer. The sharing or transmission of content from one actor to the other is addressed by the appropriate use of IHE profiles described below, and is out of scope of this profile. A Document Source or a Portable Media Creator may embody the Content Creator Actor. A Document Consumer, a Document Recipient, or a Portable Media Importer may embody the Content Consumer Actor. The sharing or transmission of content or updates from one actor to the other is addressed by the use of appropriate IHE profiles described in the section on Content Bindings with XDS, XDM and XDR. in PCC TF\_2:4.1



Figure X.3-1 Actor Diagram

### X.3.1 Requirements of Actors

## X.4 Options

Table X.4-1 Labor and Delivery History and Phyiscal Options

|  |  |  |
| --- | --- | --- |
| Actor | Option | Section |
| Content Consumer | View Option (See Note 1)  Document Import Option (See Note 1) Section Import Option (See Note 1) Discrete Data Import Option (See Note 1) | PCC TF-2: 3.0.1  PCC TF-2: 3.0.2 PCC TF-2: 3.0.3 PCC TF-2: 3.0.4 |
| Content Creator | No options defined |  |

Note 1: The Actor shall support at least one of these options.

## X.5 Groupings

Groupings are needed to represent which templates are required from other content profiles and will be added in future work.

## X.6 Security Considerations

## X.7 Content Modules

Table X.7‑ Labor and Delivery History and Physical Content Modules

| Datum | PCC Template Name | PCC Template Id |
| --- | --- | --- |
| Demographics | Header Modules  (See Note 1) | N/A |
| Chief Complaint | Chief Complaint  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1 |
| Patient Problems | Active Problems | 1.3.6.1.4.1.19376.1.5.3.1.3.6 |
| Pregnancy History | Pregnancy History  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4 |
| Medical History | History of Past Illness (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.8 |
| Medical History-Social (includes exposures) | Coded Social History  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.16.1 |
| Medical History – Tobacco, Alcohol, Drugs | Coded Social History  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.16.1 |
| Medical History – Relevant Family History | Coded Family Medical History  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.15 |
| Medications | Medications  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.19 |
| Allergies | Allergies and Other Adverse Reactions  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.13 |
| Menstrual History/Symptoms Since LMP | Review of Systems  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.18 |
| Genetic Screening/Teratology Counseling | Coded Family History Medical History  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.15 |
| Infection History | Coded History of Infection  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.1.16.2.1.1.1 |
| Initial Phyiscal Examination | Coded Physical Exam  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1 |
| Vital Signs | Coded Vital Signs  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2 |
|  |  |  |
| Surgical History | History of Surgical Procedures  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.1.16.2.2 |
| Prenatal Events | Prenatal Events | 1.3.6.1.4.1.19376.1.5.3..1.1.21.2.2 |
| Estimated Delivery Date | Estimated Delivery Date | 1.3.6.1.4.1.19376.1.5.3.1.1.11.2.2.1 |
| Care Plan | Care Plan | 1.3.6.1.4.1.19376.1.5.3.1.3.31 |
| Admission Medication History | Admission Medication History | 1.3.6.1.4.1.19376.1.5.3.1.3.20 |

Note 1: This template is part of Antepartum History and Physical

## X.8 References

This profile contains different summaries based on data elements collected from different forms originating from various organizations in the United States and Europe. The generic forms used to build this profile are:

* Demographic information about the mother, the father and the child
* General information about the family
* Admission Assessment for Labor and Delivery
* Transport Summary during pregnancy (if any)
* Antepartum Summary
* Labor & Delivery Summary (combined with the Newborn Birth Summary while in the birth room)
* Maternal Discharge Summary

These forms and data elements were collected with the assistance of the following organizations:

|  |  |
| --- | --- |
| ACOGAR | [American College of Obstretricians and Gynecologists (ACOG), Antepartum Record](http://www.acog.org) |
| AUDIPOG | [Association des Utilisateurs de Dossiers Informatisés en Périnatalogie, Obstétrique et Gynécologie](http://www.audipog.net/index.php?lang=en) |
| Dossier obstétrical | [Fédération suisse des sages-femmes 2008](http://www.hebamme.ch/fr/heb/shv/tools.cfm) |
| UHIN | Utah Health Information Network |
| IH | Intermountain Healthcare |

# Y Labor and Delivery Summary Content Profile (LDS)

Labor and Delivery Summary is a content profile that defines the structure of the data that is often collected during the labor and delivery period at the birthing facility. It includes, but is not limited to demographics, histories, allergies, physical examinations, vital signs, and newborn delivery information.

## Y.1 Purpose and Scope

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 Summary 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.

## Y.2 Process Flow

### Y.2.1 Use Cases

Change referenced section numbering when merged into technical framework

For applicable use cases see Perinatal Workflow section X.2.1.

### Y.2.2 Diagrams

Change referenced section numbering when merged into technical framework

For applicable diagrams see Perinatal Workflow section X.2.2.

## Y.3 Actors/Transactions

There are two actors in this profile, the Content Creator and the Content Consumer. Content is created by a Content Creator and is to be consumed by a Content Consumer. The sharing or transmission of content from one actor to the other is addressed by the appropriate use of IHE profiles described below, and is out of scope of this profile. A Document Source or a Portable Media Creator may embody the Content Creator Actor. A Document Consumer, a Document Recipient, or a Portable Media Importer may embody the Content Consumer Actor. The sharing or transmission of content or updates from one actor to the other is addressed by the use of appropriate IHE profiles described in the section on Content Bindings with XDS, XDM and XDR. in PCC TF\_2:4.1



Figure Y.3-1 Actor Diagram

### Y.3.1 Requirements of Actors

## Y.4 Options

Table Y.4-1 Labor and Delivery Summary Options

|  |  |  |
| --- | --- | --- |
| Actor | Option | Section |
| Content Consumer | View Option (See Note 1)  Document Import Option (See Note 1) Section Import Option (See Note 1) Discrete Data Import Option (See Note 1) | PCC TF-2: 3.0.1  PCC TF-2: 3.0.2 PCC TF-2: 3.0.3 PCC TF-2: 3.0.4 |
| Content Creator | No options defined |  |

Note 1: The Actor shall support at least one of these options.

## Y.5 Groupings

Groupings are needed to represent which templates are required from other content profiles and will be added in future work.

## Y.6 Security Considerations

## Y.7 Content Modules

Table Y.7‑ Labor and Delivery Summary Content Modules

| Data Element | PCC Template Name | PCC Template Id |
| --- | --- | --- |
| Demographics | Header Modules  (See Note 1) | N/A |
| Admitting Diagnosis | Hospital Admission Diagnosis | 1.3.6.1.4.1.19376.1.5.3.1.3.3 |
| Medications Patient Reports Having Taken Prior to Admission | Admission Medication History | 1.3.6.1.4.1.19376.1.5.3.1.3.20 |
| Chief Complaint | Chief Complaint | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1 |
| Arrival Mode | Transport Mode | 1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2 |
|  | Assessment and Plan | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.5 |
| Maternal and Fetal Labs | Coded Results | 1.3.6.1.4.1.19376.1.5.3.1.3.28 |
| ?High risk antepartum diagnoses here | History of Present Illness | 1.3.6.1.4.1.19376.1.5.3.1.3.4 |
| Past Medical History | History of Past Illness | 1.3.6.1.4.1.19376.1.5.3.1.3.8 |
| Advance Directives | Coded Advance Directives | 1.3.6.1.4.1.19376.1.5.3.1.3.35 |
| Patient’s Birth Plan | Birth Plan | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.1 |
| Allergies | Allergies and Other Adverse Reactions | 1.3.6.1.4.1.19376.1.5.3.1.3.13 |
| Maternal Physical Exam | Coded Physical Exam | 1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1 |
| Estimated Date of Delivery determined at admission | Estimated Delivery Date  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.1.11.2.2.1 |
| Anesthesia | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Other Medications | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Sedatives | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Tocolytics | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Oxytocin | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Antihypertensives | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Anticonvulsants/Antispasmodics | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Opiates (IM or IV) | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Antibiotics | Medications Administered | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |
| Type of IV fluids received | Intravenous Fluids Administered | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6 |
|  | History of Surgical Procedures | 1.3.6.1.4.1.19376.1.5.3.1.1.16.2.2 |
| Intake and Output (excludes estimated blood loss) | Intake and Output |  |
| Type of Labor | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Onset of Labor (Date and Time) | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Indication for Labor Induction | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Labor Induction Method | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Labor Augmentation Method | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
|  | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Labor Outcome | Labor and Delivery Events: Event Outcomes |  |
| Rupture of Membranes (Date/Time) | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Description of Amniotic Fluid (color and character) | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Amniotic Fluid Amount/Quantity | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Amniotic Fluid Odor | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Presence of Particulate Meconium | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Delivering Obstetric Care Provider | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Labor Complications | Problems |  |
| Episiotomy | Labor and Delivery Events: Procedures and Interventions |  |
| Laceration(s) | Problems |  |
|  | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Live Birth | Labor and Delivery Events: Event Outcome |  |
| Delivery Complications | Problems |  |
| Stillborn | Labor and Delivery Events: Event Outcome |  |
| Delivery Date and Time | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Placenta delivery date/time | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
|  |  |  |
| Weeks Gestation at time of Delivery | Labor and Delivery Events | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |
| Delivery Type | Labor and Delivery Events: Event Outcomes |  |
| Incision Type | Labor and Delivery Events: Procedures and Interventions |  |
| Operative Complications | Problems |  |
| Presentation of the fetus | Labor and Delivery Events |  |
| Birth Order | Labor and Delivery Events: Event Outcomes |  |
| Multiple Gestation | Labor and Delivery Events: Event Outcomes |  |
| Maternal Blood Loss | Estimated Blood Loss | 1.3.6.1.4.1.19376.1.5.3.1.1.9.2 |
|  |  |  |
| Biophysical Profile | Coded Antenatal Testing and Surveillance | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1 |
| Pain Assessment | Pain Assessment Panel |  |
| Contraction Stress Test | Coded Antenatal Testing and Surveillance | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1 |
| Non-Stress Test | Coded Antenatal Testing and Surveillance | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1 |
| Ultrasound | Coded Antenatal Testing and Surveillance | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1 |
| Gender/Sex of Baby | Newborn Delivery Information: Coded Physical Exam |  |
| Birthweight | Newborn Delivery Information: Coded Physical Exam |  |
| Length at Birth | Newborn Delivery Information: Coded Physical Exam |  |
| Occiput-Frontal Head Circumference | Newborn Delivery Information: Coded Physical Exam |  |
| Birth Date/Time | Newborn Delivery Information |  |
| Newborn Complications | Newborn Delivery Information: Problems |  |
| Stool | Intake and Output |  |
| First Void | Intake and Output |  |
| Gastric Output | Intake and Output |  |
| Cord Vessel Count | Newborn Delivery Information: Coded Physical Exam |  |
| Cord Gas(es) | Coded Results |  |
| Cord Blood for Type/Cross, Rh and Coomb’s Test | Coded Results |  |
| Eye Ointment | Newborn Delivery Information: Medications |  |
| Vitamin K Injection (Aquamypheton) | Newborn Delivery Information: Medications |  |
| Newborn Resuscitation | Newborn Delivery Information: Procedures and Interventions |  |
| Suction | Newborn Delivery Information: Procedures and Interventions |  |
| Gestational Age Assessment | Newborn Delivery Information: Physical Exam |  |
| Apgar Score Assessment (testing battery…how should we reflect this? (Tone, Heart Rate, Respiratory Effort, Color, Reflex/Grimace) | Newborn Delivery Information: Physical Exam |  |
| Temperature | Newborn Delivery Information: Physical Exam |  |
| Heart Rate | Newborn Delivery Information: Physical Exam |  |
| Respiratory Rate | Newborn Delivery Information: Physical Exam |  |

Note 1: This template is part of Labor and Delivery History and Physical

## Y.8 References

This profile contains different summaries based on data elements collected from different forms originating from various organizations in the United States and Europe. The generic forms used to build this profile are:

* Demographic information about the mother, the father and the child
* General information about the family
* Admission Assessment for Labor and Delivery
* Transport Summary during pregnancy (if any)
* Antepartum Summary
* Labor & Delivery Summary (combined with the Newborn Birth Summary while in the birth room)
* Maternal Discharge Summary

These forms and data elements were collected with the assistance of the following organizations:

|  |  |
| --- | --- |
| ACOGAR | [American College of Obstretricians and Gynecologists (ACOG), Antepartum Record](http://www.acog.org) |
| AUDIPOG | [Association des Utilisateurs de Dossiers Informatisés en Périnatalogie, Obstétrique et Gynécologie](http://www.audipog.net/index.php?lang=en) |
| Dossier obstétrical | [Fédération suisse des sages-femmes 2008](http://www.hebamme.ch/fr/heb/shv/tools.cfm) |
| UHIN | Utah Health Information Network |
| IH | Intermountain Healthcare |

# Z Maternal Discharge Summary Content Profile (MDS)

Maternal Discharge Summary is a content profile that defines the structure of the data that is often collected post delivery until discharge from the birthing facility. It includes, but is not limited to demographics, medications, laboratory results, newborn delivery information, patient education, and outcomes.

## Z.1 Purpose and Scope

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 Summary 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.

## Z.2 Process Flow

### Z.2.1 Use Cases

Change referenced section numbering when merged into technical framework

For applicable use cases see Perinatal Workflow section X.2.1.

### Z.2.2 Diagrams

Change referenced section numbering when merged into technical framework

For applicable diagrams see Perinatal Workflow section X.2.2.

## Z.3 Actors/Transactions

There are two actors in this profile, the Content Creator and the Content Consumer. Content is created by a Content Creator and is to be consumed by a Content Consumer. The sharing or transmission of content from one actor to the other is addressed by the appropriate use of IHE profiles described below, and is out of scope of this profile. A Document Source or a Portable Media Creator may embody the Content Creator Actor. A Document Consumer, a Document Recipient, or a Portable Media Importer may embody the Content Consumer Actor. The sharing or transmission of content or updates from one actor to the other is addressed by the use of appropriate IHE profiles described in the section on Content Bindings with XDS, XDM and XDR. in PCC TF\_2:4.1



Figure Z.3-1 Actor Diagram

### Z.3.1 Requirements of Actors

## Z.4 Options

Table Z.4-1 Maternal Discharge Summary Options

|  |  |  |
| --- | --- | --- |
| Actor | Option | Section |
| Content Consumer | View Option (See Note 1)  Document Import Option (See Note 1) Section Import Option (See Note 1) Discrete Data Import Option (See Note 1) | PCC TF-2: 3.0.1  PCC TF-2: 3.0.2 PCC TF-2: 3.0.3 PCC TF-2: 3.0.4 |
| Content Creator | No options defined |  |

Note 1: The Actor shall support at least one of these options.

## Z.5 Groupings

Groupings are needed to represent which templates are required from other content profiles and will be added in future work.

## Z.6 Security Considerations

## Z.7 Content Modules

Table Z.7‑ Maternal Discharge Summary Content Modules

| Data Element | PCC Template Name | PCC Template Id |
| --- | --- | --- |
| Demographics | Header Modules  (See Note 1) |  |
| Discharge Date/Time | Header Module | N/A |
| Assessment | Do we need an assessment section for MDS?? How about a vital signs section? |  |
| Admission Diagnosis | Hospital Admission Diagnosis | 1.3.6.1.4.1.19376.1.5.3.1.3.3 |
| Discharge Diagnosis | Discharge Diagnosis | 1.3.6.1.4.1.19376.1.5.3.1.3.7 |
| Discharge Disposition | Discharge Disposition | 1.3.6.1.4.1.19376.1.5.3.1.3.32 |
| Discharge Method | Transport Mode | 1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2 |
| Condition on Discharge | Discharge Status | Need Template ID and LOINC Code for this (Jean f/u with Susan) |
| Allergies | Allergies and Other Adverse Reactions | 1.3.6.1.4.1.19376.1.5.3.1.3.13 |
| Events during the hospitalization | Hospital Course | 1.3.6.1.4.1.19376.1.5.3.1.3.5 |
| Advance Directive | Coded Advance Directives  (See Note 1) | 1.3.6.1.4.1.19376.1.5.3.1.3.35 |
| Medications prescribed for the patient at discharge | Hospital Discharge Medications | 1.3.6.1.4.1.19376.1.5.3.1.3.22 |
| Imaging Reports | Coded Hospital Studies Summary | 1.3.6.1.4.1.19376.1.5.3.1.3.30 |
| Pain Assessment | Pain Assessment Panel | 1.3.6.1.4.1.19376.1.5.3.1.1.20.2.4 |
| Skin Assessment | Braden Score | 1.3.6.1.4.1.19376.1.5.3.1.1.12.2.3 |
| Post-Partum Complications | Active Problems | 1.3.6.1.4.1.19376.1.5.3.1.3.6 |
| Discharge Diet | Postpartum Hospitalization Treatment Discharge Diet |  |
| Hgb/Hct | Postpartum Treatment: Coded Results |  |
| Postpartum Tubal Ligation | Postpartum Treatment: Procedures and Interventions | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| Postpartum Procedures | Postpartum Treatment: Procedures and Interventions | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| Blood Transfusion(s) | Postpartum Treatment : Procedures and Interventions | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| Contraception Plan | Postpartum Treatment: Care Plan | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| Diagnostic Studies Pending | Post-partum Treatment: Care Plan | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| Feeding Method (baby) | Post-partum Treatment: Care Plan | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| Diagnostic Studies Pending | Post-partum Treatment: Care Plan | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| Follow-up Appointment | Post-partum Treatment: Care Plan | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| Immunizations Recommendations | Immunization Recommendations | 1.3.6.1.4.1.19376.1.5.3.1.1.18.3.1 |
| Immunizations Given | Post-partum Treatment: Immunizations | ~~1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7~~ |
| IV Fluids Received | Intravenous Fluids Administered | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6 |
| Blood loss after the immediate delivery time-frame | Estimated Blood Loss | 1.3.6.1.4.1.19376.1.5.3.1.1.9.2 |
| Number of blood transfusions (units) patient received | Transfusion History | 1.3.6.1.4.1.19376.1.5.3.1.1.9.12 |
| Teaching/Instructions Given | Patient Education | 1.3.6.1.4.1.19376.1.5.3.1.1.9.38 |
| Patient Verbalizes Understanding | Patient Education | 1.3.6.1.4.1.19376.1.5.3.1.1.9.38 |
| Delivery Type (e.g. vaginal, c-section,etc and type of incision if c-section | LDS Delivery Events: Event Outcomes | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.9 |
| Intimate Partner Violence Screening | Coded Social History | 1.3.6.1.4.1.19376.1.5.3.1.3.16.1 |
| Post-partum Depression Screening | Coded Social History | 1.3.6.1.4.1.19376.1.5.3.1.3.16.1 |
| Discharge Activity | Provider Orders | 1.3.6.1.4.1.19376.1.5.3.1.1.20.2.1 |
| Lactation Consultation | Consultations | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.8 |
| Name of Baby at Birth | NDS: Header Module | Required (Vol. 2) |
| Name of Baby at Discharge | NDS: Header Module | Required (Vol. 2) |
| Baby’s Unique IDENTIFIER | NDS: Header Module | Required (Vol. 2) |
| Baby’s Sex/Gender | LDS: Newborn Delivery Information | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.4 |
| Circumcision (if Male) | NDS: Procedures and Interventions | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11 |
| Birth Weight | LDS: Newborn Delivery Information | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.4 |
| Pediatrician’s Name | NDS: Care Plan | 1.3.6.1.4.1.19376.1.5.3.1.3.31 |
| Discharge Disposition(baby) | Newborn Status at Maternal Discharge | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.8 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Note 1: This template is part of Labor and Delivery Summary

## Z.8 References

This profile contains different summaries based on data elements collected from different forms originating from various organizations in the United States and Europe. The generic forms used to build this profile are:

* Demographic information about the mother, the father and the child
* General information about the family
* Admission Assessment for Labor and Delivery
* Transport Summary during pregnancy (if any)
* Antepartum Summary
* Labor & Delivery Summary (combined with the Newborn Birth Summary while in the birth room)
* Maternal Discharge Summary

These forms and data elements were collected with the assistance of the following organizations:

|  |  |
| --- | --- |
| ACOGAR | [American College of Obstretricians and Gynecologists (ACOG), Antepartum Record](http://www.acog.org) |
| AUDIPOG | [Association des Utilisateurs de Dossiers Informatisés en Périnatalogie, Obstétrique et Gynécologie](http://www.audipog.net/index.php?lang=en) |
| Dossier obstétrical | [Fédération suisse des sages-femmes 2008](http://www.hebamme.ch/fr/heb/shv/tools.cfm) |
| UHIN | Utah Health Information Network |
| IH | Intermountain Healthcare |

Volume 2 – Transactions and Content Modules

# 5.0 Namespaces and Vocabularies

|  |  |  |
| --- | --- | --- |
| codeSystem | codeSystemName | Description |
|  |  |  |

## 5.1 IHE Format Codes

|  |  |  |  |
| --- | --- | --- | --- |
| Profile | Format Code | Media Type | Template ID |
| Labor and Delivery History and Physical (LDHP) | urn:ihe:pcc:ldhp:2009 | text/xml | 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.1 |
| Labor and Delivery Summary (LDS) | urn:ihe:pcc:lds:2009 | text/xml | 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.2 |
| Maternal Discharge Summary (MDS) | urn:ihe:pcc:mds:2009 | text/xml | 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.3 |

# 6 PCC Content Modules

## 6.2 Folder Content Modules

See Perinatal Workflow section 6.2.L.

## 6.3 HL7 Version 3.0 Content Modules

### 6.3.1 CDA Document Content Modules

Add section 6.3.1.A

#### 6.3.1.A Labor and Delivery History and Physical 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.1

The Labor and Delivery History and Physical (LDHP) content profile represents the patient’s history and physical performed during admission to the birthing facility. The LDHP is a Medical Summary and inherits all header constraints from Medical Summary. It also uses parts of the Antepartum History and Physical where needed.

##### 6.3.1.A.1 Format Code

The XDSDocumentEntry format code for this content is **urn:ihe:pcc:ldhp:2009**

##### 6.3.1.A.2 LOINC Code

The LOINC code for this document is **57056-4** Labor and Delivery admission history and physical

##### 6.3.1.A.3 Standards

|  |  |
| --- | --- |
| CCD | ASTM/HL7 Continuity of Care Document |
| CDAR2 | [HL7 CDA Release 2.0](http://www.hl7.org/documentcenter/private/standards/cda/r2/cda_r2_normativewebedition.zip) |
| ACOG AR | [American College of Obstretricians and Gynecologists (ACOG), Antepartum Record](http://www.acog.org) |
| LOINC | [Logical Observation Identifiers, Names and Codes](http://www.regenstrief.org/medinformatics/loinc/) |
| SNOMED | [Systemized Nomenclature for Medicine](http://www.snomed.org) |
| CDTHP | [CDA for Common Document Types History and Physical Notes (DSTU)](http://www.hl7.org/dstucomments/index.cfm) |

##### 6.3.1.A.4 Specification

This section references content modules using Template ID as the key identifier. Definitions of the modules are found in either:

* IHE Patient Care Coordination Volume 2: Final Text
* IHE PCC Content Modules 2010-2011 Supplement

Table 6.3.1.A.4-1 Labor and Delivery History and Physical Specification

| Template Name | Opt | Section Template Id | Value Set Template Id |
| --- | --- | --- | --- |
| Chief Complaint  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1 | N/A |
| History of Present Illness  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.3.4 | N/A |
| History of Past Illness  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.3.8 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.5.1 |
| Coded History of Infection  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.1.16.2.1.1.1 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.5.6 |
| Pregnancy History  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4 | N/A |
| Coded [Social History](#_1.3.6.1.4.1.19376.1.5.3.1.3.16.htm)  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.3.16.1 | N/A |
| Coded Family Medical History  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.3.15 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.5.4 |
| Allergies and Other Adverse Reactions  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.3.13 | N/A |
| Review of Systems  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.3.18 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.5.5 |
| Coded Physical Exam  (See Note 1) | R | 1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1 | N/A |
| Vital Signs  (See Note 1) | C | 1.3.6.1.4.1.19376.1.5.3.1.3.25 | N/A |
| History of Surgical Procedures  (See Note 1) | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.2.2 | N/A |
| Labor and Delivery Events | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 | N/A |
| Newborn Delivery Information | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.4 | N/A |
| Estimated Blood Loss | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.9.2 | N/A |
| Coded Antenatal Testing and Surveillance | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1 | N/A |
| Pain Scale Assessment | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.12.2.2 | N/A |

Note 1: This template is part of Antepartum History and Physical and should be

##### 6.3.1.A.5 Conformance

CDA Release 2.0 documents that conform to the requirements of this content module shall indicate their conformance by the inclusion of the appropriate <templateId> elements in the header of the document. This is shown in the sample document below. A CDA Document may conform to more than one template. This content module inherits from the History and Physical content module, and so must conform to the requirements of that template as well, thus all <templateId> elements shown in the example below shall be included.

<ClinicalDocument xmlns='urn:hl7-org:v3'>

<typeId extension="POCD\_HD000040" root="2.16.840.1.113883.1.3"/>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.2'/><!--Medical Summary-->

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.16.1.4'/><!--History and Physical-->  
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.16.1.1'/><!--Antepartum History and Physical-->

 <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.1.1'/><!--Labor and Delivery History and Physical-->

<id root=' ' extension=' '/>

<code code='57056-4' displayName='Labor and delivery admission history and physical'

codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>

<title>Labor and Delivery Record History and Physical</title>

<effectiveTime value='20080601012005'/>

<confidentialityCode code='N' displayName='Normal'

codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />

<languageCode code='en-US'/>

 :

<component><structuredBody>

 <component>

<section>

<templateId root='[1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1](#_1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1.htm)'/>

<!-- Required Chief Complaint Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='[1.3.6.1.4.1.19376.1.5.3.1.3.4](#_1.3.6.1.4.1.19376.1.5.3.1.3.4.htm)'/>

<!-- Required History of Present Illness Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.8'/>

<!-- Required History of Past Illness Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.16.2.1.1.1'/>

<!-- Required Coded History of Infection Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4'/>

<!-- Required Pregnancy History Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.16.1'/>

<!-- Required Coded Social History Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.15'/>

<!-- Required Coded Family Medical History Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.13'/>

<!-- Required Allergies and Other Adverse Reactions Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.18'/>

<!-- Required Review of Systems Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1'/>

<!-- Required Coded Physical Exam Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.25'/>

<!-- Conditional Vital Signs Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.16.2.2'/>

<!-- Required if known History of Surgical Procedures Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3'/>

<!-- Required if known Labor and Delivery Events Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.4'/>

<!-- Required if known Newborn Delivery Information Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.9.2'/>

<!-- Required if known Estimated Blood Loss Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1'/>

<!-- Required if known Coded Antenatal Testing and Surveillance Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.12.2.2'/>

<!-- Required if known Pain Scale Assessment Section content -->

</section>

</component>  
 </strucuredBody></component>

</ClinicalDocument>

Figure .1.A.5‑1 Sample Labor and Delivery History and Physical Document

Add section 6.3.1.B

#### 6.3.1.B Labor and Delivery Summary 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.2

##### The Labor and Delivery Summary (LDS) content profile represents a summary of the most critical information concerning the labor and delivery care in a birthing facility. The LDS is a Medical Summary and inherits all header constraints from Medical Summary. It also uses parts of the Labor and Delivery History and Physical profile where needed.

##### 6.3.1.B.1 Format Code

The XDSDocumentEntry format code for this content is **urn:ihe:pcc:lds:2009**

##### 6.3.1.B.2 LOINC Code

The LOINC code for this document is **57057-2** Labor and delivery summary

##### 6.3.1.B.3 Standards

|  |  |
| --- | --- |
| CCD | ASTM/HL7 Continuity of Care Document |
| CDAR2 | [HL7 CDA Release 2.0](http://www.hl7.org/documentcenter/private/standards/cda/r2/cda_r2_normativewebedition.zip) |
| ACOG AR | [American College of Obstretricians and Gynecologists (ACOG), Antepartum Record](http://www.acog.org) |
| LOINC | [Logical Observation Identifiers, Names and Codes](http://www.regenstrief.org/medinformatics/loinc/) |
| SNOMED | [Systemized Nomenclature for Medicine](http://www.snomed.org) |
| CDTHP | [CDA for Common Document Types History and Physical Notes (DSTU)](http://www.hl7.org/dstucomments/index.cfm) |

##### 6.3.1.B.4 Specification

This section references content modules using Template ID as the key identifier. Definitions of the modules are found in either:

* IHE Patient Care Coordination Volume 2: Final Text
* IHE PCC Content Modules 2010-2011 Supplement

Table 6.3.1.B.4-1 Labor and Delivery Summary Specification

| Template Name | Opt | Section Template Id | Value Set Template Id |
| --- | --- | --- | --- |
| Hospital Admission Diagnosis  This section shall indicate the reasons for admitting the mother to the birthing facility (e.g. premature labor, ruptured membrane). | R | 1.3.6.1.4.1.19376.1.5.3.1.3.3 |  |
| Admission Medication History  This section should contain assessment of the mother’s pregnancy status and expectations for care including proposals, goals, and order requests for her condition and the birthing process. | R2 | 1.3.6.1.4.1.19376.1.5.3.1.3.20 |  |
| Chief Complaint | R | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1 |  |
| Transport Mode | R | 1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2 |  |
| Assessment and Plan | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.5 |  |
| Coded Results  Relevant laboratory results shall be recorded and the Antepartum Laboratory Value Set should be used to represent the results. | R | 1.3.6.1.4.1.19376.1.5.3.1.3.28 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.5.7 |
| History of Present Illness | R | 1.3.6.1.4.1.19376.1.5.3.1.3.4 |  |
| History of Past Illness  This section shall include clinically relevant information to the labor and delivery. This section should use the codes as specified in the Antepartum History and Physical History of Past Illness Value Set. | R | 1.3.6.1.4.1.19376.1.5.3.1.3.8 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.5.1 |
| Coded Advance Directives | R2 | 1.3.6.1.4.1.19376.1.5.3.1.3.35 |  |
| Birth Plan | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.1 |  |
| Allergies and Other Adverse Reactions  This section shall include one observation of Latex Allergy which may be negated through the negationInd attribute. Latex Allergy is particularly relevant for Obstetrics because of the frequency of vaginal exams that might involve the use of latex gloves. The observation value code for Latex Allergy is '300916003'. The codeSystem is '2.16.840.1.113883.6.96'. The codeSystemName is 'SNOMED CT' | R | 1.3.6.1.4.1.19376.1.5.3.1.3.13 |  |
| Coded Physical Exam | R | 1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1 |  |
| Estimated Delivery Date | R | 1.3.6.1.4.1.19376.1.5.3.1.1.11.2.2.1 |  |
| Medications Administered | R | 1.3.6.1.4.1.19376.1.5.3.1.3.21 |  |
| Intravenous Fluids Administered | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6 |  |
| History of Surgical Procedures | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.2.2 |  |
| Labor and Delivery Events | R | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3 |  |
| Newborn Delivery Information | R | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.4 |  |
| Estimated Blood Loss | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.9.2 |  |
| Coded Antenatal Testing and Surveillance | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1 |  |
| Pain Scale Assessment | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.12.2.2 |  |

##### 6.3.1.B.5 Conformance

CDA Release 2.0 documents that conform to the requirements of this content module shall indicate their conformance by the inclusion of the appropriate <templateId> elements in the header of the document. This is shown in the sample document below. A CDA Document may conform to more than one template. This content module inherits from the Medical Summary content module, and so must conform to the requirements of that template as well, thus all <templateId> elements shown in the example below shall be included.

<ClinicalDocument xmlns='urn:hl7-org:v3'>

<typeId extension="POCD\_HD000040" root="2.16.840.1.113883.1.3"/>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.2'/><!--Medical Summary-->  
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.1.2'/><!--Labor and Delivery Summary-->

<id root=' ' extension=' '/>

<code code='57057-2' displayName='Labor and delivery summary'

codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>

<title>Labor and Delivery Summary</title>

<effectiveTime value='20080601012005'/>

<confidentialityCode code='N' displayName='Normal'

codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />

<languageCode code='en-US'/>

 :

<component><structuredBody>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.3'/>

<!-- Required Hospital Admission Diagnosis Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.20'/>

<!-- Required if known Admission Medication History Section content -->

</section>

</component>

 <component>

<section>

<templateId root='[1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1](#_1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1.htm)'/>

<!-- Required Chief Complaint Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2'/>

<!-- Required Transport Mode Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.5'/>

<!-- Required if known Assessment and Plan Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.28'/>

<!-- Required Coded Results Section content -->

</section>

</component>

 <component>

<section>

<templateId root='[1.3.6.1.4.1.19376.1.5.3.1.3.4](#_1.3.6.1.4.1.19376.1.5.3.1.3.4.htm)'/>

<!-- Required History of Present Illness Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.8'/>

<!-- Required History of Past Illness Section content -->

</section>

</component>  
  <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.35'/>

<!-- Required if known Coded Advance Directives Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.1'/>

<!-- Required if known Birth Plan Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.13'/>

<!-- Required Allergies and Other Adverse Reactions Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1'/>

<!-- Required Coded Physical Exam Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.11.2.2.1'/>

<!-- Required Estimated Delivery Date Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.21'/>

<!-- Required Medications Administered Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6'/>

<!-- Required if known Intravenous Fluids Administered Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.16.2.2'/>

<!-- Required if known History of Surgical Procedures Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.3'/>

<!-- Required Labor and Delivery Events Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.4'/>

<!-- Required Newborn Delivery Information Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.9.2'/>

<!-- Required if known Estimated Blood Loss Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.5.1''/>

<!-- Required if known Coded Antenatal Testing and Surveillance Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.12.2.2'/>

<!-- Required if known Pain Scale Assessment Section content -->

</section>

</component>

</strucuredBody></component>

</ClinicalDocument>

Figure .1.B.5‑1 Sample Labor and Delivery Summary Document

Add section 6.3.1.C

#### 6.3.1.C Maternal Discharge Summary 1.3.6.1.4.1.19376.1.5.3.1.1.21.1.3

The Maternal Discharge Summary (MDS) content profile represents a snapshot of the patient’s postpartum stay until her discharge from the birthing facility. The MDS is a Medical Summary and inherits all header constraints from Medical Summary.

##### 6.3.1.C.1 Format Code

The XDSDocumentEntry format code for this content is **urn:ihe:pcc:mds:2009**

##### 6.3.1.C.2 LOINC Code

The LOINC code for this document is **57058-0** Labor and delivery summary

##### 6.3.1.C.3 Standards

|  |  |
| --- | --- |
| CCD | ASTM/HL7 Continuity of Care Document |
| CDAR2 | [HL7 CDA Release 2.0](http://www.hl7.org/documentcenter/private/standards/cda/r2/cda_r2_normativewebedition.zip) |
| ACOG AR | [American College of Obstretricians and Gynecologists (ACOG), Antepartum Record](http://www.acog.org) |
| LOINC | [Logical Observation Identifiers, Names and Codes](http://www.regenstrief.org/medinformatics/loinc/) |
| SNOMED | [Systemized Nomenclature for Medicine](http://www.snomed.org) |
| CDTHP | [CDA for Common Document Types History and Physical Notes (DSTU)](http://www.hl7.org/dstucomments/index.cfm) |

##### 6.3.1.C.4 Specification

This section references content modules using Template ID as the key identifier. Definitions of the modules are found in either:

* IHE Patient Care Coordination Volume 2: Final Text
* IHE PCC Content Modules 2010-2011 Supplement

Table 6.3.1.C.4-1 Maternal Discharge Summary Specification

| Template Name | Opt | Section Template Id | Value Set Template Id |
| --- | --- | --- | --- |
| Hospital Course | R | 1.3.6.1.4.1.19376.1.5.3.1.3.5 |  |
| Coded Advance Directives | R2 | 1.3.6.1.4.1.19376.1.5.3.1.3.35 |  |
| Discharge Diagnosis | R | 1.3.6.1.4.1.19376.1.5.3.1.3.7 |  |
| Hospital Discharge Medications | R | 1.3.6.1.4.1.19376.1.5.3.1.3.22 |  |
| Coded Results  Relevant laboratory results shall be recorded and the Antepartum Laboratory Value Set should be used to represent the results. | R | 1.3.6.1.4.1.19376.1.5.3.1.3.28 | 1.3.6.1.4.1.19376.1.5.3.1.1.16.5.7 |
| Coded Hospital Studies Summary | R | 1.3.6.1.4.1.19376.1.5.3.1.3.30 |  |
| Pain Scale Assessment | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.12.2.2 |  |
| Problems | R2 | 1.3.6.1.4.1.19376.1.5.3.1.3.6 |  |
| Braden Score | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.12.2.3 |  |
| History of Past Illness | R | 1.3.6.1.4.1.19376.1.5.3.1.3.8 |  |
| Postpartum Treatment | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7 |  |
| Intravenous Fluid Administered | R | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6 |  |
| Estimated Blood Loss | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.9.2 |  |
| Transfusion History | R | 1.3.6.1.4.1.19376.1.5.3.1.1.9.12 |  |
| Patient Education | R2 | 1.3.6.1.4.1.19376.1.5.3.1.1.9.38 |  |
| Newborn Status at Maternal Discharge | R | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.8 |  |
| Event Outcomes | R | 1.3.6.1.4.1.19376.1.5.3.1.1.21.2.9 |  |

##### 6.3.1.C.5 Conformance

CDA Release 2.0 documents that conform to the requirements of this content module shall indicate their conformance by the inclusion of the appropriate <templateId> elements in the header of the document. This is shown in the sample document below. A CDA Document may conform to more than one template. This content module inherits from the Medical Summary content module, and so must conform to the requirements of that template as well, thus all <templateId> elements shown in the example below shall be included.

<ClinicalDocument xmlns='urn:hl7-org:v3'>

<typeId extension="POCD\_HD000040" root="2.16.840.1.113883.1.3"/>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.2'/> <!--Medical Summary-->  
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.1.3'/> <!--Maternal Discharge Summary-->

<id root=' ' extension=' '/>

<code code='57058-0' displayName='Maternal discharge summary'

codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>

<title>Maternal Discharge Summary</title>

<effectiveTime value='20080601012005'/>

<confidentialityCode code='N' displayName='Normal'

codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />

<languageCode code='en-US'/>

 :

<component><structuredBody>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.5'/>

<!-- Required Hospital Course Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.35'/>

<!-- Required if known Coded Advance Directives Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.7'/>

<!-- Required Discharge Diagnosis Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.30'/>

<!-- Required Hospital Discharge Medications Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.28'/>

<!-- Required Coded Results Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.29'/>

<!-- Required Coded Hospital Studies Summary Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.12.2.2'/>

<!-- Required if known Pain Scale Assessment Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.6'/>

<!-- Required if known Problems Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.12.2.3'/>

<!-- Required if known Braden Score Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.8'/>

<!-- Required History of Past Illness Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.7'/>

<!-- Required if known Post-partum Treatment Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6'/>

<!-- Required Intravenous Fluid Administered Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.9.2'/>

<!-- Required if known Estimated Blood Loss Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.9.12'/>

<!-- Required Transfusion History Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.9.38'/>

<!-- Required if known Patient Education Section content -->

</section>

</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.8'/>

<!-- Required Newborn Status at Maternal Discharge Section content -->

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</component>

 <component>

<section>

<templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.21.2.9'/>

<!-- Required Event Outcomes Section content -->

</section>

</component>

</strucuredBody></component>

</ClinicalDocument>

Figure .1.C.5‑1 Sample Maternal Discharge Summary Document

1. The first three documents can be located on the IHE Website at <http://www.ihe.net/Technical_Framework/index.cfm#IT>. The remaining documents can be obtained from their respective publishers. [↑](#footnote-ref-1)