IHE Quality, Research and Public Health Technical Framework Supplement

Early Hearing Care Plan (EHCP)

Trial Implementation

Date: September 2, 2011
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Foreword

This is a supplement to the IHE Quality, Research and Public Health (QRPH) Trial Implementation Technical Framework. Each supplement undergoes a process of public comment and trial implementation before being incorporated into the volumes of the Technical Frameworks.

This supplement is submitted for Trial Implementation as of September 2, 2011 and will be available for testing at subsequent IHE Connectathons. The supplement may be amended based on the results of testing. Following successful testing it will be incorporated into the QRPH Final Text Technical Framework. Comments are invited and can be submitted at http://www.ihe.net/qrph/qrphcomments.cfm or by email to qrph@ihe.net.

This supplement describes changes to the existing technical framework documents and where indicated amends text by addition (bold underline) or removal (bold strikethrough), as well as addition of large new sections introduced by editor’s instructions to “add new text” or similar, which for readability are not bolded or underlined.

“Boxed” instructions like the sample below indicate to the Volume Editor how to integrate the relevant section(s) into the relevant Technical Framework volume:

Replace Section X.X by the following:

General information about IHE can be found at: www.ihe.net

Information about the IHE QRPH domain can be found at:
http://www.ihe.net/Domains/index.cfm

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

The current version of the IHE Technical Framework can be found at:
http://www.ihe.net/Technical_Framework/index.cfm
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<thead>
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<th></th>
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<th>6.3.3 CDA Section Content Modules</th>
<th>6.3.4 CDA Entry Content Modules</th>
<th>6.5 QRPH VALUE SETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>26</td>
<td>27</td>
<td>27</td>
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</tbody>
</table>

Introduction

This supplement is written for Trial Implementation. It is written as an addition to the Trial Implementation Quality, Research and Public Health Technical Framework.

This supplement also references the following documents. The reader SHOULD review these documents as needed:

1. PCC Technical Framework, Volume 1
2. PCC Technical Framework, Volume 2
3. PCC Technical Framework Supplement: CDA Content Modules
4. IT Infrastructure Technical Framework Volume 1
5. IT Infrastructure Technical Framework Volume 2
6. IT Infrastructure Technical Framework Volume 3
7. HL7 and other standards documents referenced in Volume 1 and Volume 2

The Early Hearing Care Plan (EHCP) Profile describes the content needed to communicate care plan instructions to properly manage the detection and intervention of hearing loss in newborns and young children. The care plan includes clinical content pertinent to early hearing detection and intervention (EHDI) including such content as screening results, risk indicators for hearing loss, interventions, and most importantly care plan instructions for management of the patient.

Profile Abstract

Hearing loss identified following newborn hearing screening (NHS) is considered a neuro-developmental emergency. Thus, hearing screening has received widespread acceptance by public health in the United States (US), England, Scotland and Australia. Pilot projects are underway world-wide. Yet nearly 50% of infants needing care following screening may not receive it. Pediatric Primary Care Providers (PCPs) do not have ready access to guidance on clinical and diagnostic information to assist care coordination for the infant with suspected hearing loss.

Clinical electronic health record systems (EHR-Ss) and public health Early Hearing Detection and Intervention (EHDI) information systems (EHDI-IS) are seldom interoperable and do not share information electronically.

Early Hearing Detection and Intervention (EHDI) is a United States-based (US) public health program that directs hospitals to screen newborns for hearing loss prior to hospital discharge. Internationally, the term used is Newborn Hearing Screening (NHS). While hospital screening is

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1 The first six documents are located on the IHE Website at http://www.ihe.net/Technical_Framework/index.cfm. The remaining documents can be obtained from their respective publishers.
generally completed on well over 95% of births, nearly 50% of infants needing care following newborn hearing screening may not receive it. Screening results are not consistently communicated to primary care providers (PCP) by hospitals. Primary care providers do not have ready access to guidance on clinical and diagnostic information to assist care coordination for the infant with suspected hearing loss. Thus, too many infants with suspected hearing loss remain at risk for the cognitive and language delays and social and emotional isolation that can occur in the child with late-diagnosed hearing loss.

The EHCP profile, will describe an Early Hearing Care Plan (EHCP), based on CDA-R2 whose content creator is the public health jurisdiction responsible for screening and whose content consumers are pediatric primary care physicians (PCP). In the complete embodiment of the EHCP, information obtained by the PCP will be returned to the public health jurisdiction. In the United States, this is typically the State EHDI program. The EHCP will provide best practice hearing guidance to PCPs on next steps and actions that must be initiated for each newborn following discharge from the hospital nursery. The EHCP will provide guidance for infants who pass screening, those who do not pass screening, those whose screening is not conducted and those whose results may be complicated by the presence of risk factors for delayed onset, progressive or incident-based hearing loss. This content profile will describe how the EHCP is to be implemented and the actions to be taken by providers following receipt of the care plan from the EHDI program.

The long term impact of undetected hearing loss can only be eliminated through a comprehensive approach as defined by the EHCP profile.

The EHCP profile will assist detection, documentation of and intervention for hearing loss advocated by professional organizations through an Early Hearing Care Plan (EHCP) made available to all authorized providers of care as jurisdictionally directed by the Public Health EHDI program.

Open Issues and Questions

1. Should the Risk Indicators for Hearing Loss Entry be expressed as a Battery or as a repeatable simple observation?

2. Clarify ownership of the EHCP updates once initial plan is delivered from EHDI-IS.

3. Add unknown as a LOINC® code to mean no one asked about risk indicators for hearing loss or other method to indicate that the risk indicators for hearing loss are unknown.

4. Further review regarding representing not performing the screening using LOINC Answer codes for reasons not performed vs. modeling in the CDA as ‘INT’ with ‘NEG’. NOTE: if the screen was not performed then there would be no results returned to hold this value except for the value: LA12408-3 Attempted, but unsuccessful - technical fail

5. PCC needs to resolve the problem with the Care Plan section. Currently they have the same section documented in two places in the PCC TF: 6.3.3.6.1 and 6.3.3.6.15
6. The Technical Committee recognizes that there are still open issues regarding the clarity of the level 3 entry specifications. This profile will be subject to level 2 testing only, which means that content consumers cannot be guaranteed to have level 3 content that can be consumed for semantic interoperability purposes. These issues will be resolved before the profile goes to final text and will remain in trial implementation until validation requirements are met.

Closed Issues

1. Need a CP to the Content Module Supplement to add an optional Hearing Loss Assessments Battery. Created a new OID and section for Hearing Loss Assessments that contains the hearing loss assessments battery.

What is the origin of the Data Elements specified?

The Data Elements in the EHCP profile are taken from the following sources:

- 2009 IHE QRPH NBS White Paper²
- US HITSP NBS Interoperability Specification (IS 92)³
- NLM Constructing Newborn Screening HL7 Messages⁴ and
- NLM HL7 NBS Example⁵


1.7 History of Annual Changes

Add the following bullet to the end of the bullet list in section 1.7:

- In the 2009-2010 cycle of the IHE QRPH initiative, the first Early Hearing Care Plan was developed as part of a broader integration profile: Early Hearing Detection and Intervention.

- In the 2010-2011 cycle of the IHE QRPH initiative, the Early Hearing Care Plan (EHCP) was extracted from the 2009-2010 broader integration profile: Early Hearing Detection and Intervention to create the EHCP profile and published for public comment as a discrete content profile designed to communicate care plan expectations from public health to care providers for an individual patient based upon hearing screening results and risk indicators for hearing loss.

1.n Copyright Permission

Add the following to sections 1.n:

2.1 Dependencies among Profiles

Add the following to Table 2-1

<table>
<thead>
<tr>
<th>EHCP</th>
<th>NONE</th>
<th>NONE</th>
<th>NONE</th>
</tr>
</thead>
</table>

Add the following section to section 2.2.X

2.2.X Early Hearing Care Plan (EHCP) Integration Profile

Add Section X
**X Early Hearing Care Plan (EHCP) Profile**

**X.1 EHCP Actors/Transactions**

Figure X.1-1 shows the actors in the EHCP profile and the relevant transactions between them. The Shared Content transactions (Refer to PCC Vol. 2 for detailed specifications) are not required for this profile. Specifications for the transport mechanism to be used by the Content Creator to transmit the content document are outside of the scope of this profile.

![Figure X.1-1. EHCP Actor Diagram](image)

Table X.1-1 lists the transactions for each actor directly involved in the EHCP Profile. In order to claim support of the EHCP profile, an implementation SHALL perform the required transactions (labeled “R”). Transactions labeled “O” are optional. A complete list of options defined by the EHCP profile and that implementations MAY choose to support is listed in Volume 1, Section X.2.

<table>
<thead>
<tr>
<th>Actors</th>
<th>Transactions</th>
<th>Optionality</th>
<th>Section in Vol. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Creator</td>
<td>NONE</td>
<td>R</td>
<td>Z.1</td>
</tr>
<tr>
<td>Content Consumer</td>
<td>NONE</td>
<td>R</td>
<td>Z.1</td>
</tr>
</tbody>
</table>

**X.1.1 Actor Descriptions and Requirements**

**X.1.1.1 Content Creator**

The Content Creator Actor SHALL be responsible for the creation of content and transmission of the Early Hearing Care Plan (EHCP) to a Content Consumer.

**X.1.1.2 Content Consumer**

A Content Consumer Actor is responsible for viewing, importing, or other processing options for EHCP content created by an EHCP Content Creator Actor.
X.1.2 Document Content Modules

X.1.2.1 Early Hearing Care Plan

All Early Hearing Care Plans SHALL be structured and coded as required by the Early Hearing Care Plan Content Module described in QRPH TF-2:6.3.1.A.

The Public Health Early Hearing Care Plan (EHCP) contains the information relevant to management of the EHDI process as defined by the jurisdiction Public Health Authority. This includes:

**Risk Indicators for Hearing Loss**

The risk indicators for hearing loss are identified in this section through, review of systems, family/social history, and/or physical examination details, as well as any necessary assessments of functional status or risks to the patient.

**Active Problems**

The active problems section includes any diagnoses based on assessments, diagnostic results, and other information received from other providers. This is a list of conditions associated with the newborn that will inform the assessment of risk (e.g., baby has atretic ear, birth defect).

**Physical Exam**

Physical Exam section SHOULD include aspects of the physical exam related to hearing screening or risk indicators for hearing loss.

**Review of Systems**

The review of systems section contains a narrative description of the responses the patient gave to a set of routine questions on the functions of each anatomic body system.

**Care Plan**

Planning describes the appointments, referrals, treatments, diagnostic orders, and interventions necessary to conform to the jurisdiction public health authority directed guidelines under the plan. This includes resources to perform these procedures (e.g. JCIH statement URL), task lists, and instructions to the provider for follow-up care expressed as jurisdictionally defined free-text, and possibly coded values if available.

**Procedures and Interventions**

This section documents that hearing screening procedure was performed. If the procedure is not performed, the reason is indicated.

**Hearing Screening Coded Results**

The Hearing Screening Coded Results section SHALL contain a narrative (free-text) description of the patient’s relevant studies (e.g., hearing screening results) as well as the hearing screening method. This section is required. Where the screening results are not available, the reason the results are not available SHALL be present.
X.2 EHCP Options

Options that may be selected for the EHCP profile are listed in table X.2-1 along with the Actors to which they apply. Dependencies between options when applicable are specified in notes.

Table X.2-1. EHCP- Actors and Options

<table>
<thead>
<tr>
<th>Actor</th>
<th>Options</th>
<th>Volume &amp; Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Consumer</td>
<td>View Option (See Note 1)</td>
<td>PCC TF-2: 3.1.1</td>
</tr>
<tr>
<td></td>
<td>Document Import Option (See Note 1)</td>
<td>PCC TF-2: 3.1.2</td>
</tr>
<tr>
<td></td>
<td>Section Import Option (See Note 1)</td>
<td>PCC TF-2: 3.1.3</td>
</tr>
<tr>
<td></td>
<td>Discrete Data Import Option (See Note 1)</td>
<td>PCC TF-2: 3.1.4</td>
</tr>
<tr>
<td>Content Creator</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

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

X.3 EHCP Actor Groupings and Profile Interactions

X.3.1 Cross Enterprise Document Sharing, Media Interchange and Reliable Messages

Actors from the ITI XDS, XDR and XDM profiles embody the Content Creator and Content Consumer sharing function of the EHCP profile. An EHCP Content Creator or Content Consumer SHOULD be grouped with an XDS or XDR Document Source profile or with an XDM Portable Media Creator.

An EHCP Content Consumer SHOULD be grouped with an XDS Document Consumer, an XDR Document Recipient, or with XDM Portable Media. Appropriate actors from the XDS, XDR or XDM profiles, and the metadata sent in the document sharing or interchange messages have specific relationships (which we call bindings) to the content of the clinical document described in this content profile. Requirements for EHCP Binding to XDS, XDR and XDM are specified in QRPH TF-2: 3.2.

X.3.2 Content Bindings with XDS, XDR and XDM

It is envisioned that the care plan will be disseminated in an environment where the physician offices and hospitals have a coordinated infrastructure that serves the information sharing needs of this community of care. Several mechanisms are supported by IHE profiles:

- A registry/repository-based infrastructure is defined by the IHE Cross Enterprise Document Sharing (XDS) and other IHE Integration Profiles such as patient identification (PIX & PDQ), notification of availability of documents (NAV), and Document Metadata Subscription (DSUB).
- A reliable messaging-based infrastructure is defined by the IHE Cross Enterprise Document Reliable Interchange (XDR) profile.
• A media-based infrastructure is defined by the IHE Cross Enterprise Document Media Interchange (XDM) profile.

• All of these infrastructures support Security and privacy through the use of the Consistent Time (CT) and Audit Trail and Node Authentication (ATNA) profiles.

For more details on these profiles, see the IHE IT Infrastructure Technical Framework. Content profiles MAY impose additional requirements on the transactions used when grouped with actors from other IHE profiles.

**X.3.3 Notification of Document Availability (NAV)**

A Document Source SHOULD provide the capability to issue a Send Notification Transaction per the ITI Notification of Document Availability (NAV) Integration Profile in order to notify one or more Document Consumer(s) of the availability of one or more documents (EHCP) for retrieval. One of the Acknowledgement Request options MAY be used to request from a Document Consumer that an acknowledgement SHOULD be returned when it has received and processed the notification. A Document Consumer SHOULD provide the capability to receive a Receive Notification Transaction per the NAV Integration Profile in order to be notified by Document Sources of the availability of one or more documents (EHCP) for retrieval. The Send Acknowledgement option MAY be used to issue a Send Acknowledgement to a Document Source that the notification was received and processed. NAV MAY be used to notify a clinician that an Early Hearing Care Plan has been provided by public health.

**X.3.4 Document Digital Signature (DSG)**

When a Content Creator Actor needs to digitally sign a document in a submission set, it MAY support the Digital Signature (DSG) Content Profile as a Document Source. When a Content Consumer Actor needs to verify a Digital Signature, it MAY retrieve the digital signature document and MAY perform the verification against the signed document content. DSG MAY be used to assert the authoritative source of the care plan as public health.

**X.3.5 Shared Value Set (SVS)**

A Content Creator Actor and Content Consumer Actor MAY support the Shared Value Set (SVS) Integration Profile to receive a common, uniform nomenclature managed. The Value subsets supporting the EHCP profile are described in the appendix of this document. SVS MAY be used to provide the EHCP related value sets provided in QRPH TF2:6.5.

**X.3.6 Document Metadata Subscription (DSUB)**

The Document Metadata Subscription (DSUB) describes the use of subscriptions within an XDS Affinity Domain or across communities. A Document Metadata Subscriber MAY subscribe on behalf of the Document Metadata Notification Recipient to receive notifications about the availability of documents based on specific criteria. A Document Metadata Notification Broker keeps track of the subscriptions and sends the appropriate notifications based on the registration of objects in an XDS Document Registry. Subscriptions exist for a certain period of time and can
be cancelled. A provider or public health authority MAY utilize DSUB to subscribe to EHCPs and EHCP updates.

Public health and Providers MAY leverage DSUB to be notified that a new Care Plan is available. The Content Consumer MAY implement a Notification recipient, and Subscriber in this Binding. DSUB MAY be used to allow the newborn’s pediatrician to subscribe to the EHCP.

**X.4 EHCP Process Flow**

**X.4.1 Use Cases**

At a newborn/infant’s first well-child check, the PCP reviews the Early Hearing Care Plan received from Public Health to determine the next hearing care steps for each child. These steps for the PCP always include a review of screening results and known risk indicators for hearing loss with the family. An assessment of additional risk indicators for hearing loss is also completed by the PCP. Based on results and risk indicators for hearing loss, the PCP is provided best practice guidance to follow that includes referrals for additional screening or diagnostic audiology and for ongoing hearing health care.

1. Public health creates a care plan for a child to make this available to the providers

**X.4.2 Process Flow**
This process flow diagram shows the envisioned movement of the Early Hearing Care Plan and informing the primary care provider.

NOTE: this transaction is not required

Figure X.4.2-1. Basic Process Flow in EHCP Profile

X.5 EHCP Security Considerations

X.5.1 Basic Patient Privacy Consents (BPPC)

The Basic Patient Privacy Consents (BPPC) profile provides a mechanism to record the patient privacy consent(s), a method to mark documents with the patient privacy consent that was used to authorize the publication, and a method for document consumers to enforce the privacy consent appropriate to the use. Parental consents associated with the hearing screening workflow SHOULD be captured and communicated using BPPC, and these SHOULD be included in the EHCP metadata.
X.5.2 Document Digital Signature (DSG)

The Document Digital Signature (DSG) profile provides a mechanism to assure non-repudiation of origin for a given document. The EHCP MAY be used where required by jurisdiction policy.
Volume 3 – Content Modules

Add to section 5
5 Namespaces and Vocabularies

Add the following rows the QRPH TF-2:5.0 Namespaces and Vocabularies

<table>
<thead>
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<th>codeSystem</th>
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<tr>
<td>NA</td>
<td></td>
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5.1.1 IHE Format Codes

Add the following rows the QRPH TF-2:5.1.1 IHE Format Codes

<table>
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<tr>
<th>Profile</th>
<th>Format Code</th>
<th>Media Type</th>
<th>Template ID</th>
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<tr>
<td>EHCP</td>
<td>urn:ihe:qrph:ehcp:2010</td>
<td>Text/XML</td>
<td>1.3.6.1.4.1.19376.1.7.3.1.1.15.4.1</td>
</tr>
</tbody>
</table>
6 QRPH Content Modules

6.2 Folder Content Modules

Add section 6.2.Y

6.2.Y Use of Folders

The Early Hearing Care Plan (EHCP) MAY be submitted with the newborn blood spot screening results.

6.3 HL7 Version 3.0 Content Modules

Add section 6.3.1.A

6.3.1 CDA Document Content Modules

6.3.1.A Early Hearing Care Plan (EHCP) Specification

1.3.6.1.4.1.19376.1.7.3.1.1.15.4.1

6.3.1.A.1 LOINC® Code

The LOINC® code for this document is Otorhinolaryngology Evaluation and management note - 34817-7 indicating a Hearing Screening Evaluation and Management Note.

6.3.1.A.2 Parent Template

This document is an instance of the Medical Document (1.3.6.1.4.1.19376.1.5.3.1.1) template. An additional parent template is level 2 CDA conformance (2.16.840.1.113883.10.20.20).

6.3.1.A.3 Standards

<table>
<thead>
<tr>
<th>CDAR2</th>
<th>HL7 CDA Release 2.0</th>
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</thead>
<tbody>
<tr>
<td>LOINC®</td>
<td>Logical Observation Identifiers, Names and Codes</td>
</tr>
<tr>
<td>SNOMED</td>
<td>Systemized Nomenclature for Medicine</td>
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</tbody>
</table>

6.3.1.A.4 Specification

Table 6.3.1.A.4-1. EHCP Document Section Specification

<table>
<thead>
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<th>Section Template ID / Location</th>
<th>Mandatory Inclusion Flag</th>
<th>Conformance</th>
<th>Cardinality</th>
<th>Further Constraints</th>
<th>Vol. 2 Location</th>
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<td>Risk indicators for hearing loss</td>
<td>1.3.6.1.4.1.19376.1.7.3.1.1.15.3.1</td>
<td>M</td>
<td>R</td>
<td>[1..1]</td>
<td>The observation values: ClinicalDocument/component/structured</td>
<td>PCC CDA 6.3.3.2.58</td>
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<td>Further Constraints</td>
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<td>-----------------</td>
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<tr>
<td>Active Problems</td>
<td>1.3.6.1.4.1.19 376.1.5.3.1.3.6 IHE PCC 2:6.3.3.2.3</td>
<td>R</td>
<td>[1..1]</td>
<td></td>
<td>Body/component/section[templateId[@root='1.3.6.1.4.1.1937 6.1.7.3.1.15.3.1']]/entry/organizer[@classCode='BATTERY']/component/observation/value SHALL be constrained to those coded values and descriptions described by the JCIH-EHDI Risk Indicators for Hearing Loss (LOINC®) Value Set Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.24).</td>
<td>PCC CDA Content Modules:6.3.3.1.10</td>
</tr>
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<td>Physical Examination</td>
<td>1.3.6.1.4.1.19 376.1.5.3.1.1.9.15 IHE PCC 2:6.3.3.4.1</td>
<td>R</td>
<td></td>
<td></td>
<td>The active problem values: ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.1937 6.1.5.3.1.3.6']]/entry/act/entryRelationship/observation/value SHALL be coded using value sets: JCIH-EHDI Risk Indicators for Hearing Loss Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.11) OR JCIH-EHDI Newborn Hearing Screening Abnormal Results Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.23)</td>
<td></td>
</tr>
<tr>
<td>Template Name</td>
<td>Section Template ID / Location</td>
<td>Mandatory Inclusion Flag</td>
<td>Conformance</td>
<td>Cardinality</td>
<td>Further Constraints</td>
<td>Vol. 2 Location</td>
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<td>--------------------------</td>
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<tr>
<td>Review of Systems</td>
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<td></td>
<td>R</td>
<td></td>
<td>The review of systems section SHALL be present when a review of systems is performed during the assessment of the patient.</td>
<td></td>
</tr>
<tr>
<td>Coded Care Plan</td>
<td>1.3.6.1.4.1.19 376.1.5.3.1.3.31 IHE PCC 6.3.3.6.15</td>
<td>M</td>
<td>R</td>
<td></td>
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</tr>
<tr>
<td>Coded Care Plan</td>
<td>The care plan section contains a description of the care requirements.</td>
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<tr>
<td>Procedures and Interventions</td>
<td>1.3.6.1.4.1.19 376.1.5.3.1.1.13.2.11 PCC TF Supplement CDA Content Modules (TI) Vol 2: 6.3.3.8.3</td>
<td>M</td>
<td>R</td>
<td></td>
<td>If Hearing Screening Procedures have been performed then the procedure codes: ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11']]/entry/procedure/code SHALL be documented using a procedure code from the value set: JCIH-EHDI Hearing Screen Left Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.8) JCIH-EHDI Hearing Screen Right Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.9) JCIH-EHDI Newborn Hearing Procedure Value Set) 1.3.6.1.4.1.19376.1.7.3.1.1.15.2.17 Where hearing screening is not performed the intent to perform this procedure SHALL be documented using</td>
<td></td>
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<tr>
<td>Template Name</td>
<td>Section Template ID / Location</td>
<td>Mandatory Inclusion Flag</td>
<td>Conformance</td>
<td>Cardinality</td>
<td>Further Constraints</td>
<td>Vol. 2 Location</td>
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<td>ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11']] /entry/procedure[@moodCode=INT.CR]/[@negationInd]/code AND SHALL use codes from value sets: JCIH-EHDI Hearing Screen Left Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.8) JCIH-EHDI Hearing Screen Right Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.9) JCIH-EHDI Newborn Hearing Procedure Value Set) 1.3.6.1.4.1.19376.1.7.3.1.1.15.2.17) AND the Reason the procedure was not performed SHALL be documented as ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11']] /entry/procedure/sourceof[@typeCode='RSON']/observation/value/ AND SHALL use codes from value sets: Joint Commission Medical Reason Value Set (1.3.6.1.4.1.33895.1.3.0.75) or</td>
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<td>Template Name</td>
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<td>Mandatory Inclusion Flag</td>
<td>Conformance</td>
<td>Cardinality</td>
<td>Further Constraints</td>
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<td>JCIH-EHDI Procedure Declined Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.20)</td>
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<td>JCIH-EHDI Reason for no Hearing Loss Diagnosis or Screening Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.15)</td>
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<td>Procedures that MAY contribute to risk indicators for hearing loss SHALL be documented using ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11'']/entry/procedure/code Using a procedure code from the value set: JCIH-EHDI Risk Indicators for Hearing Loss - Procedures Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.12)</td>
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<td>Procedures that have been performed that refer the patient for follow-up care for hearing loss SHALL be documented using ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11'']/entry/procedure/code Using a procedure code from the value set: JCIH-EHDI</td>
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<td>Template Name</td>
<td>Section Template ID / Location</td>
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<td>Cardinality</td>
<td>Further Constraints</td>
<td>Vol. 2 Location</td>
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<td>Newborn Hearing Loss Referrals Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.16)</td>
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<td></td>
<td>Where hearing referral cannot be obtained, this SHALL be documented using ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.1.13.2.11']] /entry/procedure[@moodCode=INT.CR]/[@negationInd]/code And SHALL use codes from value sets: JCIH-EHDI Newborn Hearing Loss Referrals Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.16) And the Reason documented as ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.1.13.2.11']] /entry/procedure/sourceOf[@typeCode='RSON']/observation/value/ SHALL use value sets: JCIH-EHDI Newborn Hearing Loss Reason for no Follow-up Patient Reason (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.7) Joint Commission Medical Reason</td>
<td></td>
</tr>
<tr>
<td>Template Name</td>
<td>Section Template ID / Location</td>
<td>Mandatory Inclusion Flag</td>
<td>Conformance</td>
<td>Cardinality</td>
<td>Further Constraints</td>
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</tbody>
</table>
| Hearing Screening Coded Results   | 1.3.6.1.4.1.19 376.1.7.3.1.1.15.3.2 | M                        | R           |             | SHALL include The method of hearing screening recorded in ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.1.15.3.2'])/entry/act/entryRelations/observation/methodCode
AND SHALL and using a coded value drawn from:
Newborn Hearing Screening Method Value Set (1.3.6.1.4.1.19376.1.7.3.1.1.15.2.4)
The Hearing Screening Procedure for left and right ear screening SHALL be recorded in ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.1937 6.1.5.3.1.3.28'])/entry/act/entryRelations/observation/code and SHALL use a coded value drawn

Vol. 2 Location: PCC CDA 6.3.3.5.11
<table>
<thead>
<tr>
<th>Template Name</th>
<th>Section Template ID / Location</th>
<th>Mandatory Inclusion Flag</th>
<th>Conformance</th>
<th>Cardinality</th>
<th>Further Constraints</th>
<th>Vol. 2 Location</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

from:
JCIH-EHDI Hearing Screen Left Value Set
(1.3.6.1.4.1.19376.1.7.3.1.1.15.2.8)
JCIH-EHDI Hearing Screen Right Value Set
(1.3.6.1.4.1.19376.1.7.3.1.1.15.2.9)
JCIH-EHDI Newborn Hearing Procedure Value Set
1.3.6.1.4.1.19376.1.7.3.1.1.15.2.17
The Hearing Screening Results SHALL be recorded in
ClinicalDocument/component/structured Body/component/section[templateId[@root='1.3.6.1.4.1.1937 6.1.5.3.1.3.28']]/entry/act/entryRelationship/observation/value using a coded value drawn from :
JCIH-EHDI Evidence of Hearing Screening Performed
(1.3.6.1.4.1.19376.1.7.3.1.1.15.2.18)
JCIH-EHDI Inpatient Screening Results not Performed Value Set
(1.3.6.1.4.1.19376.1.7.3.1.1.15.2.10)

6.3.1.A.5 Conformance

CDA Release 2.0 documents that conform to the requirements of this content module inherits from the CCD SHALL indicate their conformance by the inclusion of the appropriate 2.16.840.1.113883.10.20.1 elements in the header of the document.

A sample of the EHCP document is available at:
ftp://ftp.ihe.net/TF_Implementation_Material/QRPH/EHCP/EHCP20110725.txt
6.3.2 CDA Header Content Modules

Add section 6.3.2.B

6.3.2.A EHCP Header Content Module

Table 6.3.2.A-1 lists CDA header Sections required for the EHCP document. Table 6.3.1.A-2 is the specification for sections in the Header attribute requirements.

Person Information

Demographics associated with the child that pertains to the jurisdiction EHDI guidelines. This content MAY include a Case Identifier. The demographics for EHDI SHALL contain those required for support of pediatrics and are detailed below. This is covered in the CDA Header and does not require a separate content module.

NOTE: there are jurisdictional variations on the disclosure of newborn demographic information.

Table 6.3.2.A-1. Header Sections for EHCP Document

<table>
<thead>
<tr>
<th>Data Element Name</th>
<th>Opt</th>
<th>Template ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Info</td>
<td>R</td>
<td>1.3.6.1.4.1.19376.1.5.3.1.1.1</td>
</tr>
<tr>
<td>Languages Communication</td>
<td>R</td>
<td>1.3.6.1.4.1.19376.1.5.3.1.2.1</td>
</tr>
<tr>
<td>Employer and School Contacts</td>
<td>R</td>
<td>1.3.6.1.4.1.19376.1.5.3.1.2.2</td>
</tr>
<tr>
<td>Healthcare Providers and Pharmacies</td>
<td>R</td>
<td>1.3.6.1.4.1.19376.1.5.3.1.2.3</td>
</tr>
<tr>
<td>Patient Contacts</td>
<td>R</td>
<td>1.3.6.1.4.1.19376.1.5.3.1.2.4</td>
</tr>
</tbody>
</table>

Table 6.3.2.A-2. Header Attributes for EHCP Document

<table>
<thead>
<tr>
<th>Personal Info: Header Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Addr</td>
</tr>
<tr>
<td>Contact</td>
</tr>
<tr>
<td>Race</td>
</tr>
<tr>
<td>Ethnicity</td>
</tr>
<tr>
<td>Religious</td>
</tr>
<tr>
<td>Patient Identifier List</td>
</tr>
<tr>
<td>Mother’s Maiden Name</td>
</tr>
<tr>
<td>Patient Home Telephone</td>
</tr>
<tr>
<td>Patient Multiple Birth Indicator</td>
</tr>
<tr>
<td>Patient Birth Order</td>
</tr>
<tr>
<td>Date/Time of Birth</td>
</tr>
<tr>
<td>Administrative Sex</td>
</tr>
</tbody>
</table>
6.3.3 CDA Section Content Modules

See either the PCC Technical Framework Volume 2 or the PCC CDA Content Modules Supplement for Section Content Module definitions.

6.3.4 CDA Entry Content Modules

See either the PCC Technical Framework Volume 2 or the PCC CDA Content Modules Supplement for Entry Content Module definitions.

6.5 QRPH Value Sets

See either the PCC Technical Framework Volume 2 or the PCC CDA Content Modules Supplement for Value Sets.