Content Specifications for the Authorized Release of Information to a Trusted Entity Use Case
Version 2.0 7/24/2008

1 Use Case Name: Authorized Release of Information to a Trusted Entity

2 Use Case Work Group: Provider Perspective

3 Use Case-Core Content Work Group Team:

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4 Use Case Description

This use case describes the process for a third party to make a request to external Health Information Exchanges (HIEs) for the release of patient health summary information for purposes other than treatment, payment or operations, such as SSA's determination of disability. Unlike requests for medical records for healthcare delivery or payment, these requests need explicit authorizations from the patients as per HIPAA. When requesting the information, the third party includes this authorization from the patient with the request. Once the source of information receives this request, the authorization is verified and medical records are sent back to the requestor.

5 HITSP Constructs

This Use Case is not an AHIC (NeHC) use case, therefore an AHIC/HITSP ISxx construct was not developed specifically for this use case exchange process. However, this use case is an example of a patient health summary exchange and thus is closely related to the HITSP IS04-Emergency Responder Electronic Health Record (ER-EHR) and the C32-Patient Health Summary Document. In the same way the HITSP C32-Patient Health Summary document was used as a basis for the NHIN Specification for the Exchange of the Summary Patient Record with modifications and extensions, the NHIN C32-Patient Health Summary Record was used as basis for these use case content specifications with additional modifications and extensions. This specification will need to be integrated into the HITSP specifications as a new construct or into an existing construct. It is preferable to integrate this specification into C32 for broader adoption and application.

6 Rationale for NHIN C32 Format Modifications and Extensions

Except for Medical Equipment, Progress Notes, Discharge Summary and Operative Reports; all the other use case-specific data elements were easily accommodated in the NHIN C32 format. In the case of Tests Conducted, they were already part of the NHIN C32 via the Results content module, however, the use case requires that the tests for which the results ***are not*** available are also returned as part of the medical record in the Procedure content module, as documented in later sections of this specification.

The Medical Equipment information was incorporated through the addition of a new content module. The Medical Equipment content module is not specified in the NHIN C32 patient health summary record; however, it is part of the CCD specifications. The CCD definitions and value sets were then maintained for this module and its data elements in the NHIN C32. Since data elements pertaining to medical equipment are a highly-used aspect of electronic medical records, they were marked as R2 for the purposes of this implementation.

The Core Content-Use Case Team consulted with HITSP representatives (Bob Yencha), Interoperability Standards experts (Keith Boone), Core Content Workgroup members, and SSA CCD experts, and identified two solutions for handling the three types of notes (i.e.: Progress Notes, Discharge Summary and Operative Reports) in the exchange of the NHIN C32:

1. Request separate documents for each of the notes
2. Include these in the same document (Summary of Care) in appropriate modules as reference elements.

These two solutions were evaluated by considering their compliance with applicable standards (e.g. HL7, CCD, and CDA R2) as well as their impacts to the requesting and responding entities. This evaluation led to the determination that Solution #2, which includes these data elements as part of the same document, was a better approach than Solution #1, which involves requesting new documents for each of the notes for the patient. It is not uncommon for any person to have a long medical record with numerous progress notes, discharge summaries and multiple operative reports. With Solution #1, the requestor would be required to request each of these documents separately. This approach is less practical than receiving all the information in a single consolidated document. Solution #2 also provides an effective way to connect each of the notes to a specific encounter (for progress notes and discharge summary) or a specific procedure (for operative reports). Moreover, the second solution is fully compliant with the CCD specifications.

It is recognized that Solution #2 is not part of the HITSP C32 or the NHIN C32 specifications. However, since the use case is not addressed by HITSP, it gives the NHIN trial implementation an opportunity to not only highlight a gap, but also propose a practical solution to be considered by the standards organizations and HITSP.

7 NHIN C32 Content Modifications and Extensions **for the Use Case**

It was determined that the NHIN Cooperative's C32-Patient Health Summary Record will satisfy the data exchange process described in the use case with the following types of modifications:

- Additional content modules
- Additional data elements to existing and new content modules
- Relaxation of data element terminologies (i.e.: value sets)
- Tightening of content module optionality
- Extension of Vital Sign, Result, Encounter, and Procedure content scope

The additional content modules and data elements are represented the HL7 Continuity of Care Document (CCD) and are available for the NHIN Cooperative's C32 content specification.

7.1 Additions to the NHIN Cooperative's C32 Content Modules

The Authorized Release of Information to a Trusted Entity Use Case requires additional data. As a result, the content specifications shall extend the NHIN Cooperative's C32 content modules (required and optional) with the following:

Table 8.1.A-Existing Content Modules with Additional Data Elements

Existing Content Modules	Additional Data Elements
Procedure	
	Procedure Date
	Procedure Code

Table 8.1.B-NewContent Modules with New Data Elements

New Content Modules	New Data Elements
Medical Equipment	
	Medical Equipment Code
	Medical Equipment Name

8 Requirements for the Optionality and Use of Value Sets for the Use Case Modifications

The Authorized Release of Information to a Trusted Entity Use Case requires adjustments to the optionality of existing NHIN C32 content modules and data elements, as well as to the value sets of some data elements. The use case also requires identifying the optionality of the new content module, data elements, and the necessary data element value sets:

- Section 9.1 shall address the optionality and use of value sets for the data elements in existing NHIN C32 content modules.
- Section 9.2 shall address the optionality and use of value sets for the data elements in the new content modules added for the use case exchange.

8.1 Requirements for the Optionality of Existing Content Modules

The Authorized Release of Information to a Trusted Entity use case shall alter the optionality of the content modules in the NHIN Cooperative's C32 Patient Health as follows:

Table 9.1.A- Optionality of Existing Content Modules

Existing NHIN C32 Content Modules	NHIN C32 Opt/Repeat	Use Case Opt/Repeat
#1-Person Information	**R/N**	**R/N**
#2-Language Spoken	**R2/Y**	**O/Y**
#3-Support	**R/Y**	**R2/Y**
#4-Healthcare Provider	**O/Y**	**R2/Y**
#5-Insurance Provider	**O/Y**	**O/Y**
#6-Allergy/Drug Sensitivities	**R/Y**	**R2/Y**
#7-Conditions	**R/Y**	**R2/Y**
#8-Medications	**R/Y**	**R2/Y**
#9-Pregnancy	**O/N**	**O/N**
#10-Information Source	**R/N**	**R/N**
#11-Comment	**O/Y**	**O/Y**
#12-Advanced Directive	**O/Y**	**O/Y**
#13-Immunizations	**O/Y**	**O/Y**
#14-Vital Sign	**O/Y**	**R2/Y**
#15-Results	**O/Y**	**R2/Y**
#16-Encounter	**O/Y**	**R2/Y**
#17-Procedure	**O/Y**	**R2/Y**

The use case has relaxed the optionality on the Language content module, from R2 to O, because this content is generally not critical. The use case has tightened the optionality on several other content modules (O to R2) because this content is desired for many different purposes including the benefits determination process and may impact outcomes and/or reduce follow-up procedures.

8.1.1 Requirements for Optionality of Existing Data Elements in Existing Content Module(s)

The Authorized Release of Information to a Trusted Entity use case shall allow the optionality on the following NHIN Cooperative's C32 Patient Health Summary data elements to be relaxed:

Table 9.1.1A- Optionality of Existing Data Elements in Existing Content Modules

Existing Content Modules	NHIN C32 Opt/Repeat	Use Case Opt/Repeat
Support	***R/Y***	***R/Y***
Date	R/N	R2/N
Contact Type	R/N	R2/N
Contact Name	R/N	R2/N

The use case has relaxed the optionality on the Support module's data elements, from R to R2.

8.1.2 Requirements for the Optionality of New Data Elements in Existing Content Modules

The optionality of the additional data elements, within the existing content modules, needed for the use case exchange is defined below:

Table 9.1.2A- Optionality of New Data Elements in Existing Content Modules

Existing Content Modules	UC Opt/Repeat	New Data Elements
Procedure	*R2/Y*	
	R2/N	Procedure Date
	R2/N	Procedure Code

The use case has defined the optionality of the additional data elements in the Procedure module as R2/N because this content is desired for many different purposes including the benefits determination process and may impact outcomes and/or reduce follow-up procedures.

8.1.3 Requirements for Use of Value Sets for Existing Data Elements in Existing Content Modules

The Authorized Release of Information to a Trusted Entity use case shall allow the defined value sets on the following NHIN Cooperative's C32 Patient Health Summary data elements to be relaxed and allow for a wider range of value sets:

Table98.1.3A- Value Sets for Existing Data Elements in Existing Content Modules

Existing Data Elements	NHIN C32 Value Set	Use Case Value Set
Condition		
Problem Code	cda:value OID=2.16.840.1.113883.6.96 (SNOMED CT)	SNOMED CT ICD9 ICD10

The use case has extended the value sets on the Problem Code.

8.1.4 Requirements for the Use of Value Sets for New Data Elements in Existing Content Modules

A. Procedure Code: The use case shall comply with the HL7 CCD recommendation for the coded description of Procedure Code (CONF-434).

Table 9.1.4A- Value Sets for New Data Elements in Existing Content Modules

Existing Content Modules	New Data Elements	Use Case Value Set
Procedure		
	Procedure Code	The value for "[Act | Observation | Procedure] / code" in a procedure activity SHOULD be selected from LOINC (codeSystem 2.16.840.1.113883.6.1) or SNOMED CT (codeSystem 2.16.840.1.113883.6.96), and MAY be selected from CPT-4 (codeSystem 2.16.840.1.113883.6.12), ICD9 Procedures (codeSystem 2.16.840.1.113883.6.104), ICD10 Procedure Coding System (codeSystem 2.16.840.1.113883.6.4).

8.1.5 Requirements for the Content Scope of Results Content Module

The Authorized Release of Information to a Trusted Entity use case shall further describe the content scope for the Results content module. This use case aims to receive the following types of medical data, if known by the Provider, in the Results content module:

- **Tests Conducted:** All tests conducted for the patient that have results should be provided in the Results content module. All tests conducted for the patient that do not have results should be provided in the Procedure content module.
- **Body Mass Index (BMI):** The calculated BMI from height and weight values should be represented in the Results content module with Result Type of 41909-3 Body Mass Index (LOINC).
- **APGAR :** Should be represented in the Results content module with the following Result Types (LOINC):
    - 32401-2: Color 10M Post Birth
    - 32402-0: Heart Rate 10M Post Birth
    - 32403-8: Muscle Tone 10M Post Birth
    - 32404-6: Reflex Irritability 10M Post Birth
    - 32405-3: Respiratory Effort 10M Post Birth
    - ----------
    - 32406-1: Color 1M Post Birth
    - 32407-9: Heart Rate 1M Post Birth
    - 32408-7: Muscle Tone 1M Post Birth
    - 32409-5: Reflex Irritability 1M Post Birth
    - 32410-3: Respiratory Effort 1M Post Birth
    - ----------
    - 32411-1: Color 5M Post Birth
    - 32412-9: Heart Rate 5M Post Birth
    - 32413-7: Muscle Tone 5M Post Birth
    - 32414-5: Reflex Irritability 5M Post Birth
    - 32415-2: Respiratory Effort 5M Post Birth
    - ----------
    - 48332-1: Apgar Panel 10M Post Birth
    - 48333-9: Apgar Panel 5M Post Birth
    - 48334-7: Apgar Panel 1M Post Birth
    - ----------
    - 9271-8: Score 10M Post Birth
    - 9274-2: Score 5M Post Birth
    - 9272-6: Score 1M Post Birth

8.1.6 Requirements for the Content Scope of Vital Sign Content Module

The Authorized Release of Information to a Trusted Entity use case shall further describe the content scope for the Vital Sign content module. This use case aims to receive the following types of medical data, if known by the Provider, in the Vital Signs content module:

- **Weight Charts:** Should be represented in the Results content module with Result Type of 3141-9 Body Weight(measured) (LOINC). Weight charts are expected to be a series of body weight results for a set of dates.

8.1.7 Requirements for the Content Scope of Encounter Content Module

The Authorized Release of Information to a Trusted Entity use case shall further describe the content scope for the Encounter content module. This use aims to receive the following types of medical data, if known by the Provider, in the Encounter content module:

- Progress Notes (R2 optionality)
- Discharge Summary (R2 optionality)

The Progress Note and Discharge Summary shall be represented using the CCD reference elements within the Encounter content module. The reference elements support a reference code (LOINC) and a reference text, and shall be structured as follows:

Encounter Module	Progress Notes	Discharge Summary
Reference Code (LOINC)	• 34130-5 (inpatient progress note) • 34131-3 (outpatient progress note)	• 11490-0 (discharge summary – physician):
Reference Text *(Example Text)*	• Patient is responding to physical therapy. • Patient is making progress.	• The patient is all better and has been discharged. • Patient returning home and will continue weekly physical therapy.

The reference elements may be repeated, as needed, within the Encounter module to accommodate multiple Progress Notes and/or Discharge Summaries.

Refer to **Appendix A-Examples of Coding the Reference Elements for the Encounter Module.**

8.1.8 Requirements for the Content Scope of Procedure Content Module

The Authorized Release of Information to a Trusted Entity use case shall further describe the content scope for the Procedure content module. This use case aims to receive the following types of medical data, if known by the Provider, in the Procedure content module:

- Operative Report (R2 optionality)

The Operative Report shall be represented using the CCD reference elements within the Procedure content module. The reference elements support a reference code (LOINC) and a reference text, and shall be structured as follows:

Procedure Module	Operative Report
Reference Code (LOINC)	• 11504-8(LOINC surgical operation note)
Reference Text *(Example Text)*	• Patient had tonsils removed. • Patient had no complications post-surgery.

The reference elements may be repeated, as needed, within the Procedure module to accommodate multiple Operative Reports.

9.2 Requirements for the Optionality of New Content Module(s)

The optionality of the additional content module needed for the use case exchange is defined below:

Table 9.2A-Optionality of New Content Module

New NHIN C32 Content Modules	NHIN C32 Opt/Repeat	Use Case Opt/Repeat
#18-Medical Equipment	**------**	**R2/Y**

9.2.1 Requirements for the Optionality of New Data Elements in the New Content Module(s)

The optionality of the additional data elements, within the new content module, needed for the use case exchange is defined below:

Table 9.2.1A-New Content Module(s) with New Data Elements

New Content Modules	Opt/ Repeat	New Data Elements
Medical Equipment	*R2/Y*	
	R2/N	Medical Equipment Code
	R2/N	Medical Equipment Name

9.2.2 Requirements for the Use of Value Sets for the New Data Elements in the New Content Module(s)

A. Medical Equipment Code: The use case shall accept the HCPC Codes from the CPT-4 code set (2.16.840.1.113883.6.12).

10 Value for "Purpose of Use" in Query for Document and Retrieve Document Requests

The NHIN Authorization Framework Specification describes how a responding HIE shall determine whether a request from an initiating HIE can be authorized and satisfied based upon a combination of factors. One of the factors is the user assertions, and one of the specific user assertions is Purpose of Use. For this use case, the inter-HIE requests initiating from SSA will use the value "Benefits Determination" for the Purpose of Use. The policy component of a responding HIE would need to accommodate this user assertion. This is noted because it differs from the more familiar value of "Treatment" used for Purpose of Use by most other HIEs.

11 Specification Attachment – Data Element Spreadsheet

Please refer to the "AROI UC" tab of the NHIN_CoreContentSpecifcation.xls spreadsheet for the additional data elements covered in this narrative specification.

Appendix A. Examples of Coding the Reference Elements for the Encounter Module

```
          <!--Discharge Summary - - - - -->
          <reference typeCode="SUBJ">
            <externalDocument>
              <!--Unique Document ID-->
              <id root="fedh12573-999-567hrxx9-ty344464999" />
              <!--Progress Note Code-->
              <code code="34130-5" displayName="Progress Note (Inpatient)"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
              <!--Text of Progress Note-->
              <text> Patient is responding to physical therapy.</text>
            </externalDocument>
          </reference>
          <!--Progress Note - - - - -->
          <reference typeCode="SUBJ">
            <externalDocument>
              <!--Unique Document ID-->
              <id root="fedh12573-999-567hrxx9-ty399995g2" />
              <!--Discharge Summary Code-->
              <code code="11490-0" displayName="Discharge Summary"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
              <!--Text of Discharge Summary-->
              <text>The patient is all better and has been discharged. </text>
            </externalDocument>
          </reference>
```

Revision History

Version	Date	Revision Description	Author
1.7	7/9/2008	Document submitted to ONC.	Addy, Naik, Martin Prahl, Omar Bouahddou, Marie Swall
1.8	7/24/2008	Table 9.1.A- Optionality of Existing Content Modules : • Corrected Repeatable values to 'N' for Person Information, Pregnancy, and Information Source modules.	Marie Swall