Integrating the Healthcare Enterprise

5

IHE Quality, Research and Public Health Technical Framework Supplement

10

Newborn Admission Notification Information (NANI)

15 # Trial Implementation

20

Date: August 27, 2012

Author: IHE QRPH Technical Committee

25 Email: qrph@ihe.ent

Foreword

This is a supplement to the IHE Quality, Research and Public Health (QRPH) Technical
Framework V0.1. Each supplement undergoes a process of public comment and trial
30   implementation before being incorporated into the volumes of the Technical Frameworks.

This supplement is published for Trial Implementation on August 27, 2012 and may 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 Technical
Framework. Comments are invited and may be submitted at
35   http://www.ihe.net/qrph/qrphcomments.cfm.

 "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:

40

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:
45   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

50

CONTENTS

100

105

110

115

120

125

130

Introduction to this Supplement

135   The NANI Profile describes the content needed to communicate a timely newborn admission notification to public health to be used by Early Hearing Detection and Intervention (EHDI) screening programs. This profile will be used as part of the EHDI Group of profiles. This profile includes material that describes the motivation for the EHDI group of profiles.

A Newborn Admission Notification Information (NANI) profile can optimize and standardize
140   the transfer of basic patient admission data on a newborn to a public health EHDI program, eliminating the time and cost of manual data entry. Automating the delivery of these basic data will reduce the errors currently producing a challenge to state programs providing services and evaluating quality of care delivered.

This supplement is written for Trial Implementation. It is written as an addition to the Quality,
145   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

150   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

155

Open Issues and Questions

1. Apart from NANIFeed [QRPH-34], the transaction between Admission Information Source and Newborn Admission Notification Manager may also support PIX Feed V3 [ITI-44]. Is PAM also an option?

160   2. We might need a change proposal to PIX to add new data elements.

3. Figure out what is "Newborn Record Filter". Is it out of scope or should it be specified in this profile?

4. Future scope may include update messages to provide public health with additional demographic information on a newborn.

Closed Issues

1. Consent related issues jurisdictionally determined and, therefore, are out of scope. (For additional information about IHE consent related work, see ITI Framework).

2. Currently the content of the transaction between Newborn Admission Notification Manager and Newborn Admission Notification Subscriber is based on HL7 V3 Patient Administration. However this could be CDA based as Public Health Reporting is moving to CDS. It could be V2 based but both are out of scope for this version.

3. What is the IHE way of specifying how the Newborn Admission Notification Manager can support different content/transactions? For example – ADT, CDA etc. – The IHE way to do this would be to use options on the actors. You might have to make one option required and others optional.

4. This profile based on jurisdictional rules MAY require pseudonymization to protect individual patient privacy. Based on the discussion at the face-to-face meeting, we decided that this is a use case we do not want to solve in this profile just yet. This topic may be re-evaluated in future versions.

5. Is the role of manager restricted to public health? The NANI manager actor role can be performed by the hospital/birthing facility, HIE or public health.

6. Is it possible to generalize the profile with actors such as Admission Information Source, Admission Notification Manager and Admission Notification Subscriber and then implement the "Newborn" criteria as options on these actors? – YES – should be considered for future development of this profile.

Volume 1 – Profiles

190 ## Copyright Permission

Add the following to the IHE Technical Frameworks General Introduction Copyright section:

NA

X Newborn Admission Notification Information (NANI) Summary Profile

Hearing loss identified following newborn hearing screening 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. Projects are also underway worldwide, including Mexico, India and South America.

Currently, public health EHDI, programs for newborn hearing screening do not have a consistent and reliable method to obtain a timely notification of a newborn admission by a hospital or birthing facility; thus complicating the task of assuring that all eligible newborns are screened for hearing loss prior to hospital discharge. Regardless of how a hospital submits newborn hearing screening results to a State hearing-screening program, critical information is often, incomplete, inaccurate, late, or missing entirely. This has the potential to impact the delivery of early hearing care for an individual child and may lead to high loss to follow-up. It impacts a program's quality and jeopardizes the goal of providing all children screening by one month, diagnosis by 3 months and intervention before 6 months. These are collectively known as the CDC 1, 3, 6 National Early Hearing Detection and Intervention (EHDI) Goals.

The NANI Profile describes the content needed to communicate a timely notification of birth to public health to be used by Early Hearing Detection and Intervention (EHDI) screening programs. This profile will be used as part of the EHDI Group of profiles. This profile includes material that describes the motivation for the EHDI group of profiles.

A Newborn Admission Notification Information (NANI) profile can optimize and standardize the transfer of basic patient admission data on a newborn to a public health EHDI program, eliminating the time and cost of manual data entry. Automating the delivery of these basic data will reduce the errors currently producing a challenge to state programs providing services and evaluating quality of care delivered.

We anticipate in the future that the NANI Profile could be used by other Child Health programs. The purpose of the NANI profile is to provide accurate data on the number of newborn hospital admissions within the jurisdiction. These data are then used as a denominator to evaluate the effectiveness of Public Health program interventions. In the case of EHDI this means determining the number of newborns accurately screened who received follow-up services. It could be used to examine similar effectiveness regarding administering immunizations or assessing the number of newborns receiving bloodspot screening, etc.

The approach used by NANI could be implemented for other Public Health programs including Child Health Programs, Communicable Diseases, Chronic Diseases and others. In these programs, the population would differ but data would be similar in many respects.

Prior Work

In the 2009-2010 cycle of the IHE QRPH initiative, the first Newborn Admission Notification was included as a component of the broader Early Hearing Detection and Intervention

integration profile. The Early Hearing Care Plan was also 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.

Similarly in the 2011-2012 cycle of the IHE QRPH initiative, the NANI Profile is extracted from
the 2009-2010 broader integration profile and is presented here for public comment as a discrete
content profile designed to communicate Admission Information from hospitals' EHRs to public
health in order to improve the timeliness and accuracy of the birth cohort information to public
health.

X.1 NANI Actors, Transactions, and Content Modules

Figure X.1-1 shows the actors directly involved in the NANI Profile and the relevant transactions
between them.

There are three actors in this profile, the Newborn Admission Notification Manager, Admission
Information Source and Newborn Admission Notification Subscriber. Newborn Admission
Notification Content is created by an Admission Information Source and is consumed by a
Newborn Admission Notification Subscriber. The Newborn Admission Notification Manager
acts as a manager to send relevant Content to the Newborn Admission Notification Subscriber.

An Admission Information Source delivers the Content to a Newborn Admission Notification
Manager using a transport mechanism that is not defined by this profile. Similarly the Newborn
Admission Notification Manager delivers the Content to the Newborn Admission Notification
Subscriber using a mechanism not defined by this profile. It is possible to use any of the
transport mechanisms defined by the IHE PIX profiles or by some other mechanism supported
by the Actors.

The two transactions defined in this profile constrain and extend transactions previously defined
in the ITI Technical Framework. NANIFeed (QRPH-34) is related to Patient Identity Feed (ITI-8) and NANIPublish (QRPH-35) is related to the Patient Identity Feed HL7 V3 transaction (ITI-44).
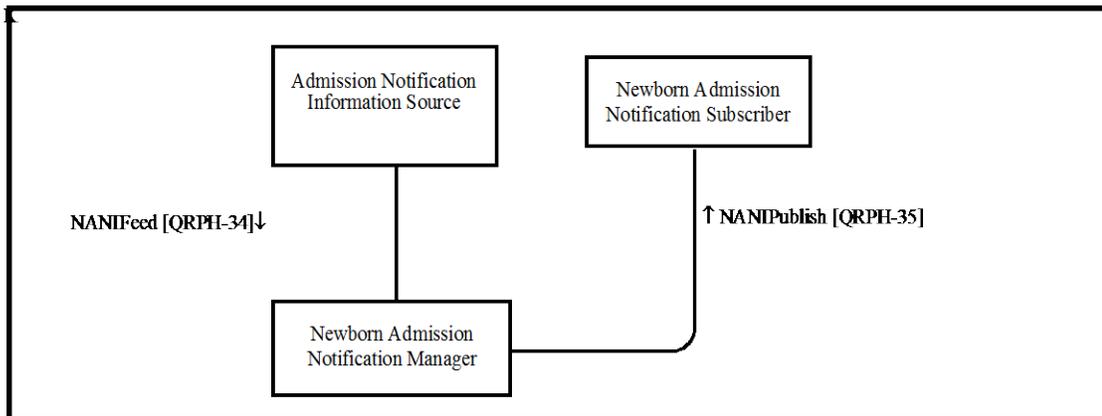
265

Figure X.1-1: NANI Actor Diagram

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

Table X.1-1: NANI Profile - Actors and Transactions

Actors	Transactions	Optionality	Section in Vol. 2
Admission Notification Information Source	NANIFeed [QRPH-34]	R	Z.1
Newborn Admission Notification Manager	NANIFeed [QRPH-34]	R	Z.1
	NANIPublish [QRPH-35]	R	Z.1
Newborn Admission Notification Subscriber	NANIPublish (QRPH-35]	R	Z.1

X.1.1 Actor Descriptions and Requirements

The Actors have no additional requirements.

275   ### X.1.1.1 Newborn Admission Notification Manager

The Newborn Admission Notification Manager SHALL be able to:

- Subscribe and unsubscribe partners;

- Keep track of existing subscriptions;

- Receive published information from the Admission Information Source;

280   - Send notification about the published information to the appropriate Newborn Admission
     Notification Subscriber based on the set of filters for each subscription. The details can
     be found in QRPH-TF2.

10

X.1.1.2 Admission Information Source

285 An Admission Information Source SHALL be able to transmit Newborn Admission Notification to the Newborn Admission Notification Manager.

X.1.1.3 Newborn Admission Notification Subscriber

A Newborn Admission Notification Subscriber Actor SHALL be able to receive a Newborn Admission Notification sent to it by the Newborn Admission Notification Manager.

X.1.2 Document Content Modules

290 ### X.1.2.1 NANI

NANI shall be structured and coded as required by the NANI Content Module described in QRPH TF-2:6.3.1.A. The NANI contains the information relevant to identification of a newborn and the management of the EHDI process for that newborn as defined by the jurisdiction Public Health Authority.

X.2 NANI Actor Options

295 Options that may be selected for this Profile are listed in the 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: NANI - Actors and Options

Actor	Options	Volume & Section
Admission Information Source	*No options defined*	- -
Newborn Admission Notification Manager	*No options defined*	- -
Newborn Admission Notification Subscriber	*No options defined*	- -

300

X.3 Required Actor grouping

Actors from the NANI Profile SHALL be grouped with ITI actors shown in table below.

Table X.3-1: Required Actor Grouping

NANI Actor	Grouping Actor	Technical Framework Reference
Admission Information Source	Consistent Time	ITI TF REV 8.0 VOL-1: 2.2.7
	Audit Trail and Node Authentication	ITI TF REV 8.0 VOL-1: 2.2.9
Newborn Admission Notification Manager	Consistent Time	ITI TF REV 8.0 VOL-1: 2.2.7
	Audit Trail and Node Authentication	ITI TF REV 8.0 VOL-1: 2.2.9

NANI Actor	Grouping Actor	Technical Framework Reference
Newborn Admission Notification Subscriber	Consistent Time	ITI TF REV 8.0 VOL-1: 2.2.7
	Audit Trail and Node Authentication	ITI TF REV 8.0 VOL-1: 2.2.9

305

X.4 NANI Document Content Module

The list of data elements that may be included in the Newborn Admission Notification can be accomplished using the Patient Identify Feed, which is based on HL7-ADT messages. Detailed specifications are documented in ITI Technical Framework Volume 2 section 3.8. The required
310 elements that SHALL be included in the Newborn Admission Notification Information are listed in NANI- Volume III.

X.5 NANI Overview

X.5.1 Concepts

The NANI use case describes the communication of newborn admission data from the hospital's
315 electronic health record system to the State Early Hearing Detection and Intervention (EHDI) Program. The Hospital is the Newborn Admission Notification Source.

NANI is the gateway between the Source of information and Public Health EHDI as the Subscriber to the information.   For public health, NANI is the tool to overcome the diversity and variations in electronic capabilities at the point of care hospital. NANI is the intermediary that
320 provides a conduit for the message variations at the hospital is a single common pathway into public health.

For those hospital data sources that are not capable of filtering their own messages, NANI is capable of identifying the target subset of admissions that should be reported to Public Health and excluding those that do not meet the Public Health requirements. NANI provides a service to
325 the hospital as the source by excluding non-target cases.

Thus NANI simplifies the technology variability that comes from the Hospital EHRs and is a service to filter out non-target cases. It is a gateway for technologic variation and of target case selection.

X.5.1.1 Use Case EHDI Program is Notified about a Newborn Admission to a
330 **Hospital**

1. Baby Joe Smith is born at a hospital and his demographic information is entered into the hospital's EHR system as an admission.

2. The hospital's EHR, acting as the Admission Information Source, notifies the Newborn Admission Notification Manager Actor about Baby Joe Smith's birth, his demographic
335   details and his admission to the hospital nursery.

3.   The Newborn Admission Notification Manager Actor applies the appropriate criteria for target case selection and notifies the State EHDI program, acting as the subscriber, about Baby Joe Smith.

4.   The State EHDI Program, acting as the Newborn Admission Notification Source receives this Admission Information about Joe Smith from Newborn Admission Notification Manager Actor.

340

X.5.1.2 Use Case EHDI Program is notified about Newborn Admission where baby is born out of hospital

1.   Baby Jeremiah Johnson is born at home and is transferred to the hospital where he is admitted and his demographic information is entered into the hospital EHR system as an admission.

345

2.   The hospital's EHR, acting as the Admission Information Source, notifies the Newborn Admission Notification Manager Actor about Baby Jeremiah Johnson's birth, his demographic details and his admission to the hospital nursery.

350

3.   The Newborn Admission Notification Manager Actor applies the appropriate criteria for target case selection and notifies the State EHDI program, acting as the subscriber, about Baby Jeremiah.

4.   The State EHDI Program as the Newborn Admission Notification Subscriber receives this newborn admission information about Jeremiah Johnson from Newborn Admission Notification Manager.

355

X.5.1.3 NANI Process Flow
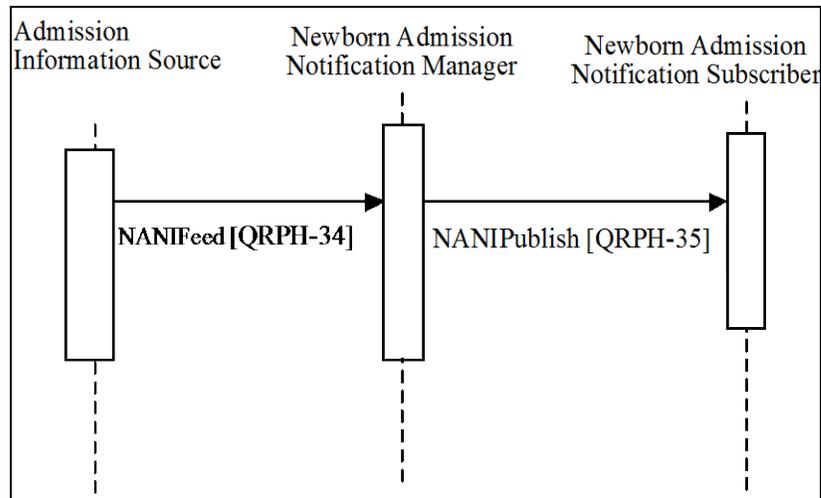
Figure X.5.1.3-1: Basic Process Flow in NANI Profile

360

X.5.1.4 NANI implementation scenarios

The Newborn Admission Notification Information profile actors could be implemented by
different systems. Depending on the jurisdiction and needs these actor roles could be played
different systems. This section gives some of the possible implementation options.

365 **X.5.1.4.1 Use Case where Newborn Admission Notification Manager is actor role
played by a hospital**

In this scenario, the birthing hospital plays two roles – Admission Information Source Actor role
and Newborn Admission Notification Manager role. Both these roles could be played by a single
system in the hospital setting or different systems. Newborn Admission Notification Subscriber
370 role is played by the State EHDI Program. See figure below.
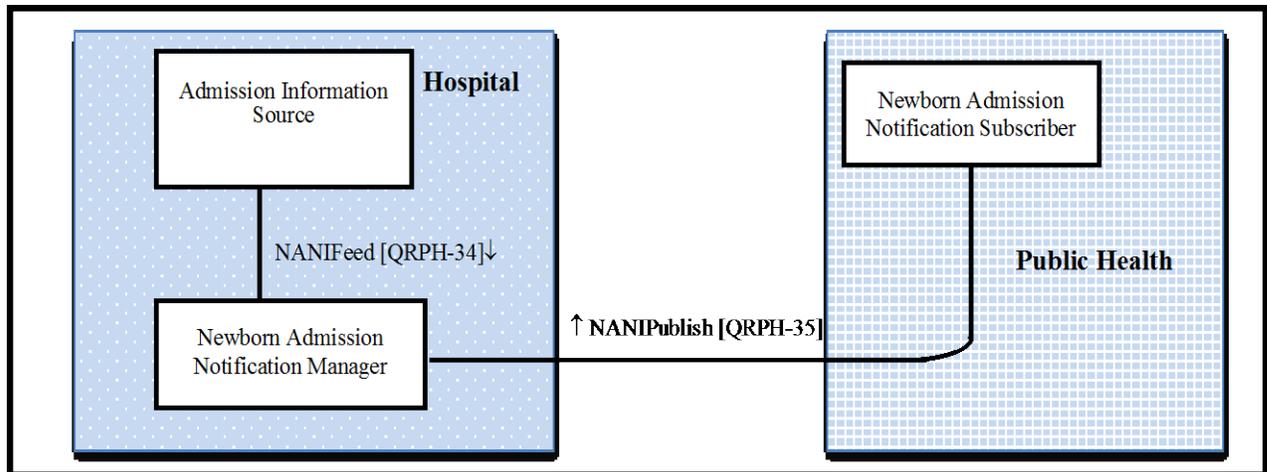
**Figure X.5.1.4.1-1: Scenario 1 – Hospital plays the role of Newborn Admission
Notification Manager**

375 **X.5.1.4.2 Use Case where Newborn Admission Notification Manager Actor role is
played by a Health Information Exchange.**

This scenario assumes that the jurisdiction has a functioning Health Information Exchange which
plays the Newborn Admission Notification Manager role. The birthing hospital plays the role of
Admission Information Source Actor role and Newborn Admission Notification Subscriber role
380 is played by the State EHDI Program. See figure below.

14
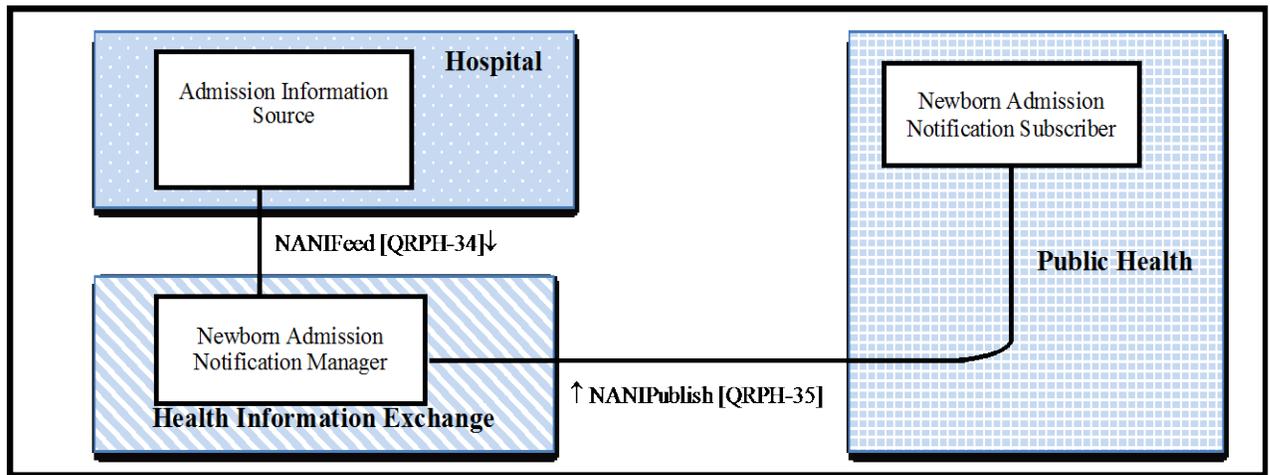
**Figure X.5.1.4.2-1: Scenario 2 – Health Information Exchange plays the role of Newborn
Admission Notification Manager**

385

X.5.1.4.3 Use Case where Newborn Admission Notification Manager Actor role is played by the State EHDI Program.

390 In this scenario, the State EHDI program plays two roles – Newborn Admission Notification
Manager and Newborn Admission Notification Manager role. Both these roles could be played
by a single system or different systems. Admission Information Source Actor role is played by
the hospital. See figure below.
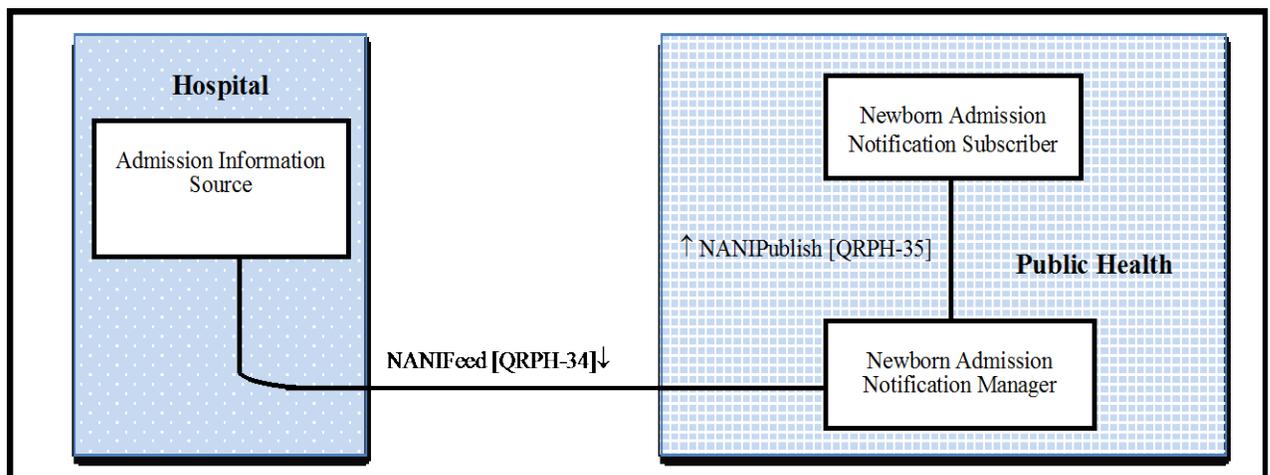
395 **Figure X.5.1.4.3.-1: Scenario 3 – State EHDI program plays the role of Newborn
Admission Notification Manager**

15

X.6 NANI Security Considerations

The implementer of this profile is advised that many risks cannot be mitigated by the IHE profile
and instead the responsibility for mitigation is transferred to the vendor, and occasionally to the
400 operational environment.

X.6.1 Consistent Time (CT)

In order to address identified security risks all actors in NANI should be grouped with Consistent
Time (CT) Profile – Time Client actor. This grouping will assure that all systems have a
consistent time clock to assure a consistent timestamp for audit logging.

405 ### X.6.2 Audit Trail and Node Authentication (ATNA)

In order to address identified security risks all actors in NANI should be grouped with Audit
Trail and Node Authentication (ATNA) profile – Secure Node actor or ATNA Secure
Application actor. This grouping will assure that only highly trusted systems can communicate
and that all changes are recorded in the audit log.

410 ### X.6.3 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
415 SHOULD be captured and communicated using BPPC, and these SHOULD be included in the
NANI metadata based on jurisdictional requirements. Since these requirements vary by
jurisdiction the exact data elements to be captured are out of scope for this profile.

X.7 NANI Cross Profile Considerations

Not applicable.

420

Appendices

Appendix A Actor Summary Definitions

Add the following terms to the IHE TF General Introduction Namespace list of Actors:

1. **Admission Information Source**– a system or a module in a NANI framework, the purpose of which is to publish information to the Newborn Admission Notification Manager.
2. **Newborn Admission Notification Manager** – a system or a module in a NANI framework, the purpose of which is to process subscription/un-subscription requests, to keep track of existing subscriptions, to receive information, and based on the set of filters for each subscription to send a notification about the received information to the appropriate Newborn Admission Notification Recipients.
3. **Newborn Admission Notification Subscriber** – a system or a module in a NANI framework, the purpose of which is to receive and process notifications from the Newborn Admission Notification Manager.

Appendix B Transaction Summary Definitions

Add the following terms to the IHE TF General Introduction Namespace list of Transactions:

1. **NANIFeed [QRPH–34]** - This transaction constrains and extends the Patient Identity Feed [ITI-8] transaction from IHE IT Infrastructure Technical Framework and is used by Admission Information Source actor to send content to Newborn Admission Notification Manager.
2. **NANIPublish [QRPH–35]** – This transaction constrains and extends the Patient Identity Feed HL7 V3 transaction (ITI-44) as defined in IHE IT Infrastructure Technical Framework and is used by Newborn Admission Notification Manager to send content to the Newborn Admission Notification Subscriber, based on the subscribers' filters.

Glossary

Add the following terms to the IHE Technical Frameworks General Introduction Glossary:

450

None

Volume 2 – Transactions

Add section 3.34

3.34 NANIFeed (QRPH-34)

455 This section corresponds to Transaction QR is used by the Admission Information Source, and
Newborn Admission Notification Manager. NANIFeed (QRPH-34) constrains and extends the
existing Patient Identity Feed (ITI-8) as defined in ITI Technical Framework.

3.34.1 Scope

This transaction communicates patient information, including corroborating demographic data,
460 after a patient is admitted.

3.34.2 Use Case Roles
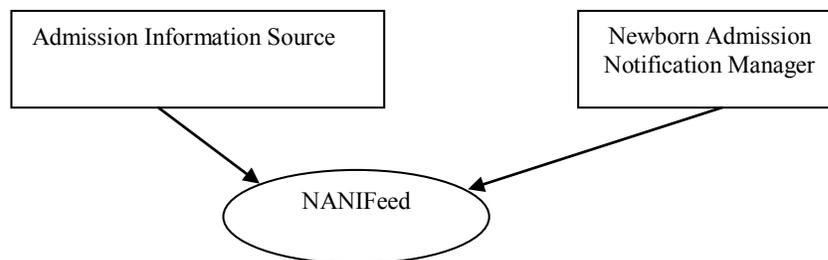
Actor: Admission Information Source

Role: Provides notification to the Newborn Admission Notification Manager for any patient that
465 is admitted to the facility.

Actor: Newborn Admission Notification Manager

Role: Receives patient information from the Admission Information Source, maintains a
subscriber list and filtering rules for each Newborn Admission Notification Subscriber. It sends
the patient information to the Newborn Admission Notification Subscriber if it matches that
470 subscriber's filtering rules.

3.34.3 Referenced Standards

HL7 Version 2.3.1 Chapter 2 – Control, Chapter 3 – Patient Administration

HL7 Version 2.3.1 was selected for this transaction for the following reasons:

- It provides a broader potential base of Patient Identity Source Actors capable of
475   participating in the profiles associated with this transaction.
- IHE IT Infrastructure's Patient Identity Feed transaction [ITI-8] uses this.

3.34.4 Interaction Diagram
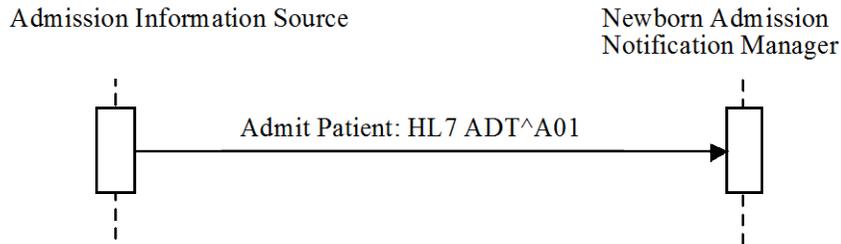
Figure 3.34.4-1: NANIFeed Sequence

3.34.4.1 NANIFeed – Admit Patient

3.34.4.1.1 Trigger Events

The following events from an Admission Information Source Actor will trigger on Admit message:

485
- A01 – Admission of an in-patient into a facility

The Newborn Admission Notification Manager shall only perform filter-forward logic on messages received from Admission Information Source Actors.

3.34.4.1.2 Message Semantics

The NANIFeed transaction is conducted by the HL7 ADT message, as defined in the subsequent
490 sections. The Admission Information Source Actor shall generate the message whenever a patient is admitted. The segments of the message listed below are required, and their detailed descriptions are provided in the following subsections.

Note: Conventions used in this section as well as additional qualifications to the level of specification and HL7
495 profiling are stated in IHE ITI TF-2x: Appendix C and C.1.

Message segments and their optionality are defined below. Other segments are optional.

Table 3.34.4.1.2-1: ADT Patient Administration Messages

ADT	Patient Administration Message	Optionality	Chapter in HL7 2.3.1
MSH	Message Header	R	2
EVN	Event Type	R	3
PID	Patient Identification	R	3
NK1	Next of Kin / Associated Parties	R2	3
PV1	Patient Visit	R	3

20

500 Each message shall be acknowledged by the HL7 ACK message sent by the receiver of ADT message to its sender. See IHE ITI TF-2x: C.2.3, "Acknowledgement Modes", for definition and discussion of the ACK message.

3.34.4.1.2.1 MSH Segment

The MSH segment shall be constructed as defined in ITI TF-2x: C.2.2 "Message Control".

505 Field *MSH-9 Message Type* shall have at least two components. The first component shall have a value of **ADT**; the second component shall be **A01**. The third component is optional; however, if present, it shall have the following value for each corresponding message type:

ADT_A01 for A01 message type

3.34.4.1.2.2 EVN Segment

510 The Admission Information Source Actor is not required to send any attributes within the EVN segment beyond what is specified in the HL7 standard. See Table C.1-4 in ITI TF-2x: C.2.4 "Common Segment Definitions" for the specification of this segment.

3.34.4.1.2.3 PID Segment

When sending ADT message A01 the Admission Information Source actor shall populate
515 appropriate values in the fields as listed in Table 3.34.4.1.2.3-1:

Table 3.34.4.1.2.3-1: IHE Profile - PID segment

SEQ	LEN	DT	OPT	TBL#	ITEM#	ELEMENT NAME
1	4	SI	O		00104	Set ID - Patient ID
2	20	CX	O		00105	Patient ID
3	250	CX	R		00106	Patient Identifier List
4	20	CX	O		00107	Alternate Patient ID
5	250	XPN	R		00108	Patient Name
6	**250**	**XPN**	**R2**		**00109**	**Mother's Maiden Name**
7	**26**	**TS**	**R**		**00110**	**Date/Time of Birth**
8	**1**	**IS**	**R**	**0001**	**00111**	**Administrative Sex**
9	250	XPN	O		00112	Patient Alias
10	**250**	**CE**	**R2**	**0005**	**00113**	**Race**
11	250	XAD	R2		00114	Patient Address
12	4	IS	O	0289	00115	County Code
13	250	XTN	R2		00116	Phone Number - Home
14	250	XTN	R2		00117	Phone Number - Business
15	250	CE	O	0296	00118	Primary Language
16	250	CE	O	0002	00119	Marital Status
17	250	CE	O	0006	00120	Religion

SEQ	LEN	DT	OPT	TBL#	ITEM#	ELEMENT NAME
18	250	CX	O		00121	Patient Account Number
19	16	ST	R2		00122	SSN Number – Patient
20	25	DLN	R2		00123	Driver's License Number - Patient
21	**250**	**CX**	**R2**		**00124**	**Mother's Identifier**
22	**250**	**CE**	**R2**	**0189**	**00125**	**Ethnic Group**
23	250	ST	O		00126	Birth Place
24	**1**	**ID**	**R2**	**0136**	**00127**	**Multiple Birth Indicator**
25	**2**	**NM**	**R2**		**00128**	**Birth Order**
26	250	CE	O	0171	00129	Citizenship
27	250	CE	O	0172	00130	Veterans Military Status
28	250	CE	O	0212	00739	Nationality
29	**26**	**TS**	**R2**		**00740**	**Patient Death Date and Time**
30	**1**	**ID**	**R2**	**0136**	**00741**	**Patient Death Indicator**

Adapted from the HL7 standard, Version 2.3.1

520   Note 1: This table reflects attributes required to be handled by the Newborn Admission Notification Manager (receiver). It is likely that not all attributes marked as R2 or R+ above will be sent in some environments.

Note 2: The field length of many attributes in this table exceeds the requirements stated in HL7 2.3.1. The Newborn Admission Notification Manager (receiver) is required to support these extended lengths to cope with the information it needs to complete identifier cross-referencing logic. The Admission Information Source may or

525   may not send values of the full length listed in this table.

Note 3: This table reflects attributes whose optionality has changed as compared to one given in IHE TF 2a Table 3.8-2. These attribute rows have been bolded for easy reference.

This message shall use the field PID-3 Patient Identifier List to convey the Patient ID uniquely identifying the patient within a given Patient Identification Domain.

530   The Admission Information Source Actor shall provide the patient identifier in the ID component (first component) of the PID-3 field (PID-3.1). The Admission Information Source Actor shall use component PID-3.4 to convey the assigning authority (Patient Identification Domain) of the patient identifier. Either the first subcomponent (namespace ID) or the second and third subcomponents (universal ID and universal ID type) shall be populated. If all three

535   subcomponents are populated, the first subcomponent shall reference the same entity as is referenced by the second and third components.

3.34.4.1.2.4 PV1 Segment

The Admit/ Register or Update Patient message is not required to include any attributes within the PV1 segment beyond what is specified in the HL7 standard.

540 **3.34.4.1.2.5 NK1 Segment**

Admission Information Source SHALL populate NK1 segment when available. Newborn
Admission Notification Manager SHALL have the ability to accept and process this segment.

When sending ADT message A01 the Admission Information Source actor shall populate
appropriate values in the fields as listed in Table 3.34.4.1.2.5-1:

545

Table 3.34.4.1.2.5-1: IHE Profile – NK1 segment

SEQ	LEN	DT	OPT	TBL#	ITEM#	ELEMENT NAME
1	4	SI	R		190	Set ID - NK1
2	**48**	**XPN**	**R2**		**191**	**Name**
3	**60**	**CE**	**R2**	**63**	**192**	**Relationship**
4	**106**	**XAD**	**R2**		**193**	**Address**
5	**40**	**XTN**	**R2**		**194**	**Phone Number**
6	40	XTN	O		195	Business Phone Number
7	60	CE	O	131	196	Contact Role
8	8	DT	O		197	Start Date
9	8	DT	O		198	End Date
10	60	ST	O		199	Next of Kin / Associated Parties Job Title
11	20	JCC	O	0327/ 328	200	Next of Kin / Associated Parties Job Code/Class
12	20	CX	O		201	Next of Kin / Associated Parties Employee Number
13	90	XON	O		202	Organization Name - NK1
14	80	CE	O	2	119	Marital Status
15	1	IS	O	1	111	Sex
16	**26**	**TS**	**R2**		**110**	**Date/Time of Birth**
17	2	IS	O	223	755	Living Dependency
18	2	IS	O	9	145	Ambulatory Status
19	80	CE	O	171	129	Citizenship
20	60	CE	O	296	118	Primary Language
21	2	IS	O	220	742	Living Arrangement
22	80	CE	O	215	743	Publicity Code
23	1	ID	O	136	744	Protection Indicator
24	2	IS	O	231	745	Student Indicator
25	80	CE	O	6	120	Religion
26	48	XPN	O		109	Mother's Maiden Name
27	80	CE	O	212	739	Nationality
28	**80**	**CE**	**R2**	**189**	**125**	**Ethnic Group**
29	80	CE	O	222	747	Contact Reason

SEQ	LEN	DT	OPT	TBL#	ITEM#	ELEMENT NAME
30	48	XPN	O		748	Contact Person's Name
31	40	XTN	O		749	Contact Person's Telephone Number
32	106	XAD	O		750	Contact Person's Address
33	**32**	**CX**	**R2**		**751**	**Next of Kin/Associated Party's Identifiers**
34	2	IS	O	311	752	Job Status
35	**80**	**CE**	**R2**	**5**	**113**	**Race**
36	2	IS	O	0295	00753	Handicap
37	16	ST	O		00754	Contact Person Social Security Number

Adapted from the HL7 standard, Version 2.3.1

Note 1: This table reflects attributes required to be handled by the Newborn Admission Notification Manager (receiver). It is likely that not all attributes marked as R2 above will be sent in some environments.

550 Note 2: This table reflects attributes whose optionality has changed as compared to one given in HL7 V2.3.1 Chapter 3 Figure 3-5. These attribute rows have been bolded for easy reference.

This message SHALL send all available relationships in NK1 segments. The field NK1-3.1 for first repetition of NK1 segment SHOULD have a value of "MOM" and field NK1-3.2 SHOULD have a value of "Mother". Other subfields in NK1-3 field are optional.

555 *MOM ^Mother*

If mother's identifier is populated it should be same in NK1-33 for relationship type of "MOM" and PID-21.

3.34.4.1.3 Expected Actions – Newborn Admission Notification Manager

The Newborn Admission Notification Manager SHALL be capable of accepting attributes in the
560 PID segment as specified in HL7 standard as well as their extended field length as defined in Table 3.8-2.

If the PID-3.4 (assigning authority) component is not included in the message (as described in ITI TF-2a: 3.8.4.1.2.3) the Newborn Admission Notification Manager shall fill PID-3.4 prior to storing the ID information and performing its cross-referencing activities. The information filled
565 by the Newborn Admission Notification Manager is based on the configuration associating each of the Admission Information Source Actors with the subcomponents of the correct assigning authority (namespace ID, UID and UID type). (See 3.8.4.1.3.1 below for a list of required Newborn Admission Notification Manager configuration parameters).

A single Admission Information Source Actor can serve multiple Patient Identification domains.
570 The Newborn Admission Notification Manager Actor shall only recognize (by configuration) a single Admission Information Source Actor per domain. (See ITI TF-2a: 3.8.4.1.3.1 below for a list of required Newborn Admission Notification Manager configuration parameters).

The Newborn Admission Notification Manager SHALL be capable of accepting NK1 segment as specified in this profile.

575 **3.34.4.1.3.1 Required Newborn Admission Notification Manager Configuration**

The following items are expected to be parameters that are configurable on the Newborn
Admission Notification Manager Actor. For each Patient Identification Domain included in the
Identification Cross-reference Domain managed by a Newborn Admission Notification Manager
Actor, the following configuration information is needed:

580
- Identifier of the Domain. This identifier shall specify all 3 components of the HL7
assigning authority (including the namespace ID and/or both the universal ID and
universal ID type subcomponents) of the PID-3 field for the identification of the
domain.

- Admission Information Source Actor for the domain. This is expected to be the MSH-
585 3 Sending Application and the corresponding MSH-4 Sending Facility fields in the
HL7 ADT message. (Alternative identification schemes might include IP address of
the Admission Information Source Actor or Node Authentication if the Audit Trail
and Node Authentication Integration Profile is used.)

3.34.5 Security Considerations

590 ## 3.34.5.1 Audit Record Considerations – Admit Patient

The Patient Admit transaction (A01) is to be audited as "Patient Record" events, as defined in
table IHE ITI TF-2a: 3.20.6-1. The actors involved in the transaction shall create audit data in
conformance with DICOM (Supp 95) "Patient Record". The following tables show items that are
required to be part of the audit record for these specific NANI transactions.

595 ### 3.34.5.1.1 Admission Information Source Actor audit message:

	Field Name	Opt	Value Constraints
Event **AuditMessage/** **EventIdentification**	EventID	M	EV(110110, DCM, "Patient Record")
	EventActionCode	M	"C" (create) for A01
	EventDateTime	*M*	*not specialized*
	EventOutcomeIndicator	*M*	*not specialized*
	EventTypeCode	M	EV("QRPH-34", "IHE Transactions", "NANIFeed")
Source (Admission Information Source Actor) (1)			
Human Requestor (0.n)			
Destination (Newborn Admission Notification Manager) (1)			
Audit Source (Admission Information Source Actor) (1)			
Patient (1)			
Where:			
Source **AuditMessage/** **ActiveParticipant**	UserID	M	The identity of the Admission Information Source Actor facility and sending application from the HL7 message; concatenated together, separated by the | character.
	AlternativeUserID	M	the process ID as used within the local operating system in the local system logs.
	UserName	*U*	*not specialized*
	UserIsRequestor	M	"true"

	RoleIDCode	M	EV(110153, DCM, "Source")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	The machine name or IP address, as specified in RFC 3881.
Human Requestor (if known) AuditMessage/ ActiveParticipant	UserID	M	Identity of the human that initiated the transaction.
	AlternativeUserID	*U*	*not specialized*
	UserName	*U*	*not specialized*
	UserIsRequestor	M	"true"
	RoleIDCode	U	Access Control role(s) the user holds that allows this transaction.
	NetworkAccessPointTypeCode	*NA*	
	NetworkAccessPointID	*NA*	

Destination AuditMessage/ ActiveParticipant	UserID	M	The identity of the Newborn Admission Notification Manager facility and receiving application from the HL7 message; concatenated together, separated by the | character.
	AlternativeUserID	*M*	*not specialized*
	UserName	*U*	*not specialized*
	UserIsRequestor	M	"false"
	RoleIDCode	M	EV(110152, DCM, "Destination")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	The machine name or IP address, as specified in RFC 3881.

Audit Source AuditMessage/ AuditSourceIdentification	*AuditSourceID*	*U*	*Not specialized.*
	AuditEnterpriseSiteID	*U*	*not specialized*
	AuditSourceTypeCode	*U*	*not specialized*

Patient (AuditMessage/ ParticipantObjectIdentification)	ParticipantObjectTypeCode	M	"1" (person)
	ParticipantObjectTypeCodeRole	M	"1" (patient)
	ParticipantObjectDataLifeCycle	*U*	*not specialized*
	ParticipantObjectIDTypeCode	M	EV(2, RFC-3881, "Patient Number")
	ParticipantObjectSensitivity	*U*	*not specialized*
	ParticipantObjectID	M	the patient ID in HL7 CX format.
	ParticipantObjectName	*U*	*not specialized*
	ParticipantObjectQuery	*U*	*not specialized*
	ParticipantObjectDetail	*M*	Type=MSH-10 (the literal string), Value=the value of MSH-10 (from the message content, base64 encoded)

600

3.34.5.1.2 Newborn Admission Notification Manager audit message:

	Field Name	Opt	Value Constraints
Event	EventID	M	EV(110110, DCM, "Patient Record")

	EventActionCode	M	"C" (create) for A01
	EventDateTime	*M*	*not specialized*
	EventOutcomeIndicator	*M*	*not specialized*
	EventTypeCode	M	EV("QRPH-34", "IHE Transactions", "NANIFeed")
Source (Admission Information Source Actor) (1)			
Destination (Newborn Admission Notification Manager) (1)			
Audit Source (Newborn Admission Notification Manager) (1)			
Patient (1)			

Where:

Source **AuditMessage/** **ActiveParticipant**	UserID	M	The identity of the Admission Information Source Actor facility and sending application from the HL7 message; concatenated together, separated by the | character.
	AlternativeUserID	*U*	*not specialized*
	UserName	*U*	*not specialized*
	UserIsRequestor	M	"true"
	RoleIDCode	M	EV(110153, DCM, "Source")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	The machine name or IP address, as specified in RFC 3881.

Destination **AuditMessage/** **ActiveParticipant**	UserID	M	The identity of the Newborn Admission Notification facility and receiving application from the HL7 message; concatenated together, separated by the | character.
	AlternativeUserID	M	the process ID as used within the local operating system in the local system logs.
	UserName	*U*	*not specialized*
	UserIsRequestor	M	"false"
	RoleIDCode	M	EV(110152, DCM, "Destination")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	The machine name or IP address, as specified in RFC 3881.

Audit Source **AuditMessage/** **AuditSourceIdentification**	*AuditSourceID*	*U*	*Not specialized.*
	AuditEnterpriseSiteID	*U*	*not specialized*
	AuditSourceTypeCode	*U*	*1.28 not specialized*

605

Patient	ParticipantObjectTypeCode	M	"1" (person)

ParticipantObjectTypeCodeRole	M	"1" (patient)
ParticipantObjectDataLifeCycle	*U*	*not specialized*
ParticipantObjectIDTypeCode	M	EV(2, RFC-3881, "Patient Number")
ParticipantObjectSensitivity	*U*	*not specialized*
ParticipantObjectID	M	the patient ID in HL7 CX format.
ParticipantObjectName	*U*	*not specialized*
ParticipantObjectQuery	*U*	*not specialized*
ParticipantObjectDetail	*M*	Type=MSH-10 (the literal string), Value=the value of MSH-10 (from the message content, base64 encoded)

3.35 NANIPublish (QRPH-35)

This section corresponds to transaction NANIPublish (QRPH-35) of the QRPH Technical Framework. Transaction QRPH-35 is used by Newborn Admission Notification Manager and Newborn Admission Notification Subscriber actors. NANIPublish (QRPH-35) constrains and extends the existing Patient Identity Feed HL7 V3 transaction (ITI-44) as defined in ITI Technical Framework.

3.35.1 Scope

This transaction communicates patient information, including demographic data for the patients that have been identified based on filters for a given Subscriber.

3.35.2 Use Case Roles

Actor:	Newborn Admission Notification Manager
Role:	Receives content from source and publishes it based on subscriber's filter criteria to the subscriber. **Corresponding HL7 v3 Application Roles:** Patient Registry Informer (PRPA_AR201301UV02)
Actor:	Newborn Admission Notification Subscriber

Role:	Subscribes to receive content and consumes it **Corresponding HL7 v3 Application Roles:** Patient Registry Tracker (PRPA_AR201302UV02)

620 ## 3.35.3 Referenced Standards

HL7 Version 3 Edition 2008 Patient Administration DSTU, Patient Topic (found at
http://www.hl7.org/memonly/downloads/v3edition.cfm#V32008)

3.35.4 Interaction Diagram
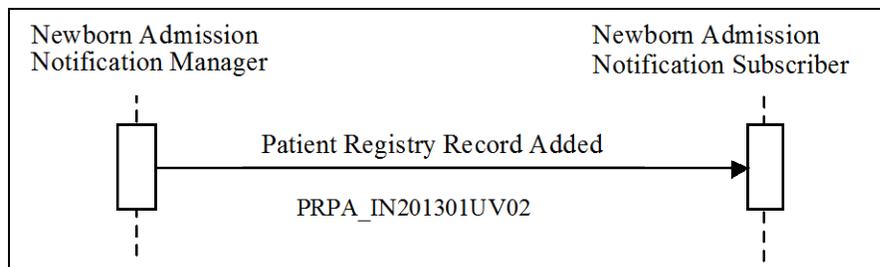
625 ## 3.35.4.1 NANIPublish

3.35.4.1.1 Trigger Events

The following events from a Newborn Admission Notification Manager will trigger this event:

Patient Registry Record Added (PRPA_TE201301UV02)

This trigger event signals that Newborn Admission Notification Manager actor has information
630 about a patient that matches the filtering criteria specified by one or more Newborn Admission
Notification Subscriber actor(s).

3.35.4.1.2 Message Semantics

The NANIPublish transaction is carried out by the HL7 V3 Patient Activate
(PRPA_MT201301UV02) message, as defined in the subsequent sections. The Newborn
635 Admission Notification Manager shall generate the message whenever a patient is meets the
filtering criteria given by Newborn Admission Notification Subscriber. The components of the
message listed below are required, and their detailed descriptions are provided in the following
subsections.

Each message shall be acknowledged by the HL7 v3 Accept Acknowledgement
640 (MCCI_MT000200UV01), which is described in ITI TF REV 8.0 VOL-2x: Appendix O.

The message information model in QRPH TF-2b: 3.35.4.1.2.2.describes the relevant data
elements for this transaction. Specific requirements for the particular actors are found in QRPH
TF-2b: 3.35.4.1.3

3.35.4.1.2.1 Major Components of the Patient Registry Record Added Message

645

Patient

The Patient class is the entry point to the R-MIMs for the Patient Activate
(PRPA_RM201301UV02) model. The patient identifiers are captured using an Instance
Identifier (II) data type.

650 Please see ITI TF REV 8.0 VOL-2x: Appendix E for a detailed description about the use of the
HL7 V3 II data type for patient identifiers.

Provider Organization

The Patient class is scoped by the provider organization where this person is a patient. The HL7
655 definition of the CMET requires that the provider organization needs to be identified by an id
attribute, and at least one of address, telecommunications address, or contact person to be
present. The id attribute SHALL have only a root, expressed as an ISO OID.

Person

660 The Person class contains identifying and demographic data elements for the focal person similar
to those in the HL7 v2.x PID segment such as name, gender, date of birth, marital status and
deceased indicator and time.

LanguageCommunication

665 Information about what language(s) should be used to communicate with the focal person can be
sent in the LanguageCommunication class.

PersonalRelationship

This is used for sending information pertaining to the mother's maiden name.

670

Citizen

Citizenship information for a person, including citizen identifier and effective time can be sent in
the Citizen class. The nation that scopes the Citizen role, as identified by Nation.code, is
mandatory.

Other Identifiers

The OtherIDs class is used to capture other identifiers associated with the person such as a driver's license number or social security number. In this transaction the IDs assigned by the scoping provider organization are represented in the id attribute of the Patient class. All other IDs are represented in the OtherIDs class. For the purposes of interoperability where both HL7 V3 and HL7 v2.x based transactions are used, the following requirement is imposed on the OtherIDs.id attribute and on the scopingOrganization.id attribute:

> OtherIDs.id.root SHALL be identical to scopingOrganization.id.root
> scopingOrganization.id.extension SHALL NOT have any value

Please see ITI TF REV 8.0 VOL-2x: E.2 for details on the use of the II data type for patient identifiers.

Information and restrictions on other fields

The base RMIMs can be found on the HL7 V3 2008 Edition CD at Edition2008/domains/uvpa/editable/PRPA_RM201301UV.htm and Edition2008/domains/uvpa/editable/PRPA_RM201302UV.htm. The following restrictions are made on the original RMIMs to arrive at the restricted model:

The focal entity choice is restricted to be only a person

The relationship holder of the personal relationship is restricted to be a person (using CMET COCT_MT030207UV)

The provider organization which is scoping the patient role is required (it is optional in the original Revise message definition).

The following roles are omitted:

- asPatientOfOtherProvider
- guarantor
- guardian
- asMember
- careGiver
- asStudent

The following participations are omitted:

- subjectOf (administrativeObservation)
- coveredPartyOf (coverage)

31

710

Figure 3.35.4.1.2.1-1 – RMIM Model Diagram

The attributes of this model are described in the following table. Note that CMETs are not
discussed, as the HL7 definitions for them are being used.

715

Table 3.35.4.1.2.1-1: Details about attribute model for PRPA_HD201301IHE

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.35.4.1.2-1 (PRPA_RM201301IHE)
Patient	The primary record for the focal person in a Admission Information Source

32

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.35.4.1.2-1 (PRPA_RM201301IHE)
classCode [1..1] (M) Patient (CS) {CNE:PAT}	Structural attribute; this is a "patient" role
id [1..*] (M) Patient (SET<II>)	Identifiers designated by this Admission Information Source for the focal person
statusCode [1..1] Patient (CS) {CNE:active, fixed value= "active"}	A value specifying the state of this record in a patient registry (based on the RIM role class state-machine). This record is active.
confidentialityCode [0..*] Patient (SET<CE>) {CWE:Confidentiality}	Value(s) that control the disclosure of information about this living subject as a patient
veryImportantPersonCode [0..1] Patient (CE) {CWE:PatientImportance}	A code specifying the patient's special status granted by the scoper organization, often resulting in preferred treatment and special considerations. Examples include board member, diplomat.
Person	A subtype of LivingSubject representing a human being Either Person.name or Patient.id must be non-null
classCode [1..1] (M) Person (CS) {CNE:PSN, fixed value= "PSN"}	Structural attribute; this is a "person" entity
determinerCode [1..1] (M) Person (CS) {CNE:INSTANCE, fixed value= "INSTANCE"}	Structural attribute; this is a specific person
name [1..*] Person (BAG<PN>)	Name(s) for this person
telecom [0..*] Person (BAG<TEL>)	Telecommunication address(es) for communicating with this person
administrativeGenderCode [1..1] Person (CE) {CWE:AdministrativeGender}	A value representing the gender (sex) of this person. Note: this attribute does not include terms related to clinical gender which is a complex physiological, genetic and sociological concept that requires multiple observations in order to be comprehensively described.
birthTime [1..1] Person (TS)	The date and time this person was born
deceasedInd [0..1] Person (BL)	An indication that this person is dead
deceasedTime [0..1] Person (TS)	The date and time this person died
multipleBirthInd [0..1] Person (BL)	An indication that this person was part of a multiple birth
multipleBirthOrderNumber [0..1] Person (INT)	The order in which this person was born if part of a multiple birth
addr [0..*] Person (BAG<AD>)	Address(es) for corresponding with this person
maritalStatusCode [0..1]	A value representing the domestic partnership status of this person

33

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.35.4.1.2-1 (PRPA_RM201301IHE)
Person (CE) {CWE:MaritalStatus}	
religiousAffiliationCode [0..1] Person (CE) {CWE:ReligiousAffiliation}	A value representing the primary religious preference of this person
raceCode [0..*] Person (SET<CE>) {CWE:Race}	A set of values representing the races of this person
ethnicGroupCode [0..*] Person (SET<CE>) {CWE:Ethnicity}	A set of values representing the ethnic groups of this person
OtherIDs	Used to capture additional identifiers for the person such as a Drivers' license or Social Security Number. Please see notes above in the Major Components section on the use of OtherIDs.
classCode [1..1] (M) Role (CS) {CNE:ROL}	Structural attribute. This can be any specialization of "role" except for Citizen, or Employee.
id [1..*] (M) Role (SET<II>)	One or more identifiers issued to the focal person by the associated scopingOrganization (e.g., a Driver's License number issued by a DMV)
PersonalRelationship	A personal relationship between the focal living subject and another living subject
classCode [1..1] (M) Role (CS) {CNE:PRS, fixed value= "PRS"}	Structural attribute; this is a "personal relationship" role
id [0..*] Role (SET<II>)	Identifier(s) for this personal relationship
code [1..1] (M) Role (CE) {CWE:PersonalRelationshipRoleType}	A required value specifying the type of personal relationship between the relationshipHolder and the scoping living subject drawn from the PersonalRelationshipRoleType domain, for example, spouse, parent, unrelated friend
statusCode [0..1] Role (CE) {CWE:RoleStatus}	A value specifying the state of this personal relationship (based on the RIM Role class state-machine), for example, following divorce a spouse relationship would be "terminated".
effectiveTime [0..1] Role (IVL<TS>)	An interval of time specifying the period during which this personal relationship is in effect, if such time is applicable and known.
Citizen	Used to capture person information relating to citizenship.
classCode [1..1] (M) Role (CS) {CNE:CIT, fixed value= "CIT"}	Structural attribute; this is a "citizen" role
id [0..*] Role (SET<II>)	Identifier(s) for the focal person as a citizen of a nation
effectiveTime [0..1] Employee (IVL<TS>)	An interval of time specifying the period during which this employment relationship is in effect, if such time limit is applicable and known.
Nation	A politically organized body of people bonded by territory and known as a nation.

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.35.4.1.2-1 (PRPA_RM201301IHE)
classCode [1..1] (M) Organization (CS) {CNE:NAT, fixed value= "NAT"}	Structural attribute; this is a 'nation' type of entity
determinerCode [1..1] (M) Organization (CS) {CNE:INSTANCE, fixed value= "INSTANCE"}	Structural attribute; this is a specific entity
code [1..1] (M) Organization (CD) {CWE:NationEntityType}	A value that identifies a nation state
name [0..1] Organization (ON)	A non-unique textual identifier or moniker for this nation
Employee	A relationship of the focal person with an organization to receive wages or salary. The purpose of this class is to identify the type of relationship the employee has to the employer rather than the nature of the work actually performed. For example, it can be used to capture whether the person is a Military Veteran or not.
classCode [1..1] (M) Employee (CS) {CNE:EMP}	Structural attribute; this is an "employee" role
statusCode [0..1] Employee (CS) {CNE:RoleStatus}	A value specifying the state of this employment relationship (based on the RIM Role class state-machine), for example, active, suspended, terminated.
statusCode [0..1] Employee (CS) {CNE:RoleStatus}	A value specifying the state of this employment relationship (based on the RIM Role class state-machine), for example, active, suspended, terminated.
effectiveTime [0..1] Employee (IVL<TS>)	An interval of time specifying the period during which this employment relationship is in effect, if such time limit is applicable and known.
occupationCode [0..1] Employee (CE) {CWE:EmployeeOccupationCode}	A code qualifying the classification of kind-of-work based upon a recognized industry or jurisdictional standard. OccupationCode is used to convey the person's occupation as opposed to jobClassCode (not used in this transaction) which characterizes this particular job. For example, it can be used to capture whether the person is a Military Veteran or not.
BirthPlace	The birthplace of the focal living subject.
classCode [1..1] (M) Birthplace (CS) {CNE:BIRTHPL}	Structural attribute; this is a "birthplace" role.
id [0..*] Birthplace (SET<II>)	A living subject's birth place represented by a unique identifier.
addr [0..*] Patient (BAG<AD>)	A living subject's birth place represented as an address. Note: Either BirthPlace.addr or an associated Place.name must be valued.
classCode [1..1] (M) Birthplace (CS) {CNE:BIRTHPL}	Structural attribute; this is a "birthplace" role.
LanguageCommunication	A language communication capability of the focal person
languageCode [1..1] (M)	A value representing a language for which the focal person has

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.35.4.1.2-1 (PRPA_RM201301IHE)
LanguageCommunication (CE) {CWE:HumanLanguage}	some level of proficiency for written or spoken communication. Examples: Spanish, Italian, German, English, American Sign
preferenceInd [0..1] LanguageCommunication (BL)	An indicator specifying whether or not this language is preferred by the focal person for the associated mode
ContactParty	A person or an organization (playing entity) that is authorized to provide or receive information about the focal person (scoping entity)
classCode [1..1] (M) Role (CS) {CNE:C:RoleClass:CON}	this is an "contact party" role
id [0..*] Role (SET<II>)	Identifier(s) for this contact party relationship
code [0..1] Role (CE) {CWE:V:ContactRoleType}	A value further specifying what type of contact party relationship this is, drawn from the ContactRoleType domain. Valid value for this profile is "next of kin".
negationInd [0..1] Role (BL)	An ContactParty with negationInd "true" and a contactPartyChoice association of "not applicable" null flavor conveys that the scoping person does not have a contact party relationship of the type specified by the ContactParty.code value; for example, "no next of kin" or "no emergency contact"
addr [1..*] Role (BAG<AD>)	Address(es) for corresponding with this contact party
telecom [1..*] Role (BAG<TEL>)	Telecommunication address(es) for communicating with this contact party
statusCode [0..1] Role (CS) {CNE:D:RoleStatus}	A value specifying the state of this contact party relationship (based on the RIM Role class state-machine), for example, active, suspended, terminated
effectiveTime [0..1] Role (IVL<TS>)	An interval of time specifying the period during which this contact party relationship is in effect, if such time limit is applicable and known

3.35.4.1.2.2 Control Act and Transmission Wrappers

Please see ITI TF REV 8.0 VOL -2x: Appendix O for details on the IHE guidelines for
720 implementing the wrappers. Table 3.35.4.1.2.2-1contains the Transmission and Control Act
wrappers used for the two interactions, and the associated constraints.

Table 3.35.4.1.2.2-1: Wrappers and Constraints

Transmission Wrapper	Trigger Event Control Act Wrapper
MCCI_MT000100UV01 – Send Message Payload	MFMI_MT700701UV01 – Master File / Registry Notification Control Act, Role Subject

Transmission Wrapper	Trigger Event Control Act Wrapper
The value of interactionId SHALL be set to PRPA_IN201301UV02 or PRPA_IN201302UV02. The value of processingModeCode SHALL be set to T The acceptAckCode SHALL be set to AL There SHALL be only one Receiver Device	The trigger event code in ControlActProcess.code SHALL be set to PRPA_TE201301UV02 or PRPA_TE201302UV02 respectively. RegistrationEvent.statusCode SHALL be set to "active". There SHALL be no InReplacementOf act relationship for these interactions.

The composite message schemas which describe the full payload of these interactions, including
the wrappers, can be found online on the IHE FTP site, see ITI TF REV 8.0 VOL-2x: Appendix
W (the HL7 V3 2008 Normative Edition schemas are at
Edition2008/processable/multicacheschemas/PRPA_IN201301UV02.xsd and
Edition2008/processable/multicacheschemas/PRPA_IN201302UV02.xsd).

3.35.4.1.2.3 Web Services Types and Messages

The Patient Registry Record Added/Revised messages will be transmitted using Web Services,
according to the requirements specified in ITI TF REV 8.0 VOL-2x: Appendix V.

The following WSDL naming conventions SHALL apply:

```
"add" message      -> "PRPA_IN201301UV02_Message"
acknowledgement  -> "MCCI_IN000002UV01_Message"
```

The following WSDL snippet describes the types for these messages:

```
    …
 <types>
      <xsd:schema elementFormDefault="qualified" targetNamespace="urn:hl7-
org:v3"
xmlns:hl7="urn:hl7-org:v3">
<!-- Include the message schema -->
<xsd:import namespace="urn:hl7-org:v3"
schemaLocation="../schema/HL7V3/NE2008/multicacheschemas/PRPA_IN201301UV02.xs
d"/>
<xsd:element name="PRPA_IN201301UV02"/>
</xsd:schema>
<xsd:schema elementFormDefault="qualified" targetNamespace="urn:hl7-org:v3"
xmlns:hl7="urn:hl7-org:v3">
<!-- Include the message schema -->
<xsd:import namespace="urn:hl7-org:v3"
schemaLocation="../schema/HL7V3/NE2008/multicacheschemas/PRPA_IN201302UV02.xs
d"/>
<xsd:element name="PRPA_IN201302UV02"/>
</xsd:schema>
<xsd:schema elementFormDefault="qualified" targetNamespace="urn:hl7-org:v3"
xmlns:hl7="urn:hl7-org:v3">
<!-- Include the message schema -->
<xsd:import namespace="urn:hl7-org:v3"
schemaLocation="../schema/HL7V3/NE2008/multicacheschemas/MCCI_IN000002UV01.xs
d"/>
<xsd:element name="MCCI_IN000002UV01"/>
```

```
</xsd:schema>
  </types>
…
```

765   The messages are described by the following snippet:

```
        …
<message name="PRPA_IN201301UV02_Message">
<part element="hl7:PRPA_IN201301UV02" name="Body"/>
  </message>
770    <message name="MCCI_IN000002UV01_Message">
<part element="hl7:MCCI_IN000002UV01" name="Body"/>
  </message>
        …
```

3.35.4.1.3 Expected Actions – Newborn Admission Notification Manager

775

The Newborn Admission Notification Manager shall be capable of maintaining list of Newborn
Admission Notification Subscribers and also maintaining filtering criteria for each individual
subscriber (See 3.35.4.1.3.1 below for a list of required Newborn Admission Notification
Manager configuration parameters).

3.35.4.1.3.1 Required Newborn Admission Notification Manager Configuration

780

The following items are expected to be parameters that are configurable on the Newborn
Admission Notification Manager Actor.

- Configure and store endpoint information for each Newborn Admission Notification
  Subscriber

785   - Configure and store filtering criteria for each Newborn Admission Notification
  Subscriber.

> Note: The details of actual configuration and filtering mechanism will be jurisdictionally defined and is out of scope of this
> Profile.

3.35.5 Security Considerations

790   ### 3.35.5.1 Security Audit Considerations

3.35.5.1.1 Audit Record Considerations – Admit/Register or Update Patient

The NANIPublish transactions are to be audited as "Patient Record" events, as defined in table
3.20.6-1 of ITI TF Rev8.0 Vol 2a. The actors involved in the transaction shall create audit data
in conformance with DICOM (Supp 95) "Patient Record". The following tables show items that
795   are required to be part of the audit record for these specific PIX transactions.

3.35.5.1.2 Newborn Admission Notification Manager Actor audit message

	Field Name	Opt	Value Constraints
Event AuditMessage/ EventIdentification	EventID	M	EV(110110, DCM, "Patient Record")
	EventActionCode	M	"C" (create) , "U" (update), or "D" (delete) as appropriate
	EventDateTime	*M*	*not specialized*
	EventOutcomeIndicator	*M*	*not specialized*
	EventTypeCode	M	EV("QRPH-35", "IHE Transactions", "NANIPublish")
Source (Newborn Admission Notification Manager Actor) (1)			
Human Requestor (0..n)			
Destination (Newborn Admission Notification Subscriber Actor) (1)			
Audit Source (Newborn Admission Notification Manager Actor) (1)			
Patient (1)			
Where:			
Source AuditMessage/ ActiveParticipant	UserID	M	the content of the <wsa:ReplyTo/> element
	AlternativeUserID	M	the process ID as used within the local operating system in the local system logs.
	UserName	*U*	*not specialized*
	UserIsRequestor	M	*not specialized*
	RoleIDCode	M	EV(110153, DCM, "Source")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	the machine name or IP address, as specified in RFC 3881.
Human Requestor (if known) AuditMessage/ ActiveParticipant	UserID	M	identity of the human that initiated the transaction.
	AlternativeUserID	*U*	*not specialized*
	UserName	*U*	*not specialized*
	UserIsRequestor	M	*not specialized*
	RoleIDCode	U	Access Control role(s) the user holds that allows this transaction.
	NetworkAccessPointTypeCode	*NA*	
	NetworkAccessPointID	*NA*	

Destination AuditMessage/ ActiveParticipant	UserID	M	SOAP endpoint URI.
	AlternativeUserID	*U*	*not specialized*
	UserName	*U*	*not specialized*
	UserIsRequestor	M	*not specialized*
	RoleIDCode	M	EV(110152, DCM, "Destination")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	the machine name or IP address, as specified in RFC 3881.

Audit Source AuditMessage/ AuditSourceIdentification	*AuditSourceID*	*U*	*not specialized.*
	AuditEnterpriseSiteID	*U*	*not specialized*
	AuditSourceTypeCode	*U*	*not specialized*

800

Patient	ParticipantObjectTypeCode	M	"1" (person)

39

	ParticipantObjectTypeCodeRole	M	"1" (patient)
	ParticipantObjectDataLifeCycle	*U*	*not specialized*
	ParticipantObjectIDTypeCode	M	EV(2, RFC-3881, "Patient Number")
	ParticipantObjectSensitivity	*U*	*not specialized*
	ParticipantObjectID	M	the patient ID in HL7 CX format (see ITI TF-2x: appendix E)
	ParticipantObjectName	*U*	*not specialized*
	ParticipantObjectQuery	*U*	*not specialized*
	ParticipantObjectDetail	M	Type=II (the literal string), Value=the value of message.id

3.35.5.1.3 Newborn Admission Notification Subscriber Actor audit message

	Field Name	**Opt**	**Value Constraints**
Event AuditMessage/ EventIdentification	EventID	M	EV(110110, DCM, "Patient Record")
	EventActionCode	M	"C" (create) , "U" (update), or "D" (delete) as appropriate
	EventDateTime	*M*	*not specialized*
	EventOutcomeIndicator	*M*	*not specialized*
	EventTypeCode	M	EV("QRPH-35", "IHE Transactions", "NANIPublish")
Source (Newborn Admission Notification Manager Actor) (1)			
Destination (Newborn Admission Notification Subscriber) (1)			
Audit Source (Newborn Admission Notification Subscriber) (1)			
Patient(1)			

Where:

	UserID	M	the content of the <wsa:ReplyTo/> element
Source AuditMessage/ ActiveParticipant	*AlternativeUserID*	*U*	*not specialized*
	UserName	*U*	*not specialized*
	UserIsRequestor	M	*not specialized*
	RoleIDCode	M	EV(110153, DCM, "Source")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	the machine name or IP address, as specified in RFC 3881.

	UserID	M	SOAP endpoint URI
Destination AuditMessage/ ActiveParticipant	AlternativeUserID	M	the process ID as used within the local operating system in the local system logs.
	UserName	*U*	*not specialized*
	UserIsRequestor	M	"false"
	RoleIDCode	M	EV(110152, DCM, "Destination")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	the machine name or IP address, as specified in RFC 3881.

	AuditSourceID	*U*	*not specialized.*
Audit Source AuditMessage/ AuditSourceIdentification	*AuditEnterpriseSiteID*	*U*	*not specialized*
	AuditSourceTypeCode	*U*	*not specialized*

805

Patient (AuditMessage/ ParticipantObjectIdentifi cation)	ParticipantObjectTypeCode	M	"1" (person)
	ParticipantObjectTypeCodeRole	M	"1" (patient)
	ParticipantObjectDataLifeCycle	*U*	*not specialized*
	ParticipantObjectIDTypeCode	M	EV(2, RFC-3881, "Patient Number")
	ParticipantObjectSensitivity	*U*	*not specialized*
	ParticipantObjectID	M	the patient ID in HL7 CX format (see ITI TF-2x: appendix E).
	ParticipantObjectName	*U*	*not specialized*
	ParticipantObjectQuery	*U*	*not specialized*
	ParticipantObjectDetail	*M*	Type=II (the literal string), Value=the value of message.id

Appendix A – Differences between NANI transactions and Patient Identity Transactions

A.1 Differences between NANIFeed transaction and Patient Identity Feed transaction.

810   Differences between Patient Identity Feed (ITI-8) and NANIFeed (QRPH-34) transaction.

Table A.1-1: Changes in Segments used

	PIX Feed(ITI-8)	NANIFeed(QRPH-34)	Comments
HL7 V2 Segments used	MSH	MSH	Next of Kin (NK1) segment is now R2 (required if available)
	EVN	EVN	
	PID	PID	
	PV1	PV1	
		NK1	

Table A.1-2: Changes to PID segment

SEQ	Optionality in ITI-8	Optionality in QRPH-34	ELEMENT NAME
1	O	O	Set ID - Patient ID
2	O	O	Patient ID
3	R	R	Patient Identifier List
4	O	O	Alternate Patient ID
5	R	R	Patient Name
6	**R+**	**R2**	**Mother's Maiden Name**
7	**R+**	**R**	**Date/Time of Birth**
8	**R+**	**R**	**Administrative Sex**
9	O	O	Patient Alias
10	R2	R2	Race
11	R2	R2	Patient Address
12	O	O	County Code

SEQ	Optionality in ITI-8	Optionality in QRPH-34	ELEMENT NAME
13	R2	R2	Phone Number - Home
14	R2	R2	Phone Number - Business
15	O	O	Primary Language
16	O	O	Marital Status
17	O	O	Religion
18	O	O	Patient Account Number
19	R2	R2	SSN Number – Patient
20	R2	R2	Driver's License Number - Patient
21	**O**	**R2**	**Mother's Identifier**
22	O	O	Ethnic Group
23	O	O	Birth Place
24	**O**	**R2**	**Multiple Birth Indicator**
25	**O**	**R2**	**Birth Order**
26	O	O	Citizenship
27	O	O	Veterans Military Status
28	O	O	Nationality
29	**O**	**R2**	**Patient Death Date and Time**
30	**O**	**R2**	**Patient Death Indicator**

815

Table A.1-3: Changes in NK1 segment

SEQ	Optionality in HL7	Optionality in QRPH-34	ELEMENT NAME
1	R	R	Set ID - NK1
2	**O**	**R2**	**Name**
3	**O**	**R2**	**Relationship**
4	**O**	**R2**	**Address**
5	**O**	**R2**	**Phone Number**
6	O	O	Business Phone Number
7	O	O	Contact Role
8	O	O	Start Date
9	O	O	End Date
10	O	O	Next of Kin / Associated Parties Job Title
11	O	O	Next of Kin / Associated Parties Job Code/Class
12	O	O	Next of Kin / Associated Parties Employee Number
13	O	O	Organization Name - NK1
14	O	O	Marital Status

SEQ	Optionality in HL7	Optionality in QRPH-34	ELEMENT NAME
15	O	O	Sex
16	**O**	**R2**	**Date/Time of Birth**
17	O	O	Living Dependency
18	O	O	Ambulatory Status
19	O	O	Citizenship
20	O	O	Primary Language
21	O	O	Living Arrangement
22	O	O	Publicity Code
23	O	O	Protection Indicator
24	O	O	Student Indicator
25	O	O	Religion
26	O	O	Mother's Maiden Name
27	O	O	Nationality
28	**O**	**R2**	**Ethnic Group**
29	O	O	Contact Reason
30	O	O	Contact Person's Name
31	O	O	Contact Person's Telephone Number
32	O	O	Contact Person's Address
33	**O**	**R2**	**Next of Kin/Associated Party's Identifiers**
34	O	O	Job Status
35	**O**	**R2**	**Race**
36	O	O	Handicap
37	**O**	**R2**	**Contact Person Social Security Number**

A.2 Difference between NANIPublish Transaction and Patient Identity Feed V3 Transaction

Differences between Patient Identity Feed V3 (ITI-44) and NANIPublish (QRPH-35)
820   transaction.

Table A.2-1: Differences between NANIPublish transaction and Patient Identity Feed V3 transaction

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.44.4.1.2-1 (PRPA_RM201301IHE)	Changes as compared to IHE PIX V3 transaction are noted in this column
Patient	The primary record for the focal person in a Admission Information Source	
classCode [1..1] (M) Patient (CS) {CNE:PAT}	Structural attribute; this is a "patient" role	
id [1..*] (M) Patient (SET<II>)	Identifiers designated by this Admission Information Sourcefor the focal person	
statusCode [1..1] Patient (CS) {CNE:active, fixed value= "active"}	A value specifying the state of this record in a patient registry (based on the RIM role class state-machine). This record is active.	
confidentialityCode [0..*] Patient (SET<CE>) {CWE:Confidentiality}	Value(s) that control the disclosure of information about this living subject as a patient	
veryImportantPersonCode [0..1] Patient (CE) {CWE:PatientImportance}	A code specifying the patient's special status granted by the scoper organization, often resulting in preferred treatment and special considerations. Examples include board member, diplomat.	
Person	A subtype of LivingSubject representing a human being Either Person.name or Patient.id must be non-null	
classCode [1..1] (M) Person (CS) {CNE:PSN, fixed value= "PSN"}	Structural attribute; this is a "person" entity	
determinerCode [1..1] (M) Person (CS) {CNE:INSTANCE, fixed value= "INSTANCE"}	Structural attribute; this is a specific person	
name [1..*] Person (BAG<PN>)	Name(s) for this person	
telecom [0..*] Person (BAG<TEL>)	Telecommunication address(es) for communicating with this person	
administrativeGenderCode [1..1] Person (CE) {CWE:AdministrativeGender}	A value representing the gender (sex) of this person. Note: this attribute does not include terms related to clinical gender which is a complex physiological, genetic and sociological concept that requires multiple observations in order to be comprehensively described.	Changed from optional to required
birthTime [1..1] Person (TS)	The date and time this person was born	Changed from optional to required
deceasedInd [1..1] Person (BL)	An indication that this person is dead	Changed from optional to required

44

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.44.4.1.2-1 (PRPA_RM201301IHE)	Changes as compared to IHE PIX V3 transaction are noted in this column
deceasedTime [1..1] Person (TS)	The date and time this person died	Changed from optional to required
multipleBirthInd [1..1] Person (BL)	An indication that this person was part of a multiple birth	Changed from optional to required
multipleBirthOrderNumber [1..1] Person (INT)	The order in which this person was born if part of a multiple birth	Changed from optional to required
addr [0..*] Person (BAG<AD>)	Address(es) for corresponding with this person	
maritalStatusCode [0..1] Person (CE) {CWE:MaritalStatus}	A value representing the domestic partnership status of this person	
religiousAffiliationCode [0..1] Person (CE) {CWE:ReligiousAffiliation}	A value representing the primary religious preference of this person	
raceCode [1..*] Person (SET<CE>) {CWE:Race}	A set of values representing the races of this person	
ethnicGroupCode [1..*] Person (SET<CE>) {CWE:Ethnicity}	A set of values representing the ethnic groups of this person	
OtherIDs	Used to capture additional identifiers for the person such as a Drivers' license or Social Security Number. Please see notes above in the Major Components section on the use of OtherIDs.	
classCode [1..1] (M) Role (CS) {CNE:ROL}	Structural attribute. This can be any specialization of "role" except for Citizen, or Employee.	
id [1..*] (M) Role (SET<II>)	One or more identifiers issued to the focal person by the associated scopingOrganization (e.g., a Driver's License number issued by a DMV)	
PersonalRelationship	A personal relationship between the focal living subject and another living subject	
classCode [1..1] (M) Role (CS) {CNE:PRS, fixed value= "PRS"}	Structural attribute; this is a "personal relationship" role	
id [1..*] Role (SET<II>)	Identifier(s) for this personal relationship	Changed from optional to required
code [1..1] (M) Role (CE) {CWE:PersonalRelationshipRoleType}	A required value specifying the type of personal relationship between the relationshipHolder and the scoping living subject drawn from the PersonalRelationshipRoleType domain, for example, spouse, parent, unrelated friend	We want mother's info
statusCode [0..1] Role (CE)	A value specifying the state of this personal relationship (based on the RIM Role class state-machine), for example, following divorce a spouse	

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.44.4.1.2-1 (PRPA_RM201301IHE)	Changes as compared to IHE PIX V3 transaction are noted in this column
{CWE:RoleStatus}	relationship would be "terminated".	
effectiveTime [0..1] Role (IVL<TS>)	An interval of time specifying the period during which this personal relationship is in effect, if such time is applicable and known.	
Citizen	Used to capture person information relating to citizenship.	
classCode [1..1] (M) Role (CS) {CNE:CIT, fixed value= "CIT"}	Structural attribute; this is a "citizen" role	
id [0..*] Role (SET<II>)	Identifier(s) for the focal person as a citizen of a nation	
effectiveTime [0..1] Employee (IVL<TS>)	An interval of time specifying the period during which this employment relationship is in effect, if such time limit is applicable and known.	
Nation	A politically organized body of people bonded by territory and known as a nation.	
classCode [1..1] (M) Organization (CS) {CNE:NAT, fixed value= "NAT"}	Structural attribute; this is a 'nation' type of entity	
determinerCode [1..1] (M) Organization (CS) {CNE:INSTANCE, fixed value= "INSTANCE"}	Structural attribute; this is a specific entity	
code [1..1] (M) Organization (CD) {CWE:NationEntityType}	A value that identifies a nation state	
name [0..1] Organization (ON)	A non-unique textual identifier or moniker for this nation	
Employee	A relationship of the focal person with an organization to receive wages or salary. The purpose of this class is to identify the type of relationship the employee has to the employer rather than the nature of the work actually performed. For example, it can be used to capture whether the person is a Military Veteran or not.	
classCode [1..1] (M) Employee (CS) {CNE:EMP}	Structural attribute; this is an "employee" role	
statusCode [0..1] Employee (CS) {CNE:RoleStatus}	A value specifying the state of this employment relationship (based on the RIM Role class state-machine), for example, active, suspended, terminated.	
statusCode [0..1] Employee (CS) {CNE:RoleStatus}	A value specifying the state of this employment relationship (based on the RIM Role class state-machine), for example, active, suspended, terminated.	

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.44.4.1.2-1 (PRPA_RM201301IHE)	Changes as compared to IHE PIX V3 transaction are noted in this column
effectiveTime [0..1] Employee (IVL<TS>)	An interval of time specifying the period during which this employment relationship is in effect, if such time limit is applicable and known.	
occupationCode [0..1] Employee (CE) {CWE:EmployeeOccupationCode}	A code qualifying the classification of kind-of-work based upon a recognized industry or jurisdictional standard. OccupationCode is used to convey the person's occupation as opposed to jobClassCode (not used in this transaction) which characterizes this particular job. For example, it can be used to capture whether the person is a Military Veteran or not.	
BirthPlace	The birthplace of the focal living subject.	
classCode [1..1] (M) Birthplace (CS) {CNE:BIRTHPL}	Structural attribute; this is a "birthplace" role.	
id [1..*] Birthplace (SET<II>)	A living subject's birth place represented by a unique identifier.	
addr [1..*] Patient (BAG<AD>)	A living subject's birth place represented as an address. Note: Either BirthPlace.addr or an associated Place.name must be valued.	
classCode [1..1] (M) Birthplace (CS) {CNE:BIRTHPL}	Structural attribute; this is a "birthplace" role.	
LanguageCommunication	A language communication capability of the focal person	
languageCode [1..1] (M) LanguageCommunication (CE) {CWE:HumanLanguage}	A value representing a language for which the focal person has some level of proficiency for written or spoken communication. Examples: Spanish, Italian, German, English, American Sign	
preferenceInd [0..1] LanguageCommunication (BL)	An indicator specifying whether or not this language is preferred by the focal person for the associated mode	
ContactParty	A person or an organization (playing entity) that is authorized to provide or receive information about the focal person (scoping entity)	New element. Not present in PIX V3
classCode [1..1] (M) Role (CS) {CNE:C:RoleClass:CON}	this is an "contact party" role	
id [1..*] Role (SET<II>)	Identifier(s) for this contact party relationship	
code [1..1] Role (CE) {CWE:V:ContactRoleType}	A value further specifying what type of contact party relationship this is, drawn from the ContactRoleType domain. Valid value for this profile is "next of kin".	"MOM"
negationInd [0..1] Role (BL)	An ContactParty with negationInd "true" and a contactPartyChoice association of "not applicable" null flavor conveys that the scoping person does not have a contact party relationship of the type specified	

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.44.4.1.2-1 (PRPA_RM201301IHE)	Changes as compared to IHE PIX V3 transaction are noted in this column
	by the ContactParty.code value; for example, "no next of kin" or "no emergency contact"	
addr [1..*] Role (BAG<AD>)	Address(es) for corresponding with this contact party	
telecom [1..*] Role (BAG<TEL>)	Telecommunication address(es) for communicating with this contact party	
statusCode [0..1] Role (CS) {CNE:D:RoleStatus}	A value specifying the state of this contact party relationship (based on the RIM Role class state-machine), for example, active, suspended, terminated	
effectiveTime [0..1] Role (IVL<TS>)	An interval of time specifying the period during which this contact party relationship is in effect, if such time limit is applicable and known	

825 ## Namespace Additions

Add the following terms to the IHE Namespace:

Profile	Format Code	Media Type	Template ID
2012 Profiles			
Newborn Admission Notification Information (NANI)	urn:ihe:qrph:nani:2012	N/A	1.3.6.1.4.1.19376.1.7.3.1.1.20

830