# **ONC Certification Test Data Immunization**

Version 1.9.8

4th November 2024

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# **ONC** Immunization Test Plan

This test plan is to be used for ONC Certification Testing of Health IT modules. All test cases are required to be executed. The test plan includes a set of Administered Immunization test cases (Administration Group) and a set of Query and Response test cases (Evaluated History and Forecast Group).

# **Test Story**

Description
ull
Comments
null
Pre-condition
ull
Post-Condition
ull
Test Objectives
ndl
Evaluation Criteria
null
Notes
nıll

# 1. Administration Group

The administration group is design to test: (1) the creation of a broad scope of immunization messages including support for new and historical administrations, refusals, combination vaccines, patient consent and various observations including VIS and VFC. (2) the receipt and handling of various acknowledgement messages including application accept, application error, and application warning. Test Cases consists of 2 steps: (1) creating immunization messages based on the Immunization Messaging Standard (Z22 Profile-VXU Message) and specific Test Data, and (2) receiving acknowledgment messages based on the Immunization Messaging Standard (Z23 Profile-ACK Message).

### **Test Story**

Description
null
Comments
null
Pre-condition Pre-condition
null
Post-Condition
null
Total Objections
Test Objectives
null
Evaluation Criteria
null
Notes
null

# 1.1. IZ-AD-1\_Admin\_Child

Maximally populated child administration

# **Test Story**

Description Control of the Control o
A child (infant) is seen at a clinic. Historical vaccinations are recorded and new vaccines are administered and documented.
Comments
No Comments
w
Pre-condition
No PreCondition
Post-Condition
No PostCondition
Test Objectives
This test case assesses the ability of the EHR to create an administration message containing historical and new administrations for a chill acluding next of kin, patient consent, VIS, funding source and VFC data.
Evaluation Criteria
Notes
No Note

# 1.1.1. IZ-AD-1.1 Send V04 Z22

Test Step Type: SUT\_INITIATOR

Tests the ability to create a valid VXU^V04 message

#### **Test Story**

#### Description

A two month old male infant, Russell Clinton Richardson, is brought to a clinic for a well child visit by his mother Maria Elizabeth Richardson (nee Billington) and his father John William Richardson. A clinic staff member collects basic patient demographic information including name, date of birth and sex. A clinic provider, Wilma Thomas (physician ID 654) reviews the patient's vaccination history and determines that the child previously received Hepatitis B vaccine 1 day after birth and 1 month after birth. The staff member determines that the patient needs DTaP, Hib, IPV, Rotavirus and Pneumococcal vaccinations. Because of the patient's status of Native American, he qualifies for all Vaccine For Children (VFC) supplied vaccines under the status of VFC eligible - American Indian/Alaska Native. The parents are given 5 Vaccine Information Sheets (VIS) to review. After reading them, they agree that the child should receive all the vaccinations recommended. They also agree that the data should be shared once it is incorporated into the local IIS. They indicate that reminders and recalls may be sent by any method. Appropriate doses of DTaP/Hib/IPV (Pentacel), Rotavirus (RotaTeq) and Pneumococcal (Prevnar 13) are selected from the clinic's stock of publically funded vaccines. A clinician, Lily Jackson (ID 7824) prepares and administers the doses to the patient and then enters the data into the EHR and transmits it to the IIS.

#### **Comments**

No Comments

#### Pre-condition

No PreCondition

#### **Post-Condition**

No PostCondition

#### **Test Objectives**

Create an administration message containing historical (using CVX) and new administrations (using NDC)

Support for next of kin

Support for patient consent

Support for VIS

Support for funding source

Support for VFC data.

#### **Evaluation Criteria**

Message Validation Report

#### Notes

For new administration messages, the vaccine is communicated using NDC codes in RXA-5 (Administered Code). For a given vaccine, one or more NDC codes may be appropriate to message. For this reason, RXA-5.1 is categorized as "Value - Test Case Fixed List" and allows for multiple valid values. The Message Content and Example Message data contain a single representative valid NDC code for example purposes.

ONC has determined that, from a regulatory/program perspective, an HIT Module cannot be required to be able to generate messages with the Vaccine Funding Source OBX segment for 2015 Edition certification testing. For certification purposes, ONC permits Testers to ignore the error notification generated by the NIST Immunization Test Suite when this segment is missing. Since the product under test will have to meet state reporting requirements when implemented, and many states require this information, it may be beneficial for HIT Modules to demonstrate support for the Vaccine Funding Source OBX segment during 2015 Edition certification testing.

MSH : Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID		Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID	Tubi Linu i e	Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application		Indirection
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID	INISI IISAFF	Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility	NICENICE A C	D C C .:
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID		Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624073733.994-0500	Presence-System Generated
MSH-9	Message Type		
MSH-9.1	Message Code	VXU	Value-Profile Fixed
MSH-9.2	Trigger Event	V04	Value-Profile Fixed
MSH-9.3	Message Structure	VXU_V04	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-AD-1.1_Send_V04_Z22	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID		Indifferent
MSH-22.6.2	Universal ID		Indifferent
MSH-22.6.3	Universal ID Type		Indifferent
MSH-22.7	Identifier Type Code		Indifferent
MSH-22.10	Organization Identifier		Indifferent
			manerent
MSH-23	Receiving Responsible Organization	NICTUCEAC	Processos Configuration
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority		Y #00
MSH-23.6.1	Namespace ID		Indifferent
MSH-23.6.2	Universal ID		Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
MSH-23.7	Identifier Type Code		Indifferent
MSH-23.10	Organization Identifier		Indifferent

#### PID: Patient Identification

PID : Patient Identification			
Location	Data Element	Data	Categorization
PID-1	Set ID - PID	1	Value-Profile Fixed
PID-3	Patient Identifier List		
PID-3.1	ID Number	3123	Presence-Content Indifferent
PID-3.4	Assigning Authority		
PID-3.4.1	Namespace ID	NIST-MPI-1	Presence-Content Indifferent
PID-3.4.2	Universal ID		Indifferent
PID-3.4.3	Universal ID Type		Indifferent
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed
PID-5	Patient Name		
PID-5.1	Family Name		
PID-5.1.1	Surname	Richardson	Presence-Content Indifferent
PID-5.2	Given Name	Russell	Presence-Content Indifferent
PID-5.3	Second and Further Given Names or Initials Thereof	Clint	Presence-Content Indifferent
PID-5.7	Name Type Code	L	Value-Test Case Fixed
PID-6	Mother's Maiden Name		
PID-6.1	Family Name		
PID-6.1.1	Surname	Billington	Presence-Content Indifferent
PID-6.7	Name Type Code	M	Value-Profile Fixed
PID-7	Date/Time of Birth		
PID-7.1	Time	20150415	Presence-Content Indifferent
PID-8	Administrative Sex	M	Value-Test Case Fixed
PID-10	Race		National Petroperature
PID-10.1	Identifier	1002-5	Value-Test Case Fixed
PID-10.2	Text	American Indian or Alaska Native	Presence-Test Case Proper
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed
PID-11	Patient Address		value i forne i med
PID-11.1	Street Address		
PID-11.1.1	Street or Mailing Address	543 Blount Drive	Presence-Content Indifferent
PID-11.2	Other Designation	3 13 Diodate Drive	Indifferent
PID-11.3	City	Bozeman	Presence-Content Indifferent
PID-11.4	State or Province	MT	Presence-Content Indifferent
	Zip or Postal Code		1
PID-11.5	Zip of 1 ostal code	59715	Presence-Content Indifferent
PID-11.6	Country	USA	Presence-Content Indifferent
PID-11.7	Address Type	P	Value-Test Case Fixed List
PID-13	Phone Number - Home		
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
PID-13.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
PID-13.4	Email Address		NonPresence
PID-13.6	Area/City Code	406	Presence-Content Indifferent
PID-13.7	Local Number	5557690	Presence-Content Indifferent
PID-22	Ethnic Group		
PID-22.1	Identifier	2186-5	Value-Test Case Fixed
PID-22.2	Text	Not Hispanic or Latino	Presence-Test Case Proper
PID-22.3	Name of Coding System	CDCREC	Value-Profile Fixed
PID-24	Multiple Birth Indicator	N	Value-Test Case Fixed
PID-25	Birth Order	1	Indifferent
PID-29	Patient Death Date and Time		
PID-29.1	Time		NonPresence
PID-30	Patient Death Indicator	N	Value-Test Case Fixed

# PD1 : Patient Additional Demographic

Location	Data Element	Data	Categorization
PD1-11	Publicity Code		
PD1-11.1	Identifier	02	Value-Test Case Fixed
PD1-11.2	Text	Reminder/recall - any method	Presence-Test Case Proper
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed
PD1-12	Protection Indicator	N	Value-Test Case Fixed
PD1-13	Protection Indicator Effective Date	20150624	Presence-Content Indifferent
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed
PD1-17	Immunization Registry Status Effective Date	20150415	Presence-Content Indifferent
PD1-18	Publicity Code Effective Date	20150624	Presence-Content Indifferent

NK1[\*]

NK1 : Next of Kin / Associated Parties			
Location	Data Element	Data	Categorization
NK1-1	Set ID - NK1	1	Value-Profile Fixed
NK1-2	Name		
NK1-2.1	Family Name		
NK1-2.1.1	Surname	Richardson	Presence-Content Indifferent
NK1-2.2	Given Name	Maria	Presence-Content Indifferent
NK1-2.3	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
NK1-2.7	Name Type Code	L	Value-Test Case Fixed
NK1-3	Relationship		
NK1-3.1	Identifier	MTH	Value-Test Case Fixed
NK1-3.2	Text	Mother	Presence-Test Case Proper
NK1-3.3	Name of Coding System	HL70063	Value-Profile Fixed
NK1-4	Address		
NK1-4.1	Street Address		
NK1-4.1.1	Street or Mailing Address	543 Blount Drive	Presence-Content Indifferent
NK1-4.2	Other Designation		Indifferent
NK1-4.3	City	Bozeman	Presence-Content Indifferent
NK1-4.4	State or Province	MT	Presence-Content Indifferent
NK1-4.5	Zip or Postal Code	59715	Presence-Content Indifferent
NK1-4.6	Country	USA	Presence-Content Indifferent
NK1-4.7	Address Type	P	Value-Test Case Fixed List
NK1-5	Phone Number		
NK1-5.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
NK1-5.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
NK1-5.4	Email Address		Indifferent
NK1-5.6	Area/City Code	406	Presence-Content Indifferent
NK1-5.7	Local Number	5557690	Presence-Content Indifferent

NK1	· Nevt	of Kin	/ Associated	Parties "

Location	Data Hement	Data	Categorization
NK1-1	Set ID - NK1	2	Value-Profile Fixed
NK1-2	Name		
NK1-2.1	Family Name		
NK1-2.1.1	Surname	Richardson	Presence-Content Indifferent
NK1-2.2	Given Name	John	Presence-Content Indifferent
NK1-2.3	Second and Further Given Names or Initials Thereof	William	Presence-Content Indifferent
NK1-2.7	Name Type Code	L	Value-Test Case Fixed
NK1-3	Relationship		
NK1-3.1	Identifier	FTH	Value-Test Case Fixed
NK1-3.2	Text	Father	Presence-Test Case Proper
NK1-3.3	Name of Coding System	HL70063	Value-Profile Fixed
NK1-4	Address		
NK1-4.1	Street Address		
NK1-4.1.1	Street or Mailing Address	543 Blount Drive	Presence-Content Indifferent
NK1-4.2	Other Designation		Indifferent
NK1-4.3	City	Bozeman	Presence-Content Indifferent
NK1-4.4	State or Province	MT	Presence-Content Indifferent
NK1-4.5	Zip or Postal Code	59715	Presence-Content Indifferent
NK1-4.6	Country	USA	Presence-Content Indifferent
NK1-4.7	Address Type	P	Value-Test Case Fixed List
NK1-5	Phone Number		
NK1-5.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
NK1-5.3	Telecommunication Equipment Type	СР	Value-Test Case Fixed
NK1-5.4	Email Address		Indifferent
NK1-5.6	Area/City Code	406	Presence-Content Indifferent
NK1-5.7	Local Number	5558299	Presence-Content Indifferent

#### ORC[\*]

ORC : Common Order

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	3140	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	38766	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	8681	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	65138	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number	INE.	value-Fronie Fixed
ORC-2.1	Entity Identifier	7491	Presence-Content Indifferent
ORC-2.1		NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.2 ORC-2.3	Namespace ID Universal ID	NISI -AA-IZ-2	Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number	70520	D C . I FO
ORC-3.1	Entity Identifier	79539	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

-orc	:	Common	Order'
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		Indifferent
ORC-2.2	Namespace ID		Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		indirectiv
ORC-3.1	Entity Identifier	31528	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID	THOI THE IZ	Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		indirectiv
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name	7021	Tresence Content maneren
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number		Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname		Indifferent
ORC-12.3	Given Name		Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof		Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID		Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code		Indifferent
ORC-12.13	Identifier Type Code		Indifferent
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

ORC : Common Ord	der⁼
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		Indifferent
ORC-2.2	Namespace ID		Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	82668	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number		Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname		Indifferent
ORC-12.3	Given Name		Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof		Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID		Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code		Indifferent
ORC-12.13	Identifier Type Code		Indifferent
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

#### RXA[\*] =

#### RXA: Pharmacy/Treatment Administration =

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	49281-0561-01	Value-Test Case Fixed List
RXA-5.2	Text	Pentacel	Presence-Test Case Proper
RXA-5.3	Name of Coding System  Administered Amount	NDC	Value-Profile Fixed
RXA-6		0.5	Presence-Test Case Proper
RXA-7	Administered Units	T	What Test Con First
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes	la a	less on a second
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.2	Text	New Record	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Value-Test Case Fixed
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	526434	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20150722	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name	20130722	rescrice-content maniferent
RXA-17.1	Identifier	PMC	Value-Test Case Fixed
RXA-17.1	Text	Sanofi Pasteur	Presence-Test Case Proper
RXA-17.2	Name of Coding System	<del>-</del>	
		MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		NewPursana
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

-RXA : PI	harmacy/Treatment Administration	-
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Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration	1	value 110111c 118cd
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code	20130021	Trescite Content Harreren
RXA-5.1	Identifier	00006-4047-20	Value-Test Case Fixed List
RXA-5.2	Text	RotaTeq	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	2.0	Presence-Test Case Proper
RXA-7	Administered Units	2.0	Trescrice-Test Case Froper
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes	OCCIVI	value-i forme Fixed
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.1 RXA-9.2		New Record	
RXA-9.2 RXA-9.3	Nome of Coding Statem	NIP001	Presence-Test Case Proper  Value-Profile Fixed
	Name of Coding System	NIPUUI	value-Profile Fixed
RXA-10	Administering Provider	7024	D C + 1 I'm
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name	v	D G V 100
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Value-Test Case Fixed
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	297961	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20150916	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	MSD	Value-Test Case Fixed
RXA-17.2	Text	Merck and Co., Inc.	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

RXA: Pharmacy/Treatment Administrate	ion =
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	RXA : Pharmacy/Iro	eatment Administration	
Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	00005-1971-01	Value-Test Case Fixed List
RXA-5.2	Text	Prevnar 13	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	0.5	Presence-Test Case Proper
RXA-7	Administered Units		l l
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes		
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.2	Text	New Record	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Value-Test Case Fixed
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	353480	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20150729	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	PFR	Value-Test Case Fixed
RXA-17.2	Text	Pfizer, Inc	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

Location	Data Hement	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150416	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	45	Value-Test Case Fixed
RXA-5.2	Text	Hep B, unspecified formulation	Presence-Test Case Proper
RXA-5.3	Name of Coding System	CVX	Value-Profile Fixed
RXA-6	Administered Amount	999	Value-Test Case Fixed
RXA-7	Administered Units		
RXA-7.1	Identifier		NonPresence
RXA-7.2	Text		NonPresence
RXA-7.3	Name of Coding System		NonPresence
RXA-9	Administration Notes		
RXA-9.1	Identifier	01	Value-Test Case Fixed
RXA-9.2	Text	Historical Administration	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number		Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname		Indifferent
RXA-10.3	Given Name		Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof		Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID		Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code		Indifferent
RXA-10.13	Identifier Type Code		Indifferent
RXA-11	Administered at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID		Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number		Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time		Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier		Indifferent
RXA-17.2	Text		Indifferent
RXA-17.3	Name of Coding System		Indifferent
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

RXA: Pharmacy/Treatment Administration				
Location	Data Element	Data	Categorization	
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed	
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed	
RXA-3	Date/Time Start of Administration			
RXA-3.1	Time	20150515	Presence-Content Indifferent	
RXA-5	Administered Code			
RXA-5.1	Identifier	45	Value-Test Case Fixed	
RXA-5.2	Text	Hep B, unspecified formulation	Presence-Test Case Proper	
RXA-5.3	Name of Coding System	CVX	Value-Profile Fixed	
RXA-6	Administered Amount	999	Value-Test Case Fixed	
RXA-7	Administered Units			
RXA-7.1	Identifier		NonPresence	
RXA-7.2	Text		NonPresence	
RXA-7.3	Name of Coding System		NonPresence	
RXA-9	Administration Notes			
RXA-9.1	Identifier	01	Value-Test Case Fixed	
RXA-9.2	Text	Historical Administration	Presence-Test Case Proper	
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed	
RXA-10	Administering Provider			
RXA-10.1	ID Number		Indifferent	
RXA-10.2	Family Name			
RXA-10.2.1	Surname		Indifferent	
RXA-10.3	Given Name		Indifferent	
RXA-10.4	Second and Further Given Names or Initials Thereof		Indifferent	
RXA-10.9	Assigning Authority			
RXA-10.9.1	Namespace ID		Indifferent	
RXA-10.9.2	Universal ID		Indifferent	
RXA-10.9.3	Universal ID Type		Indifferent	
RXA-10.10	Name Type Code		Indifferent	
RXA-10.13	Identifier Type Code		Indifferent	
RXA-11	Administered-at Location			
RXA-11.4	Facility			
RXA-11.4.1	Namespace ID		Indifferent	
RXA-11.4.2	Universal ID		Indifferent	
RXA-11.4.3	Universal ID Type		Indifferent	
RXA-15	Substance Lot Number			
RXA-16	Substance Expiration Date			
RXA-16.1	Time		Indifferent	
RXA-17	Substance Manufacturer Name			
RXA-17.1	Identifier			
RXA-17.2	Text			
RXA-17.3	Name of Coding System			
RXA-18	Substance/Treatment Refusal Reason			
RXA-18.1	Identifier		NonPresence	
RXA-18.2	Text		NonPresence	
RXA-18.3	Name of Coding System		NonPresence	
RXA-20	Completion Status	СР	Value-Test Case Fixed	
RXA-21	Action Code - RXA	A	Value-Test Case Fixed	
1011-21	raction code - IVVA	1.1	variation Case Place	

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Location	Data Hement	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C28161	Value-Test Case Fixed
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	RT	Value-Test Case Fixed
RXR-2.2	Text	Right Thigh	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

#### RXR : Pharmacy/Treatment Route

Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C38288	Value-Test Case Fixed
RXR-1.2	Text	Oral	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier		NonPresence
RXR-2.2	Text		NonPresence
RXR-2.3	Name of Coding System		NonPresence

#### RXR : Pharmacy/Treatment Route

Location	Data Hement	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C28161	Value-Test Case Fixed
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	LT	Value-Test Case Fixed
RXR-2.2	Text	Left Thigh	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

#### OBX[\*]

OBA: Observation/Result				
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	1	Value-Profile Fixed	
OBX-2	Value Type	CE	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed	
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper	
OBX-5	Observation Value			
OBX-5.1	Identifier	VXC50	Value-Test Case Fixed	
OBX-5.2	Text	Public	Presence-Test Case Proper	
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150624	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier		Indifferent	
OBX-17.2	Text		Indifferent	
OBX-17.3	Name of Coding System		Indifferent	

-obx:	Observation/Result
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Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	2	Value-Profile Fixed	
OBX-2	Value Type	CE	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed	
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper	
OBX-5	Observation Value			
OBX-5.1	Identifier	V04	Value-Test Case Fixed	
OBX-5.2	Text	VFC Eligible - American Indian/Alaska Native	Presence-Test Case Proper	
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150624	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed	
OBX-17.2	Text	per immunization	Presence-Test Case Proper	
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed	

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Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300017211210806	Value-Test Case Fixed
OBX-5.2	Text	Polio Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	5	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	4	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300006611210806	Value-Test Case Fixed
OBX-5.2	Text	Haemophilus Influenzae type b (Hib) Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	6	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	4	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	7	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	5	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300003511210806	Value-Test Case Fixed
OBX-5.2	Text	DTaP (Diphtheria, Tetanus, Pertussis) Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	8	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	5	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC50	Value-Test Case Fixed
OBX-5.2	Text	Public	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

-овх:	Observation/Result

OBA. Observation/Account			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	V04	Value-Test Case Fixed
OBX-5.2	Text	VFC Eligible - American Indian/Alaska Native	Presence-Test Case Proper
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed
OBX-17.2	Text	per immunization	Presence-Test Case Proper
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed

Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300019611211015	Value-Test Case Fixed
OBX-5.2	Text	Rotavirus Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC50	Value-Test Case Fixed
OBX-5.2	Text	Public	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

-obx:	Observation/Result
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Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	V04	Value-Test Case Fixed
OBX-5.2	Text	VFC Eligible - American Indian/Alaska Native	Presence-Test Case Proper
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed
OBX-17.2	Text	per immunization	Presence-Test Case Proper
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300049311230512	Value-Test Case Fixed
OBX-5.2	Text	Pneumococcal Conjugate Vaccine (PCV13_PCV15_PCV20) VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

# **Test Data Specification**

Element	Data
Patient Name	Russell Clint Richardson
Mother's Maiden Name	Billington
ID Number	3123
Date/Time of Birth	04/15/2015
Administrative Sex	Male
Patient Address	543 Blount Drive Bozeman MT 59715 USA
Local Number	(406)555-7690
Race	American Indian or Alaska Native
Ethnic Group	Not Hispanic or Latino
Multiple Birth Indicator	No
Birth Order	1

Immunization Registry Information————————————————————————————————————		
Element	Data	
Immunization Registry Status	Active	
Immunization Registry Status Effective Date	04/15/2015	
Publicity Code	Reminder/recall - any method	
Publicity Code Effective Date	06/24/2015	
Protection Indicator	No	
Protection Indicator Effective Date	06/24/2015	

# Guardian or Responsible Party[\*]

# -Guardian or Responsible Party-

Element	Data
Name	Maria Elizabeth Richardson
Relationship	Mother
Address	543 Blount Drive Bozeman MT 59715 USA
Phone Number	(406)555-7690

# Guardian or Responsible Party-

Element	Data
Name	John William Richardson
Relationship	Father
Address	543 Blount Drive Bozeman MT 59715 USA
Phone Number	(406)555-8299

# -Vaccine Administration Information[\*]

# Vaccine Administration Information

Element	Data
Administered Vaccine	Pentacel
Date/Time Start of Administration	06/24/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	526434
Substance Expiration Date	07/22/2015
Substance Manufacturer Name	Sanofi Pasteur
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Intramuscular
Administration Site	Right Thigh
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Public
Vaccine Funding Program Eligibility	VFC Eligible - American Indian/Alaska Native
Document Type	Polio Vaccine VIS
Date Vis Presented	06/24/2015
Document Type	Haemophilus Influenzae type b (Hib) Vaccine VIS
Date Vis Presented	06/24/2015
Document Type	DTaP (Diphtheria, Tetanus, Pertussis) Vaccine VIS
Date Vis Presented	06/24/2015

# -Vaccine Administration Information-

Element	Data
Administered Vaccine	RotaTeq
Date/Time Start of Administration	06/24/2015
Administered Amount	2.0
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	297961
Substance Expiration Date	09/16/2015
Substance Manufacturer Name	Merck and Co., Inc.
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Oral
Administration Site	
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Public
Vaccine Funding Program Eligibility	VFC Eligible - American Indian/Alaska Native
Document Type	Rotavirus Vaccine VIS
Date Vis Presented	06/24/2015

# -Vaccine Administration Information-

Element	Data
Administered Vaccine	Prevnar 13
Date/Time Start of Administration	06/24/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	353480
Substance Expiration Date	07/29/2015
Substance Manufacturer Name	Pfizer, Inc
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Intramuscular
Administration Site	Left Thigh
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Public
Vaccine Funding Program Eligibility	VFC Eligible - American Indian/Alaska Native
Document Type	Pneumococcal Conjugate Vaccine (PCV13_PCV15_PCV20) VIS
Date Vis Presented	06/24/2015

Vaccine Administration Information		
Element	Data	
Administered Vaccine	Hep B, unspecified formulation	
Date/Time Start of Administration	04/16/2015	
Administered Amount	999	
Administered Units		
Administration Notes	Historical Administration	
Administering Provider		
Substance Lot Number		
Substance Expiration Date		
Substance Manufacturer Name		
Substance/Treatment Refusal Reason		
Completion Status	Complete	
Action Code	Add	
Route		
Administration Site		

NISTEHRFacility

Lily Jackson

Entering Organization

Entered By

Ordered By

Vaccine Administration Information		
Element	Data	
Administered Vaccine	Hep B, unspecified formulation	
Date/Time Start of Administration	05/15/2015	
Administered Amount	999	
Administered Units		
Administration Notes	Historical Administration	
Administering Provider		
Substance Lot Number		
Substance Expiration Date		
Substance Manufacturer Name		
Substance/Treatment Refusal Reason		
Completion Status	Complete	
Action Code	Add	
Route		
Administration Site		
Entering Organization	NISTEHRFacility	
Entered By	Lily Jackson	
Ordered By		

# 1.1.2. IZ-AD-1.2 Receive ACK Z23

Test Step Type: TA\_RESPONDER

Tests the ability to consume a valid ACK message

#### **Test Story**

# Description

The IIS returns a positive acknowledgement message indicating that no errors were found during the course of filing the message.

#### Comments

No Comments

#### **Pre-condition**

A VXU message is generated by the EHR.

#### Post-Condition

No PostCondition

#### **Test Objectives**

No Test Objectives

#### **Evaluation Criteria**

The acknowledgement message is consumed by the system responsible for the content of the administration message without error.

#### Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

#### **Message Contents**

Location	Data Element	Data	Categorization
MSH-1	Field Separator	ı	
MSH-2	Encoding Characters	\~\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID		
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID	Tubi indire	
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID	THOI LANCE I	
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID	1 USI LI IIU AC	
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624073734.034-0500	
MSH-9		20130024073734.034-0300	
	Message Type	A CW	
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-1.2_Receive_ACK_Z23	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE	
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z23	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID		
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID		
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code		
MSH-22.10	Organization Identifier		
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code		
MSH-23.10	Organization Identifier		

-MSA:	Message	Acknowle	edgment =
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		<u> </u>	
Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AA	
MSA-2	Message Control ID	NIST-IZ-AD-1.1_Send_V04_Z22	

	Patient Information		
1 attent information			
	Element Date		
This information will be automatically supplied by the System			
This information will be automatically supplied by the System			

#### **Juror Document**

Return an Acknowledgement		
Test Case ID	IZ-AD-1_Admin_Child	
Juror ID		
Juror Name		
HIT System Tested		
Inspection Date/Time		
Inspection Settlement (Pass/Fail)	Pass Fail	
Reason Failed		
Juror Comments		

#### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which NO Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK message correctly; a positive notification indicating that the ACK message was processed correctly need not be made visible in the system.

# 1.2. IZ-AD-2\_Admin\_Adult

Adult administration

# **Test Story**

Description	
Description	
An adult is seen at a c	linic. Historical vaccinations are recorded and new vaccines are administered and documented.
Comments	
No Comments	
Pre-condition	
No PreCondition	
Post-Condition	
No PostCondition	
Test Objectives	
	the ability of the EHR to create an administration message for an adult containing historical and new
administrations includi	ng VIS and not eligible VFC.
Evaluation Criteria	
Notes	
No Note	

# 1.2.1. IZ-AD-2.1 Send V04 Z22

Test Step Type: SUT\_INITIATOR

Tests the ability to create a valid VXU^V04 message

### **Test Story**

### Description

A 32 year old female, Elise Wong, visits a clinic for a well woman visit. A clinic staff member collects basic patient demographic information including name, date of birth and sex. A clinic provider, Wilma Thomas (physician ID 654) reviews the patient's vaccination history and determines that Elise has received her influenza vaccinations on 10/12/2014 and 11/12/2013, but is in need of a tetanus booster. Because of the patient's age she does not qualify for Vaccine For Children (VFC) supplied vaccine. Elise is given the appropriate Vaccine Information Sheet (VIS) to review. After reading it, she agrees to receive the recommended vaccination. She also agrees that the data should be shared once it is incorporated into the local IIS. She indicates that reminders and recalls may be sent by any method. An appropriate dose of Td (TENIVAC) is selected from the clinic's stock of privately funded vaccines. A clinician, Lily Jackson (ID 7824) prepares and administers the doses to the patient and then enters the data into the EHR and transmits it to the IIS.

#### Comments

No Comments

#### Pre-condition

No PreCondition

#### Post-Condition

No PostCondition

#### **Test Objectives**

Support for a 'not eligible' VFC.

Support for both phone number and e-mail.

## **Evaluation Criteria**

Message Validation Report

#### Notes

For new administration messages, the vaccine is communicated using NDC codes in RXA-5 (Administered Code). For a given vaccine, one or more NDC codes may be appropriate to message. For this reason, RXA-5.1 is categorized as "Value - Test Case Fixed List" and allows for multiple valid values. The Message Content and Example Message data contain a single representative valid NDC code for example purposes.

ONC has determined that, from a regulatory/program perspective, an HIT Module cannot be required to be able to generate messages with the Vaccine Funding Source OBX segment for 2015 Edition certification testing. For certification purposes, ONC permits Testers to ignore the error notification generated by the NIST Immunization Test Suite when this segment is missing. Since the product under test will have to meet state reporting requirements when implemented, and many states require this information, it may be beneficial for HIT Modules to demonstrate support for the Vaccine Funding Source OBX segment during 2015 Edition certification testing.

# **Message Contents**

MSH: Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed
MSH-3	Sending Application	1-100	value-i forme i face
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID	NISI EFINAF F	Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID		Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID		Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID		Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624084727.655-0500	Presence-System Generated
MSH-9	Message Type		
MSH-9.1	Message Code	VXU	Value-Profile Fixed
MSH-9.2	Trigger Event	V04	Value-Profile Fixed
MSH-9.3	Message Structure	VXU V04	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-AD-2.1 Send V04 Z22	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID	COCTINIVIS	Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		Indirector
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority	NOI LINGAC	1 rescrice-configuration
MSH-22.6.1	Namespace ID		Indifferent
MSH-22.6.2	Universal ID		Indifferent
			Indifferent
MSH-22.6.3 MSH-22.7	Universal ID Type		Indifferent
	Identifier Type Code		
MSH-22.10	Organization Identifier		Indifferent
MSH-23	Receiving Responsible Organization	NICTERIORACI	Decree Configuration
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority		v #00
MSH-23.6.1	Namespace ID		Indifferent
MSH-23.6.2	Universal ID		Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
MSH-23.7	Identifier Type Code		Indifferent
MSH-23.10	Organization Identifier		Indifferent

– pin	<ul> <li>Patient</li> </ul>	Identification	

T		nt Identification	0.4
Location	Data Element	Data	Categorization
PID-1	Set ID - PID	1	Value-Profile Fixed
PID-3	Patient Identifier List		
PID-3.1	ID Number	90012	Presence-Content Indifferent
PID-3.4	Assigning Authority		
PID-3.4.1	Namespace ID	NIST-MPI-1	Presence-Content Indifferent
PID-3.4.2	Universal ID		Indifferent
PID-3.4.3	Universal ID Type		Indifferent
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed
PID-5	Patient Name		
PID-5.1	Family Name		
PID-5.1.1	Surname	Wong	Presence-Content Indifferent
PID-5.2	Given Name	Elise	Presence-Content Indifferent
PID-5.3	Second and Further Given Names or Initials Thereof		Indifferent
PID-5.7	Name Type Code	L	Value-Test Case Fixed
PID-6	Mother's Maiden Name		
PID-6.1	Family Name		
PID-6.1.1	Surname		Indifferent
PID-6.7	Name Type Code		Indifferent
PID-7	Date/Time of Birth		
PID-7.1	Time	19830615	Presence-Content Indifferent
PID-8	Administrative Sex	F	Value-Test Case Fixed
PID-10	Race		
PID-10.1	Identifier	2028-9	Value-Test Case Fixed
PID-10.2	Text	Asian	Presence-Test Case Proper
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed
PID-11	Patient Address	CECALC	value i forme i fred
PID-11.1	Street Address		
PID-11.1.1	Street or Mailing Address	9200 Wellington Trail	Presence-Content Indifferent
PID-11.2	Other Designation	9200 Weinington Trun	Indifferent
PID-11.3	City	Bozeman	Presence-Content Indifferent
PID-11.4	State or Province	MT	Presence-Content Indifferent
PID-11.5	Zip or Postal Code	59715	Presence-Content Indifferent
PID-11.6		USA	Presence-Content Indifferent
	Country		
PID-11.7	Address Type	P	Value-Test Case Fixed List
PID-13[1]	Phone Number - Home	DD9 I	WI T (C F I
PID-13[1].2	Telecommunication Use Code	PRN	Value-Test Case Fixed
PID-13[1].3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
PID-13[1].4	Email Address	1405	NonPresence
PID-13[1].6	Area/City Code	406	Presence-Content Indifferent
PID-13[1].7	Local Number	5557896	Presence-Content Indifferent
PID-13[2]	Phone Number - Home		
PID-13[2].2	Telecommunication Use Code	NET	Value-Test Case Fixed
PID-13[2].3	Telecommunication Equipment Type		Indifferent
PID-13[2].4	Email Address	Elise.Wong@isp.com	Presence-Content Indifferent
PID-13[2].6	Area/City Code		NonPresence
PID-13[2].7	Local Number		NonPresence
PID-22	Ethnic Group		
PID-22.1	Identifier	2186-5	Value-Test Case Fixed
PID-22.2	Text	Not Hispanic or Latino	Presence-Test Case Proper
PID-22.3	Name of Coding System	CDCREC	Value-Profile Fixed
PID-24	Multiple Birth Indicator	N	Value-Test Case Fixed
PID-25	Birth Order	1	Indifferent
PID-29	Patient Death Date and Time		
PID-29.1	Time		NonPresence
PID-30	Patient Death Indicator	N	Value-Test Case Fixed

-PD1	:	Patient	Additional	Demographic '
1 1/1	•	1 aucnt	Auditional	Demographic

		e .	
Location	Data Element	Data	Categorization
PD1-11	Publicity Code		
PD1-11.1	Identifier	02	Value-Test Case Fixed
PD1-11.2	Text	Reminder/recall - any method	Presence-Test Case Proper
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed
PD1-12	Protection Indicator	N	Value-Test Case Fixed
PD1-13	Protection Indicator Effective Date	20150624	Presence-Content Indifferent
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed
PD1-17	Immunization Registry Status Effective Date	19830615	Presence-Content Indifferent
PD1-18	Publicity Code Effective Date	20150624	Presence-Content Indifferent

# ORC[\*]

ORC : Common Or
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Location	Data Hement	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	4422	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	13696	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Sızanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	Namespace ID NIST-PI-1	
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	Name Type Code L	
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

-orc	:	Common	Order'
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		Indifferent
ORC-2.2	Namespace ID		Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	38760	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number		Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname		Indifferent
ORC-12.3	Given Name		Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof		Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID		Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code		Indifferent
ORC-12.13	Identifier Type Code		Indifferent
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

-orc :	Common	Order
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		Indifferent
ORC-2.2	Namespace ID		Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	35508	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number		Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname		Indifferent
ORC-12.3	Given Name		Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof		Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID		Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code		Indifferent
ORC-12.13	Identifier Type Code		Indifferent
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

#### - RXA[\*] -

## RXA: Pharmacy/Treatment Administration =

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		value 1101110 1 2100
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code	20130021	Tresence content manierent
RXA-5.1	Identifier	49281-0215-88	Value-Test Case Fixed List
RXA-5.2	Text	TENIVAC	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	0.5	Presence-Test Case Proper
RXA-7	Administered Units		Treatise Test case Tropes
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes	OCON	value-i forme rixed
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.1 RXA-9.2	Text	New Record	Presence-Test Case Proper
RXA-9.2 RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
	Administering Provider	NIPUUI	value-Proffie Fixed
RXA-10 RXA-10.1		7024	Processor Contact In FCC
	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		D G V . EM
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	· ·		Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Value-Test Case Fixed
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	315841	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20151216	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name	20131210	rescrice-content mannerent
RXA-17.1	Identifier	PMC	Value-Test Case Fixed
RXA-17.2	Text	Sanofi Pasteur	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-17.3	Substance/Treatment Refusal Reason	1V1 V.A.	value-i forme fixed
RXA-18.1	Identifier		NonPresence
			NonPresence
RXA-18.2	Text		
RXA-18.3	Name of Coding System	CD	NonPresence
RXA-20	Completion Status	CP	Value-Test Case Fixed

RXA: Pharmacy/Treatment Administrate	ion =
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Location	Data Element	Data	Categorization	
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed	
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed	
RXA-3	Date/Time Start of Administration			
RXA-3.1	Time	20141012	Presence-Content Indifferent	
RXA-5	Administered Code			
RXA-5.1	Identifier	88	Value-Test Case Fixed	
RXA-5.2	Text	influenza, unspecified formulation	Presence-Test Case Proper	
RXA-5.3	Name of Coding System	CVX	Value-Profile Fixed	
RXA-6	Administered Amount	999	Value-Test Case Fixed	
RXA-7	Administered Units			
RXA-7.1	Identifier		NonPresence	
RXA-7.2	Text		NonPresence	
RXA-7.3	Name of Coding System		NonPresence	
RXA-9	Administration Notes			
RXA-9.1	Identifier	01	Value-Test Case Fixed	
RXA-9.2	Text	Historical Administration	Presence-Test Case Proper	
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed	
RXA-10	Administering Provider			
RXA-10.1	ID Number		Indifferent	
RXA-10.2	Family Name			
RXA-10.2.1	Surname		Indifferent	
RXA-10.3	Given Name		Indifferent	
RXA-10.4	Second and Further Given Names or Initials Thereof		Indifferent	
RXA-10.9	Assigning Authority			
RXA-10.9.1	Namespace ID		Indifferent	
RXA-10.9.2	Universal ID		Indifferent	
RXA-10.9.3	Universal ID Type		Indifferent	
RXA-10.10	Name Type Code		Indifferent	
RXA-10.13	Identifier Type Code		Indifferent	
RXA-11	Administered-at Location			
RXA-11.4	Facility			
RXA-11.4.1	Namespace ID		Indifferent	
RXA-11.4.2	Universal ID		Indifferent	
RXA-11.4.3	Universal ID Type		Indifferent	
RXA-15	Substance Lot Number		Indifferent	
RXA-16	Substance Expiration Date			
RXA-16.1	Time		Indifferent	
RXA-17	Substance Manufacturer Name			
RXA-17.1	Identifier		Indifferent	
RXA-17.2	Text		Indifferent	
RXA-17.3	Name of Coding System		Indifferent	
RXA-18	Substance/Treatment Refusal Reason			
RXA-18.1	Identifier		NonPresence	
RXA-18.2	Text		NonPresence	
RXA-18.3	Name of Coding System		NonPresence	
RXA-20	Completion Status	СР	Value-Test Case Fixed	
RXA-21	Action Code - RXA	A	Value-Test Case Fixed	

RXA: Pharmacy/Treatment Administration			
Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20131112	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	88	Value-Test Case Fixed
RXA-5.2	Text	influenza, unspecified formulation	Presence-Test Case Proper
RXA-5.3	Name of Coding System	CVX	Value-Profile Fixed
RXA-6	Administered Amount	999	Value-Test Case Fixed
RXA-7	Administered Units		
RXA-7.1	Identifier		NonPresence
RXA-7.2	Text		NonPresence
RXA-7.3	Name of Coding System		NonPresence
RXA-9	Administration Notes		
RXA-9.1	Identifier	01	Value-Test Case Fixed
RXA-9.2	Text	Historical Administration	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number		Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname		Indifferent
RXA-10.3	Given Name		Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof		Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID		Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code		Indifferent
RXA-10.13	Identifier Type Code		Indifferent
RXA-11	Administered at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID		Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number		Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time		Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier		Indifferent
RXA-17.2	Text		Indifferent
RXA-17.3	Name of Coding System		Indifferent
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

	RXR : Pharmacy/Treatment Route		
Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C28161	Value-Test Case Fixed
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	RD	Value-Test Case Fixed
RXR-2.2	Text	Right Deltoid	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

#### OBX[\*]

# OBX: Observation/Result

Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	PHC70	Value-Test Case Fixed
OBX-5.2	Text	Private	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

## OBX: Observation/Result

		_	
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	V01	Value-Test Case Fixed
OBX-5.2	Text	Not VFC Eligible	Presence-Test Case Proper
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed
OBX-17.2	Text	per immunization	Presence-Test Case Proper
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300028811210806	Value-Test Case Fixed
OBX-5.2	Text	Td (Tetanus, Diphtheria) Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

# **Test Data Specification**

Patient Information		
Element	Data	
Patient Name	Elise Wong	
Mother's Maiden Name		
ID Number	90012	
Date/Time of Birth	06/15/1983	
Administrative Sex	Female	
Patient Address	9200 Wellington Trail Bozeman MT 59715 USA	
Local Number	(406)555-7896	
Email	Elise. Wong@isp.com	
Race	Asian	
Ethnic Group	Not Hispanic or Latino	
Multiple Birth Indicator	No	

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Birth Order

Element	Data
Immunization Registry Status	Active
Immunization Registry Status Effective Date	06/15/1983
Publicity Code	Reminder/recall - any method
Publicity Code Effective Date	06/24/2015
Protection Indicator	No
Protection Indicator Effective Date	06/24/2015

# -Vaccine Administration Information[\*]-

# -Vaccine Administration Information

Element	Data
Administered Vaccine	TENIVAC
Date/Time Start of Administration	06/24/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	315841
Substance Expiration Date	12/16/2015
Substance Manufacturer Name	Sanofi Pasteur
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Intramuscular
Administration Site	Right Deltoid
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Private
Vaccine Funding Program Eligibility	Not VFC Eligible
Document Type	Td (Tetanus, Diphtheria) Vaccine VIS
Date Vis Presented	06/24/2015

Vaccine Administration Information		
Element	Data	
Administered Vaccine	influenza, unspecified formulation	
Date/Time Start of Administration	10/12/2014	
Administered Amount	999	
Administered Units		
Administration Notes	Historical Administration	
Administering Provider		
Substance Lot Number		
Substance Expiration Date		
Substance Manufacturer Name		
Substance/Treatment Refusal Reason		
Completion Status	Complete	
Action Code	Add	

NISTEHRFacility

Lily Jackson

Route

Entered By

Ordered By

Administration Site

Entering Organization

Vaccine Administration Information		
Element	Data	
Administered Vaccine	influenza, unspecified formulation	
Date/Time Start of Administration	11/12/2013	
Administered Amount	999	
Administered Units		
Administration Notes	Historical Administration	
Administering Provider		
Substance Lot Number		
Substance Expiration Date		
Substance Manufacturer Name		
Substance/Treatment Refusal Reason		
Completion Status	Complete	
Action Code	Add	
Route		
Administration Site		
Entering Organization	NISTEHRFacility	
Entered By	Lily Jackson	
Ordered By		

# 1.2.2. IZ-AD-2.2 Receive ACK Z23

Test Step Type: TA\_RESPONDER

Tests the ability to consume a valid ACK message

# **Test Story**

## Description

The IIS returns a positive acknowledgement message indicating that no errors were found during the course of filing the message.

### Comments

No Comments

#### **Pre-condition**

A VXU message is generated by the EHR.

#### Post-Condition

No PostCondition

## **Test Objectives**

#### **Evaluation Criteria**

The acknowledgement message is consumed by the system responsible for the content of the administration message without error.

#### Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

## **Message Contents**

Location	Data Element	Message Header Data	Categorization
		Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	~\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID		
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID		
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624084727.669-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-2.2 Receive ACK Z23	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE NE	
MSH-16	Application Acknowledgment Type	NE NE	
MSH-21	Message Profile Identifier	TUE	
MSH-21.1	Entity Identifier	Z23	
MSH-21.2	Namespace ID	CDCPHINVS	
	Universal ID	CDCFHINVS	
MSH-21.3			
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization	NAMES AND ADDRESS OF THE PARTY	
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID		
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code		
MSH-22.10	Organization Identifier		
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code		
MSH-23.10	Organization Identifier		

MSA: Message Acknowledgment			
Data Element	Data	Categorization	
Acknowledgment Code	AA		
Message Control ID	NIST-IZ-AD-2.1_Send_V04_Z22		
	Data Element Acknowledgment Code	Data Element     Data       Acknowledgment Code     AA	

_	Patient Information			
	Tation intolliation			
	Element	Data		
	This information will be automatically supplied by the System			

## **Juror Document**

Return an Acknowledgement			
Test Case ID	IZ-AD-2_Admin_Adult		
Juror ID			
Juror Name			
HIT System Tested			
Inspection Date/Time			
Learnest on Cathanant (Decr(Cath	Pass	Fail	
Inspection Settlement (Pass/Fail)			
Reason Failed			
Juror Comments			

#### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which NO Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

#### Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK message correctly; a positive notification indicating that the ACK message was processed correctly need not be made visible in the system.

# 1.3. IZ-AD-3\_No\_Consent

Child administration without consent for sharing. Also test the ability to send the patient's full first and middle names.

# **Test Story**

Description	
A child is seen at a clinic. A ne	w vaccine is administered and documented but the information is not to shared by the IIS.
Comments	
No Comments	
Pre-condition	
No PreCondition	
Post-Condition	
No PostCondition	
Test Objectives	
	ty of the EHR to create an administration message for a child containing a new administration but an not be shared. Also test the ability of the EHR to support full first and middle names.
indication that the data should i	not be shared. Also lest the ability of the EFIK to support full hist and findule frames.
Evaluation Criteria	
Notes	
No Note	

# 1.3.1. IZ-AD-3.1 Send V04 Z22

Test Step Type: SUT INITIATOR

Tests the ability to create a valid VXU^V04 message

### **Test Story**

### Description

An eleven and a half year old female, Katherine Mackenzie Benton, is brought to a clinic for a third and final dose of HPV vaccine. She is accompanied by her mother Kari Michelle Benton (nee Jones). A clinic staff member collects basic patient demographic information including name, date of birth and sex. The mother is given the appropriate Vaccine Information Sheet (VIS) to review. After reading it, the mother agrees that the child should receive the HPV vaccine, but she chooses not to share the data once it is incorporated into the local IIS. She also declines any reminder or recall notifications. A clinic provider, Wilma Thomas (physician ID 654) places an order for the vaccination. While the patient is covered by insurance, the plan does not cover this vaccination and she qualifies for Vaccine For Children (VFC) supplied vaccines under the status of VFC eligible - Underinsured. An appropriate dose of HPV (Gardasil-9) is selected from the clinic's stock of publically funded vaccines. A clinician, Lily Jackson (ID 7824) prepares and administers the dose to the patient and then enters the data into the EHR and transmits it to the IIS.

#### Comments

No Comments

#### Pre-condition

No PreCondition

#### Post-Condition

No PostCondition

### **Test Objectives**

Support for no consent given

Support for a full middle name

Support for a long first and middle name

## **Evaluation Criteria**

Message Validation Report

#### Notes

For new administration messages, the vaccine is communicated using NDC codes in RXA-5 (Administered Code). For a given vaccine, one or more NDC codes may be appropriate to message. For this reason, RXA-5.1 is categorized as "Value - Test Case Fixed List" and allows for multiple valid values. The Message Content and Example Message data contain a single representative valid NDC code for example purposes.

ONC has determined that, from a regulatory/program perspective, an HIT Module cannot be required to be able to generate messages with the Vaccine Funding Source OBX segment for 2015 Edition certification testing. For certification purposes, ONC permits Testers to ignore the error notification generated by the NIST Immunization Test Suite when this segment is missing. Since the product under test will have to meet state reporting requirements when implemented, and many states require this information, it may be beneficial for HIT Modules to demonstrate support for the Vaccine Funding Source OBX segment during 2015 Edition certification testing.

# **Message Contents**

MSH: Message Header

MSH : Message Header				
Location	Data Element	Data	Categorization	
MSH-1	Field Separator	i i	Value-Profile Fixed	
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed	
MSH-3	Sending Application			
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration	
MSH-3.2	Universal ID		Indifferent	
MSH-3.3	Universal ID Type		Indifferent	
MSH-4	Sending Facility		indirerent	
MSH-4.1		NISTEHRFAC	Processes Configuration	
MSH-4.1 MSH-4.2	Namespace ID	NISI EHRFAC	Presence-Configuration Indifferent	
	Universal ID			
MSH-4.3	Universal ID Type		Indifferent	
MSH-5	Receiving Application	) WORNEY D.D.	D 0 0 1	
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration	
MSH-5.2	Universal ID		Indifferent	
MSH-5.3	Universal ID Type		Indifferent	
MSH-6	Receiving Facility			
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration	
MSH-6.2	Universal ID		Indifferent	
MSH-6.3	Universal ID Type		Indifferent	
MSH-7	Date/Time Of Message			
MSH-7.1	Time	20150624093847.804-0500	Presence-System Generated	
MSH-9	Message Type			
MSH-9.1	Message Code	VXU	Value-Profile Fixed	
MSH-9.2	Trigger Event	V04	Value-Profile Fixed	
MSH-9.3	Message Structure	VXU V04	Value-Profile Fixed	
MSH-10	Message Control ID	NIST-IZ-AD-3.1 Send V04 Z22	Presence-System Generated	
MSH-11	Processing ID			
MSH-11.1	Processing ID	P	Presence-Content Indifferent	
MSH-12	Version ID	<del> </del>	Tessile Content married	
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed	
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed	
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed	
MSH-21	Message Profile Identifier	AL	value-1 forme fixed	
		722	Value-Profile Fixed	
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed	
MSH-21.2	Namespace ID	CDCPHINVS		
MSH-21.3	Universal ID		Indifferent	
MSH-21.4	Universal ID Type		Indifferent	
MSH-22	Sending Responsible Organization			
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration	
MSH-22.6	Assigning Authority			
MSH-22.6.1	Namespace ID		Indifferent	
MSH-22.6.2	Universal ID		Indifferent	
MSH-22.6.3	Universal ID Type		Indifferent	
MSH-22.7	Identifier Type Code		Indifferent	
MSH-22.10	Organization Identifier		Indifferent	
MSH-23	Receiving Responsible Organization			
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration	
MSH-23.6	Assigning Authority		, and the grantest	
MSH-23.6.1	Namespace ID		Indifferent	
MSH-23.6.2	Universal ID		Indifferent	
MSH-23.6.2 MSH-23.6.3			Indifferent	
	Universal ID Type			
MSH-23.7	Identifier Type Code		Indifferent	
MSH-23.10	Organization Identifier		Indifferent	

#### PID · Patient Identification

Data Element	Data	
Data Deficit	Data	Categorization
Set ID - PID	1	Value-Profile Fixed
Patient Identifier List		
ID Number	89778	Presence-Content Indifferent
Assigning Authority		
Namespace ID	NIST-MPI-1	Presence-Content Indifferent
Universal ID		Indifferent
Universal ID Type		Indifferent
Identifier Type Code	MR	Value-Test Case Fixed
Patient Name		
Family Name		
Surname	Benton	Presence-Content Indifferent
Given Name	Katherine	Presence Length-Content Indifferent
Second and Further Given Names or Initials Thereof	Mackenzie	Presence Length-Content Indifferent
Name Type Code	L	Value-Test Case Fixed
Mother's Maiden Name		
Family Name		
Surname	Jones	Presence-Content Indifferent
Name Type Code	M	Value-Profile Fixed
Date/Time of Birth		
Time	20031221	Presence-Content Indifferent
Administrative Sex	F	Value-Test Case Fixed
Race		
Identifier	2106-3	Value-Test Case Fixed
Text	White	Presence-Test Case Proper
Name of Coding System	CDCREC	Value-Profile Fixed
Patient Address		
Street Address		
Street or Mailing Address	89 West 21st Ave	Presence-Content Indifferent
		Indifferent
	Bozeman	Presence-Content Indifferent
State or Province	МТ	Presence-Content Indifferent
Zip or Postal Code	59715	Presence-Content Indifferent
		Presence-Content Indifferent
Address Type	P	Value-Test Case Fixed List
Phone Number - Home		
Telecommunication Use Code	PRN	Value-Test Case Fixed
	PH	Value-Test Case Fixed
		NonPresence
	406	Presence-Content Indifferent
	5554019	Presence-Content Indifferent
*	2186-5	Value-Test Case Fixed
		Presence-Test Case Proper
<del></del>	<del>-</del>	Value-Profile Fixed
		Value-Trottle Fixed  Value-Test Case Fixed
*		Indifferent
	1	Indirection
		NanPracanca
Patient Death Indicator	N	NonPresence Value-Test Case Fixed
	Patient Identifier List  ID Number  Assigning Authority  Namespace ID  Universal ID  Universal ID Type  Identifier Type Code  Patient Name  Family Name  Surname  Given Name  Second and Further Given Names or Initials Thereof  Name Type Code  Mother's Maiden Name  Family Name  Surname  Name Type Code  Date/Time of Birth  Time  Administrative Sex  Race  Identifier  Text  Name of Coding System  Patient Address  Street Address  Street or Mailing Address  Other Designation  City  State or Province  Zip or Postal Code  Country  Address Type	Patient Identifier List  ID Number 89778  Assigning Authority Namespace ID NIST-MPI-1  Universal ID Universal

PD1 : Patient Additional Demographic

121 T HILLEN THANKS THE PARTY OF THE PARTY O			
Location	Data Element	Data	Categorization
PD1-11	Publicity Code		
PD1-11.1	Identifier	01	Value-Test Case Fixed
PD1-11.2	Text	No reminder/recall	Presence-Test Case Proper
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed
PD1-12	Protection Indicator	Y	Value-Test Case Fixed
PD1-13	Protection Indicator Effective Date	20150624	Presence-Content Indifferent
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed
PD1-17	Immunization Registry Status Effective Date	20031221	Presence-Content Indifferent
PD1-18	Publicity Code Effective Date	20150624	Presence-Content Indifferent

NK1 : Next of Kin / Associated Parties

Location	Data Element	Data	Categorization
NK1-1	Set ID - NK1	1	Value-Profile Fixed
NK1-2	Name		
NK1-2.1	Family Name		
NK1-2.1.1	Surname	Benton	Presence-Content Indifferent
NK1-2.2	Given Name	Kari	Presence-Content Indifferent
NK1-2.3	Second and Further Given Names or Initials Thereof	Michelle	Presence-Content Indifferent
NK1-2.7	Name Type Code	L	Value-Test Case Fixed
NK1-3	Relationship		
NK1-3.1	Identifier	MTH	Value-Test Case Fixed
NK1-3.2	Text	Mother	Presence-Test Case Proper
NK1-3.3	Name of Coding System	HL70063	Value-Profile Fixed
NK1-4	Address		
NK1-4.1	Street Address		
NK1-4.1.1	Street or Mailing Address	89 West 21st Ave	Presence-Content Indifferent
NK1-4.2	NK1-4.2 Other Designation		Indifferent
NK1-4.3	City	Bozeman	Presence-Content Indifferent
NK1-4.4	State or Province	MT	Presence-Content Indifferent
NK1-4.5	Zip or Postal Code	59715	Presence-Content Indifferent
NK1-4.6	Country	USA	Presence-Content Indifferent
NK1-4.7	Address Type	P	Value-Test Case Fixed List
NK1-5	Phone Number		
NK1-5.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
NK1-5.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
NK1-5.4	Email Address		Indifferent
NK1-5.6 Area/City Code		406	Presence-Content Indifferent
NK1-5.7	Local Number	5554019	Presence-Content Indifferent

-orc	:	Common	Order-
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	2 Placer Order Number		
ORC-2.1	Entity Identifier	5237	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	31309	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	00006-4119-01	Value-Test Case Fixed List
RXA-5.2	Text	GARDASIL 9	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	0.5	Presence-Test Case Proper
RXA-7	Administered Units		
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes		
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.2	Text	New Record	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Value-Test Case Fixed
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	795441	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20151223	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	MSD	Value-Test Case Fixed
RXA-17.2	Text	Merck and Co., Inc.	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
DVA 20	Completion Status	CD	Volvo Test Cose Fixed

	RXR : Pharmacy/Treatment Route		
Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C28161	Value-Test Case Fixed
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	RD	Value-Test Case Fixed
RXR-2.2	Text	Right Deltoid	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

СР

A

Completion Status

Action Code - RXA

Value-Test Case Fixed

Value-Test Case Fixed

RXA-20

RXA-21

#### OBX[\*]

# OBX: Observation/Result

Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC50	Value-Test Case Fixed
OBX-5.2	Text	Public	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

## OBX: Observation/Result

Location	Data Element	Data	Catagorization
			Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	V05	Value-Test Case Fixed
OBX-5.2	Text	VFC Eligible - Underinsured	Presence-Test Case Proper
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed
OBX-17.2	Text	per immunization	Presence-Test Case Proper
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed

	OBX: 0	Observation/Result	
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300029511210806	Value-Test Case Fixed
OBX-5.2	Text	HPV (Human Papillomavirus) Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

	OBX:	Observation/Result	
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

# **Test Data Specification**

	Patient Information		
Element	Data		
Patient Name	Katherine Mackenzie Benton		
Mother's Maiden Name	Jones		
ID Number	89778		
Date/Time of Birth	12/21/2003		
Administrative Sex	Female		
Patient Address	89 West 21st Ave Bozeman MT 59715 USA		
Local Number	(406)555-4019		
Race	White		
Ethnic Group	Not Hispanic or Latino		
Multiple Birth Indicator	No		

Immunization Registry Information		
Element	Data	
Immunization Registry Status	Active	
Immunization Registry Status Effective Date	12/21/2003	
Publicity Code	No reminder/recall	
Publicity Code Effective Date	06/24/2015	
Protection Indicator	Yes	
Protection Indicator Effective Date	06/24/2015	

1

Birth Order

Guardian or Responsible Party—		
Element	Data	
Name	Kari Michelle Benton	
Relationship	Mother	
Address	89 West 21st Ave Bozeman MT 59715 USA	
Phone Number	(406)555-4019	

Vaccine Administration Information			
Element	Data		
Administered Vaccine	GARDASIL 9		
Date/Time Start of Administration	06/24/2015		
Administered Amount	0.5		
Administered Units	mL		
Administration Notes	New Record		
Administering Provider	Lily Jackson		
Substance Lot Number	795441		
Substance Expiration Date	12/23/2015		
Substance Manufacturer Name	Merck and Co., Inc.		
Substance/Treatment Refusal Reason			
Completion Status	Complete		
Action Code	Add		
Route	Intramuscular		
Administration Site	Right Deltoid		
Entering Organization	NISTEHRFacility		
Entered By	Lily Jackson		
Ordered By	Wilma Thomas		

Element	Data
Vaccine Funding Source	Public
Vaccine Funding Program Eligibility	VFC Eligible - Underinsured
Document Type	HPV (Human Papillomavirus) Vaccine VIS
Date Vis Presented	06/24/2015

# 1.3.2. IZ-AD-3.2 Receive ACK Z23

Test Step Type: TA RESPONDER

Tests the ability to consume a valid ACK message

# **Test Story**

## Description

The IIS returns a positive acknowledgement message indicating that no errors were found during the course of filing the message.

### Comments

No Comments

#### **Pre-condition**

A VXU message is generated by the EHR.

#### Post-Condition

No PostCondition

## **Test Objectives**

#### **Evaluation Criteria**

The acknowledgement message is consumed by the system responsible for the content of the administration message without error.

#### Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

## **Message Contents**

Location	Data Element	Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	\~\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID	1 doi not i	
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID	NISTRISTAC	
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application	NICTELIDADD	
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624093847.806-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-3.2 Receive ACK Z23	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID	<del>-</del>	
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type		
MSH-21	Message Profile Identifier		
MSH-21.1	-	Z23	
MSH-21.2	Entity Identifier	CDCPHINVS	
	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID Torre		
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization	NUMBER	
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID		
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code		
MSH-22.10	Organization Identifier		
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code		
MSH-23.10	Organization Identifier		

MSA: Message Acknowledgment				
Location	Data Element	Data	Categorization	
MSA-1	Acknowledgment Code	AA		
MSA-2	Message Control ID	NIST-IZ-AD-3.1_Send_V04_Z22		

Patient Information				
r attent information				
Element Data				
This information will be automatically supplied by the System				
and an				

# **Juror Document**

Return an Acknowledgement				
Test Case ID IZ-AD-3_No_Consent				
Juror ID				
Juror Name				
HIT System Tested				
Inspection Date/Time				
Laure estima Catalograph (Dece/Pail)	Pass Fail			
Inspection Settlement (Pass/Fail)				
Reason Failed				
Juror Comments	Comments			

#### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which NO Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

#### Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK message correctly; a positive notification indicating that the ACK message was processed correctly need not be made visible in the system.

# 1.4. IZ-AD-4\_Delete\_Record

Child deleted administration

# **Test Story**

Description	
_	linic. A previously documented vaccination is deleted due to user error.
Comments	
No Comments	
Pre-condition	
The IZ-AD-3_No_0	Consent test case has been successfully completed.
Post-Condition	
No PostCondition	
Test Objectives	
This test case assess	es the ability of the EHR to create a delete message for a previously sent administration.
Evaluation Criteria	
Notes	
No Note	

# 1.4.1. IZ-AD-4.1 Send V04 Z22

Test Step Type: SUT INITIATOR

Tests the ability to create a valid VXU^V04 message

## **Test Story**

### Description

After administering an HPV vaccination to the eleven and a half year old female Katherine Benton the clinician, Lily Jackson (ID 7824) realizes that the vaccination was documented on the incorrect patient chart. She deletes the vaccination from the patient chart and transmits the change to the IIS.

#### Comments

No Comments

#### **Pre-condition**

The IZ-AD-3.1 Send V04 Z22 test step has been successfully completed.

#### **Post-Condition**

No PostCondition

### **Test Objectives**

Support for sending delete notification.

#### **Evaluation Criteria**

Message Validation Report

#### **Notes**

For new administration messages, the vaccine is communicated using NDC codes in RXA-5 (Administered Code). For a given vaccine, one or more NDC codes may be appropriate to message. For this reason, RXA-5.1 is categorized as "Value - Test Case Fixed List" and allows for multiple valid values. The Message Content and Example Message data contain a single representative valid NDC code for example purposes.

ONC has determined that, from a regulatory/program perspective, an HIT Module cannot be required to be able to generate messages with the Vaccine Funding Source OBX segment for 2015 Edition certification testing. For certification purposes, ONC permits Testers to ignore the error notification generated by the NIST Immunization Test Suite when this segment is missing. Since the product under test will have to meet state reporting requirements when implemented, and many states require this information, it may be beneficial for HIT Modules to demonstrate support for the Vaccine Funding Source OBX segment during 2015 Edition certification testing.

## **Message Contents**

MSH: Message Header

		Message Header		
Location	Data Element	Data	Categorization	
MSH-1	Field Separator		Value-Profile Fixed	
ASH-2	Encoding Characters	^\&	Value-Profile Fixed	
MSH-3	Sending Application			
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration	
MSH-3.2	Universal ID		Indifferent	
MSH-3.3	Universal ID Type		Indifferent	
MSH-4	Sending Facility			
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration	
MSH-4.2	Universal ID		Indifferent	
MSH-4.3	Universal ID Type		Indifferent	
MSH-5	Receiving Application			
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration	
MSH-5.2	Universal ID		Indifferent	
MSH-5.3	Universal ID Type		Indifferent	
ASH-6	Receiving Facility			
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration	
MSH-6.2	Universal ID		Indifferent	
MSH-6.3	Universal ID Type		Indifferent	
MSH-7	Date/Time Of Message			
MSH-7.1	Time	20150624093847.804-0500	Presence-System Generated	
MSH-9	Message Type	20120021092017100110200	Tresence System Centerated	
MSH-9.1	Message Code	VXU	Value-Profile Fixed	
MSH-9.2	Trigger Event	V04	Value-Profile Fixed	
MSH-9.3	Message Structure	VXU V04	Value-Profile Fixed	
MSH-10			Presence-System Generated	
MSH-11	Processing ID	NIST-IZ-AD-4.1_Send_V04_Z22	Trescrice-by stem centrated	
MSH-11.1	Processing ID	P	Presence-Content Indifferent	
MSH-12	Version ID	1	1 resence-content indirerent	
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed	
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed	
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed	
MSH-21	Message Profile Identifier	722	VI P CI E I	
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed	
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed	
MSH-21.3	Universal ID		Indifferent	
MSH-21.4	Universal ID Type		Indifferent	
MSH-22	Sending Responsible Organization			
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration	
MSH-22.6	Assigning Authority			
MSH-22.6.1	Namespace ID		Indifferent	
MSH-22.6.2	Universal ID		Indifferent	
MSH-22.6.3	Universal ID Type		Indifferent	
MSH-22.7	Identifier Type Code		Indifferent	
MSH-22.10	Organization Identifier		Indifferent	
MSH-23	Receiving Responsible Organization			
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration	
MSH-23.6	Assigning Authority			
MSH-23.6.1	Namespace ID		Indifferent	
MSH-23.6.2	Universal ID		Indifferent	
MSH-23.6.3	Universal ID Type		Indifferent	
MSH-23.7	Identifier Type Code		Indifferent	
MSH-23.10	Organization Identifier		Indifferent	

### PID : Patient Identification

PID : Patient Identification					
Location	Data Element	Data	Categorization		
PID-1	Set ID - PID	1	Value-Profile Fixed		
PID-3	Patient Identifier List				
PID-3.1	ID Number	89778	Presence-Content Indifferent		
PID-3.4	Assigning Authority				
PID-3.4.1	Namespace ID	NIST-MPI-1	Presence-Content Indifferent		
PID-3.4.2	Universal ID		Indifferent		
PID-3.4.3	Universal ID Type		Indifferent		
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed		
PID-5	Patient Name				
PID-5.1	Family Name				
PID-5.1.1	Surname	Benton	Presence-Content Indifferent		
PID-5.2	Given Name	Katherine	Presence-Content Indifferent		
PID-5.3	Second and Further Given Names or Initials Thereof	Mackenzie	Presence-Content Indifferent		
PID-5.7	Name Type Code	L	Value-Test Case Fixed		
PID-6	Mother's Maiden Name				
PID-6.1	Family Name				
PID-6.1.1	Surname	Jones	Presence-Content Indifferent		
PID-6.7	Name Type Code	M	Value-Profile Fixed		
PID-7	Date/Time of Birth				
PID-7.1	Time	20031221	Presence-Content Indifferent		
PID-8	Administrative Sex	F	Value-Test Case Fixed		
PID-10	Race				
PID-10.1	Identifier	2106-3	Value-Test Case Fixed		
PID-10.2	Text	White	Presence-Test Case Proper		
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed		
PID-11	Patient Address				
PID-11.1	Street Address				
PID-11.1.1	Street or Mailing Address	89 West 21st Ave	Presence-Content Indifferent		
PID-11.2	Other Designation	05 ((65 215) 11(6	Indifferent		
PID-11.3	City	Bozeman	Presence-Content Indifferent		
PID-11.4	State or Province	MT	Presence-Content Indifferent		
PID-11.5	Zip or Postal Code	59715	Presence-Content Indifferent		
PID-11.6	Country	USA	Presence-Content Indifferent		
PID-11.7	Address Type	P	Value-Test Case Fixed List		
PID-13	Phone Number - Home	-	Value 1 650 Case 1 1100 2150		
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed		
PID-13.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed		
PID-13.4	Email Address		NonPresence		
PID-13.6	Area/City Code	406	Presence-Content Indifferent		
PID-13.7	Local Number	5554019	Presence-Content Indifferent		
PID-22	Ethnic Group		- 1 control content intuition		
PID-22.1	Identifier	2186-5	Value-Test Case Fixed		
PID-22.2	Text	Not Hispanic or Latino	Presence-Test Case Proper		
PID-22.3	Name of Coding System	CDCREC	Value-Profile Fixed		
PID-24	Multiple Birth Indicator	N	Value-Test Case Fixed		
PID-25	Birth Order	1	Indifferent		
PID-29	Patient Death Date and Time		Indirection		
PID-29 PID-29.1	Time		NonPresence		
PID-30	Patient Death Indicator	N	Value-Test Case Fixed		
1 1D-30	ration Death Indicator	IN	value-1 est Case Fixed		

PD1 : Patient Additional Demographic

1D1.1 attent Additional Demographic				
Location	Data Element	Data	Categorization	
PD1-11	Publicity Code			
PD1-11.1	Identifier	01	Value-Test Case Fixed	
PD1-11.2	Text	No reminder/recall	Presence-Test Case Proper	
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed	
PD1-12	Protection Indicator	Y	Value-Test Case Fixed	
PD1-13	Protection Indicator Effective Date	20150624	Presence-Content Indifferent	
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed	
PD1-17	Immunization Registry Status Effective Date	20031221	Presence-Content Indifferent	
PD1-18	Publicity Code Effective Date	20150624	Presence-Content Indifferent	

-NK1	Nevt	of Kin	/ Associated	Parties =
NN	next	OI MIII	Associateu	rarues

NK1 : Next of Kin / Associated Parties				
Location	Data Element	Data	Categorization	
NK1-1	Set ID - NK1	1 Value-Profile Fixed		
NK1-2	Name			
NK1-2.1	Family Name			
NK1-2.1.1	Surname	Benton	Presence-Content Indifferent	
NK1-2.2	Given Name	Kari	Presence-Content Indifferent	
NK1-2.3	Second and Further Given Names or Initials Thereof	Michelle	Presence-Content Indifferent	
NK1-2.7	Name Type Code	L	Value-Test Case Fixed	
NK1-3	Relationship			
NK1-3.1	Identifier	MTH	Value-Test Case Fixed	
NK1-3.2	Text	Mother	Presence-Test Case Proper	
NK1-3.3	Name of Coding System	HL70063	Value-Profile Fixed	
NK1-4	Address	Address		
NK1-4.1	Street Address			
NK1-4.1.1	Street or Mailing Address	89 West 21st Ave	Presence-Content Indifferent	
NK1-4.2	Other Designation		Indifferent	
NK1-4.3	City	Bozeman	Presence-Content Indifferent	
NK1-4.4	State or Province	МТ	Presence-Content Indifferent	
NK1-4.5	Zip or Postal Code	59715	Presence-Content Indifferent	
NK1-4.6	Country	USA	Presence-Content Indifferent	
NK1-4.7	Address Type	P	Value-Test Case Fixed List	
NK1-5	Phone Number			
NK1-5.2	Telecommunication Use Code	PRN	Value-Test Case Fixed	
NK1-5.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed	
NK1-5.4	Email Address		Indifferent	
NK1-5.6	Area/City Code	406	Presence-Content Indifferent	
NK1-5.7	Local Number	5554019	Presence-Content Indifferent	

-orc	:	Common	Order-
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	5237	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	31309	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	00006-4119-01	Value-Test Case Fixed List
RXA-5.2	Text	GARDASIL 9	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	0.5	Presence-Test Case Proper
RXA-7	Administered Units		
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes		
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.2	Text	New Record	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Value-Test Case Fixed
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	795441	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20151223	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	MSD	Value-Test Case Fixed
RXA-17.2	Text	Merck and Co., Inc.	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
DVA 20	Completion Status	CP	Value Test Case Fixed

RXR : Pharmacy/Treatment Route				
Location	Data Element	Data	Categorization	
RXR-1	Route			
RXR-1.1	Identifier	C28161	Value-Test Case Fixed	
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper	
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed	
RXR-2	Administration Site			
RXR-2.1	Identifier	RD	Value-Test Case Fixed	
RXR-2.2	Text	Right Deltoid	Presence-Test Case Proper	
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed	

СР

D

Completion Status

Action Code - RXA

Value-Test Case Fixed

Value-Test Case Fixed

RXA-20

RXA-21

### -OBX[\*]

### OBX: Observation/Result

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC50	Value-Test Case Fixed
OBX-5.2	Text	Public	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

### OBX: Observation/Result

Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	V05	Value-Test Case Fixed
OBX-5.2	Text	VFC Eligible - Underinsured	Presence-Test Case Proper
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed
OBX-17.2	Text	per immunization	Presence-Test Case Proper
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300029511210806	Value-Test Case Fixed
OBX-5.2	Text	HPV (Human Papillomavirus) Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result				
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	4	Value-Profile Fixed	
OBX-2	Value Type	DT	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed	
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper	
OBX-5	Observation Value	20150624	Presence-Content Indifferent	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150624	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier		Indifferent	
OBX-17.2	Text		Indifferent	
OBX-17.3	Name of Coding System		Indifferent	

## **Test Data Specification**

Patient Information		
Element	Data	
Patient Name	Katherine Mackenzie Benton	
Mother's Maiden Name	Jones	
ID Number	89778	
Date/Time of Birth	12/21/2003	
Administrative Sex	Female	
Patient Address	89 West 21st Ave Bozeman MT 59715 USA	
Local Number	(406)555-4019	
Race	White	
Ethnic Group	Not Hispanic or Latino	
Multiple Birth Indicator	No	

immunization Registry Information		
Element	Data	
Immunization Registry Status	Active	
Immunization Registry Status Effective Date	12/21/2003	
Publicity Code	No reminder/recall	
Publicity Code Effective Date	06/24/2015	
Protection Indicator	Yes	
Protection Indicator Effective Date	06/24/2015	

1

Birth Order

Guardian or Responsible Party—			
Element Data			
Name	Kari Michelle Benton		
Relationship	Mother		
Address	89 West 21st Ave Bozeman MT 59715 USA		
Phone Number	(406)555-4019		

Vaccine Administration Information			
Element	Data		
Administered Vaccine	GARDASIL 9		
Date/Time Start of Administration	06/24/2015		
Administered Amount	0.5		
Administered Units	mL		
Administration Notes	New Record		
Administering Provider	Lily Jackson		
Substance Lot Number	795441		
Substance Expiration Date	12/23/2015		
Substance Manufacturer Name	Merck and Co., Inc.		
Substance/Treatment Refusal Reason			
Completion Status	Complete		
Action Code	Delete		
Route	Intramuscular		
Administration Site	Right Deltoid		
Entering Organization	NISTEHRFacility		
Entered By	Lily Jackson		
Ordered By	Wilma Thomas		

Element	Data
Vaccine Funding Source	Public
Vaccine Funding Program Eligibility	VFC Eligible - Underinsured
Document Type	HPV (Human Papillomavirus) Vaccine VIS
Date Vis Presented	06/24/2015

## 1.4.2. IZ-AD-4.2 Receive ACK Z23

Test Step Type: TA\_RESPONDER

Tests the ability to consume a valid ACK message

### **Test Story**

### Description

The IIS returns a positive acknowledgement message indicating that no errors were found during the course of filing the message.

### Comments

No Comments

### **Pre-condition**

A VXU message is generated by the EHR.

### Post-Condition

No PostCondition

### **Test Objectives**

### **Evaluation Criteria**

The acknowledgement message is consumed by the system responsible for the content of the administration message without error.

### Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

### **Message Contents**

Location	Data Element	Message Header Data	Categorization
MSH-1		Data	Categorization
	Field Separator		
MSH-2	Encoding Characters	^\&	
MSH-3	Sending Application	NOTIFICADO	
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID		
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID		
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624093847.806-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-4.2 Receive ACK Z23	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID	-	
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE NE	
MSH-21	Message Profile Identifier	INE	
		722	
MSH-21.1	Entity Identifier	Z23 CDCPHINVS	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID		
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID		
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code		
MSH-22.10	Organization Identifier		
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code		
MSH-23.10	Organization Identifier		

MSA: Message Acknowledgment			
Data Element	Data	Categorization	
Acknowledgment Code	AA		
Message Control ID	NIST-IZ-AD-4.1_Send_V04_Z22		
	Data Element Acknowledgment Code	Data Element     Data       Acknowledgment Code     AA	Data Element     Data     Categorization       Acknowledgment Code     AA

_	Patient Information				
	1 attent information				
	Element Data				
	This information will be automatically supplied by the System				

### **Juror Document**

Return an Acknowledgement				
Test Case ID IZ-AD-4_Delete_Record				
Juror ID				
Juror Name				
HIT System Tested				
Inspection Date/Time				
Louis Salama (Duris D	Pass Fail			
Inspection Settlement (Pass/Fail)				
Reason Failed				
Juror Comments				

### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which NO Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

### Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK message correctly; a positive notification indicating that the ACK message was processed correctly need not be made visible in the system.

## 1.5. IZ-AD-5\_Refusal

Child administration with refusal. Also test multiple birth indicator.

## **Test Story**

No Note

Description	
The second child of	f a set of twins is seen at a clinic. New vaccinations are administered but an additional one is refused by the parents
Comments	
No Comments	
Pre-condition	
No PreCondition	
Post-Condition	
No PostCondition	
Test Objectives	
	ses the ability of the EHR to create an administration message for child whose parents have refused an immunizatio iple birth indicator and order.
Evaluation Criteri	

### 1.5.1. IZ-AD-5.1 Send V04 Z22

Test Step Type: SUT INITIATOR

Tests the ability to create a valid VXU^V04 message

### **Test Story**

### Description

A 1 year old male, Tyler Owen Banks, is brought to a clinic for a well child visit. He is accompanied by his father Karl Leonard Banks. Tyler's twin brother, born 5 minutes before Tyler, was not able to make it to the clinic. A clinic staff member collects basic patient demographic information including name, date of birth and sex. A clinic provider, Wilma Thomas (physician ID 654) reviews the patient's vaccination history and determines that the child requires Hib, Hep A, MMR and Varicella vaccinations. The child is covered by insurance and does not qualify for all Vaccine For Children (VFC) supplied vaccines. The father is given the appropriate Vaccine Information Sheets (VIS) to review. After reading them, the father agrees that the child should receive the Hib, Hep A and MMR vaccines but refuses the Varicella vaccine. He also agrees that the data should be shared once it is incorporated into the local IIS. Appropriate doses of Hib (HIBERIX), Hep A (VAQTA) and MMR (M-M-R II) are selected from the clinic's stock of privately funded vaccines. A clinician, Lily Jackson (ID 456) prepares and administers the doses to the patient and then enters the data into the EHR and transmits it to the IIS.

### **Comments**

No Comments

### Pre-condition

No PreCondition

### **Post-Condition**

No PostCondition

### **Test Objectives**

Support for an immunization refusal

Support for multiple birth indicator and order

### **Evaluation Criteria**

Message Validation Report

### Notes

For new administration messages, the vaccine is communicated using NDC codes in RXA-5 (Administered Code). For a given vaccine, one or more NDC codes may be appropriate to message. For this reason, RXA-5.1 is categorized as "Value - Test Case Fixed List" and allows for multiple valid values. The Message Content and Example Message data contain a single representative valid NDC code for example purposes.

ONC has determined that, from a regulatory/program perspective, an HIT Module cannot be required to be able to generate messages with the Vaccine Funding Source OBX segment for 2015 Edition certification testing. For certification purposes, ONC permits Testers to ignore the error notification generated by the NIST Immunization Test Suite when this segment is missing. Since the product under test will have to meet state reporting requirements when implemented, and many states require this information, it may be beneficial for HIT Modules to demonstrate support for the Vaccine Funding Source OBX segment during 2015 Edition certification testing.

### **Message Contents**

Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed
MSH-3	Sending Application	~\de	value-1 forme Fixed
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID	NISI EFINAF F	
			Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility	NAMES AND A C	la a a i
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID		Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application	) WORNEY D.D.	V 100
MSH-5.1	Namespace ID	NISTIISAPP	Indifferent
MSH-5.2	Universal ID		Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID		Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624093847.808-0500	Presence-System Generated
MSH-9	Message Type		
MSH-9.1	Message Code	VXU	Value-Profile Fixed
MSH-9.2	Trigger Event	V04	Value-Profile Fixed
MSH-9.3	Message Structure	VXU_V04	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-AD-5.1_Send_V04_Z22	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTEHRFAC	Indifferent
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID		Indifferent
MSH-22.6.2	Universal ID		Indifferent
MSH-22.6.3	Universal ID Type		Indifferent
MSH-22.7	Identifier Type Code		Indifferent
MSH-22.10	Organization Identifier		Indifferent
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTIISFAC	Indifferent
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		Indifferent
MSH-23.6.2	Universal ID		Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
MSH-23.7	Identifier Type Code		Indifferent

– PID	· P	atien	t Iden	tific	ation '

PID : Patient Identification				
Location	Data Element	Data	Categorization	
PID-1	Set ID - PID	1	Value-Profile Fixed	
PID-3	Patient Identifier List			
PID-3.1	ID Number	8891	Presence-Content Indifferent	
PID-3.4	Assigning Authority			
PID-3.4.1	Namespace ID	NIST-MPI-1	Presence-Content Indifferent	
PID-3.4.2	Universal ID		Indifferent	
PID-3.4.3	Universal ID Type		Indifferent	
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed	
PID-5	Patient Name			
PID-5.1	Family Name			
PID-5.1.1	Surname	Banks	Presence-Content Indifferent	
PID-5.2	Given Name	Tyler	Presence-Content Indifferent	
PID-5.3	Second and Further Given Names or Initials Thereof	Owen	Presence-Content Indifferent	
PID-5.7	Name Type Code	L	Value-Test Case Fixed	
PID-6	Mother's Maiden Name			
PID-6.1	Family Name			
PID-6.1.1	Surname		Indifferent	
PID-6.7	Name Type Code		Indifferent	
PID-7	Date/Time of Birth			
PID-7.1	Time	20140602	Presence-Content Indifferent	
PID-8	Administrative Sex	M	Value-Test Case Fixed	
PID-10	Race		value 1 cot case 1 fred	
PID-10.1	Identifier	2106-3	Value-Test Case Fixed	
PID-10.2	Text	White	Presence-Test Case Proper	
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed	
PID-11	Patient Address		value-110the 11xed	
PID-11.1	Street Address			
PID-11.1.1	Street Address Street or Mailing Address	924 Sycamore Lane	Presence-Content Indifferent	
PID-11.2	Other Designation	924 Sycamore Lane	Indifferent	
PID-11.2 PID-11.3	<u> </u>	Bozeman	Presence-Content Indifferent	
PID-11.3 PID-11.4	City State or Province	MT	Presence-Content Indifferent	
		+		
PID-11.5	Zip or Postal Code	59715	Presence-Content Indifferent	
PID-11.6	Country	USA	Presence-Content Indifferent	
PID-11.7	Address Type	P	Value-Test Case Fixed List	
PID-13	Phone Number - Home			
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed	
PID-13.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed	
PID-13.4	Email Address		NonPresence	
PID-13.6	Area/City Code	406	Presence-Content Indifferent	
PID-13.7	Local Number	5555835	Presence-Content Indifferent	
PID-22	Ethnic Group			
PID-22.1	Identifier	2186-5	Value-Test Case Fixed	
PID-22.2	Text	Not Hispanic or Latino	Presence-Test Case Proper	
PID-22.3	Name of Coding System	CDCREC	Value-Profile Fixed	
PID-24	Multiple Birth Indicator	Y	Indifferent	
PID-25	Birth Order	2	Indifferent	
PID-23 PID-29	Patient Death Date and Time	L	manierent	
			NonDracanaa	
PID-29.1	Time	N	NonPresence	
PID-30	Patient Death Indicator	N	Indifferent	

PD1 : Patient Additional Demographic

Data Element	Data	Categorization
Publicity Code		
Identifier	08	Value-Test Case Fixed
Text	Reminder/recall - to provider	Presence-Test Case Proper
Name of Coding System	HL70215	Value-Profile Fixed
Protection Indicator	N	Indifferent
Protection Indicator Effective Date	20150624	Indifferent
Immunization Registry Status	A	Value-Test Case Fixed
Immunization Registry Status Effective Date	20040602	Presence-Content Indifferent
Publicity Code Effective Date	20150624	Presence-Content Indifferent
	Publicity Code  Identifier  Text  Name of Coding System  Protection Indicator  Protection Indicator Effective Date  Immunization Registry Status  Immunization Registry Status Effective Date	Publicity Code  Identifier 08  Text Reminder/recall - to provider  Name of Coding System HL70215  Protection Indicator N  Protection Indicator Effective Date 20150624  Immunization Registry Status A  Immunization Registry Status Effective Date 20040602

-NK1	· Next	of Kin	/ Associated	Parties =

NK1 : Next of Kin / Associated Parties				
Location	Data Element	Data	Categorization	
NK1-1	Set ID - NK1	1	Value-Profile Fixed	
NK1-2	Name			
NK1-2.1	Family Name			
NK1-2.1.1	Surname	Banks	Presence-Content Indifferent	
NK1-2.2	Given Name	Karl	Presence-Content Indifferent	
NK1-2.3	Second and Further Given Names or Initials Thereof	Leonard	Indifferent	
NK1-2.7	Name Type Code	L	Value-Test Case Fixed	
NK1-3	Relationship			
NK1-3.1	Identifier	FTH	Value-Test Case Fixed	
NK1-3.2	Text	Father	Presence-Test Case Proper	
NK1-3.3	Name of Coding System	HL70063	Value-Profile Fixed	
NK1-4	Address			
NK1-4.1	Street Address			
NK1-4.1.1	Street or Mailing Address	924 Sycamore Lane	Presence-Content Indifferent	
NK1-4.2	Other Designation		Indifferent	
NK1-4.3	City	Bozeman	Presence-Content Indifferent	
NK1-4.4	State or Province	МТ	Presence-Content Indifferent	
NK1-4.5	Zip or Postal Code	59715	Presence-Content Indifferent	
NK1-4.6	Country	USA	Presence-Content Indifferent	
NK1-4.7	Address Type	P	Value-Test Case Fixed List	
NK1-5	Phone Number			
NK1-5.2	Telecommunication Use Code	PRN	Value-Test Case Fixed	
NK1-5.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed	
NK1-5.4	Email Address		Indifferent	
NK1-5.6	Area/City Code	406	Presence-Content Indifferent	
NK1-5.7	Local Number	5555835	Presence-Content Indifferent	

### ORC[\*]

ORC : Common Order

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	5645	Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	22515	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Indifferent
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Indifferent
ORC-17.2	Text	NISTEHRFacility	Indifferent
ORC-17.3	Name of Coding System	HL70362	Indifferent

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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		Value 1151No 12160
ORC-2.1	Entity Identifier	5027	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	12128	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number	Tub.	value i forme i med
ORC-2.1	Entity Identifier	7239	Presence-Content Indifferent
ORC-2.1	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID	NISI -AA-IZ-Z	Indifferent
	Universal ID Type		
ORC-2.4	Oniversal ID 1 ype		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	50588	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

-orc :	Common	Order
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		Indifferent
ORC-2.2	Namespace ID		Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	9999	Value-Profile Fixed
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number		Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname		Indifferent
ORC-12.3	Given Name		Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof		Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID		Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code		Indifferent
ORC-12.13	Identifier Type Code		Indifferent
			HRIHELEH
ORC-17 1	Entering Organization	NICTELIDEAC	Duranna Content In Effect
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NIST EHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

### RXA[\*] =

### RXA: Pharmacy/Treatment Administration =

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	58160-0806-01	Value-Test Case Fixed List
RXA-5.2	Text	HIBERIX	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	0.5	Presence-Test Case Proper
RXA-7	Administered Units		Tresence Test case Troper
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes	CCCIVI	varie i rome i reci
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.1	Text	New Record	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider	1411 001	value-i forme i face
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.1		7024	Fresence-Content indifferent
RXA-10.2.1	Family Name	T1	Daniel Court and La ECCourt
RXA-10.2.1 RXA-10.3	Surname	Jackson	Presence-Content Indifferent
KXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Indifferent
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	328734	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20150923	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	SKB	Value-Test Case Fixed
RXA-17.2	Text	GlaxoSmithKline	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		, mas 1 one 1 mou
RXA-18.1	Identifier		NonPresence
RXA-18.2			NonPresence
	Norma of Coding Statem		NonPresence NonPresence
RXA-18.3	Name of Coding System	СР	
RXA-20	Completion Status		Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

RXA: Pharmacy/Treatment Administrate	ion =
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Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	00006-4095-01	Value-Test Case Fixed List
RXA-5.2	Text	VAQTA	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	0.5	Presence-Test Case Proper
RXA-7	Administered Units		
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes		
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.2	Text	New Record	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Value-Test Case Fixed
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	208940	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20160120	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	MSD	Value-Test Case Fixed
RXA-17.2	Text	Merck and Co., Inc.	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

-RXA:	Pharmacy/Treatme	ent Administration =

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150624	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	00006-4681-01	Value-Test Case Fixed List
RXA-5.2	Text	M-M-R II	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	0.5	Presence-Test Case Proper
RXA-7	Administered Units		Î
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes		
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.2	Text	New Record	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Value-Test Case Fixed
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	134301	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20151028	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	MSD	Value-Test Case Fixed
RXA-17.2	Text	Merck and Co., Inc.	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

RXA : Pharmacy/Treatment Administration					
Location	Data Element	Data	Categorization		
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed		
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed		
RXA-3	Date/Time Start of Administration				
RXA-3.1	Time	20150624	Presence-Content Indifferent		
RXA-5	Administered Code				
RXA-5.1	Identifier	21	Value-Test Case Fixed		
RXA-5.2	Text	varicella	Presence-Test Case Proper		
RXA-5.3	Name of Coding System	CVX	Value-Profile Fixed		
RXA-6	Administered Amount	999	Value-Test Case Fixed		
RXA-7	Administered Units		Tundo 1 est ento 1 2 tot		
RXA-7.1	Identifier		NonPresence		
RXA-7.2	Text		NonPresence		
RXA-7.3	Name of Coding System		NonPresence		
RXA-9	Administration Notes				
RXA-9.1	Identifier		Indifferent		
RXA-9.2	Text		Indifferent		
RXA-9.3	Name of Coding System		Indifferent		
RXA-10	Administering Provider				
RXA-10.1	ID Number		Indifferent		
RXA-10.2	Family Name				
RXA-10.2.1	Surname		Indifferent		
RXA-10.3	Given Name		Indifferent		
RXA-10.4	Second and Further Given Names or Initials Thereof		Indifferent		
RXA-10.9	Assigning Authority				
RXA-10.9.1	Namespace ID		Indifferent		
RXA-10.9.2	Universal ID		Indifferent		
RXA-10.9.3	Universal ID Type		Indifferent		
RXA-10.10	Name Type Code		Indifferent		
RXA-10.13	Identifier Type Code		Indifferent		
RXA-11	Administered-at Location				
RXA-11.4	Facility				
RXA-11.4.1	Namespace ID		Indifferent		
RXA-11.4.2	Universal ID		Indifferent		
RXA-11.4.3	Universal ID Type		Indifferent		
RXA-15	Substance Lot Number		Indifferent		
RXA-16	Substance Expiration Date				
RXA-16.1	Time		Indifferent		
RXA-17	Substance Manufacturer Name				
RXA-17.1	Identifier		Indifferent		
RXA-17.2	Text		Indifferent		
RXA-17.3	Name of Coding System		Indifferent		
RXA-18	Substance/Treatment Refusal Reason				
RXA-18.1	Identifier	00	Value-Test Case Fixed		
RXA-18.2	Text	Parental decision	Presence-Test Case Proper		
RXA-18.3	Name of Coding System	NIP002	Value-Profile Fixed		
RXA-20	Completion Status	RE	Value-Test Case Fixed		
RXA-21	Action Code - RXA	A	Value-Test Case Fixed		

## RXR[\*]

-RXR:	Pharmacy	/Treatment	Route
IVM.	I maimacy	/ II catilicit	Route

Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C28161	Value-Test Case Fixed
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	RT	Value-Test Case Fixed
RXR-2.2	Text	Right Thigh	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

### RXR : Pharmacy/Treatment Route

Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C28161	Value-Test Case Fixed
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	RT	Value-Test Case Fixed
RXR-2.2	Text	Right Thigh	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

### RXR : Pharmacy/Treatment Route

Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C38299	Value-Test Case Fixed
RXR-1.2	Text	Subcutaneous	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	LT	Value-Test Case Fixed
RXR-2.2	Text	Left Thigh	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

### OBX[\*]

### OBX: Observation/Result

ODA. Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	PHC70	Value-Test Case Fixed
OBX-5.2	Text	Private	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	V01	Value-Test Case Fixed
OBX-5.2	Text	Not VFC Eligible	Presence-Test Case Proper
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Indifferent
OBX-17.2	Text	per immunization	Indifferent
	1	T	i

CDCPHINVS

Indifferent

Name of Coding System

OBX-17.3

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300026411230724	Value-Test Case Fixed
OBX-5.2	Text	Multi Pediatric Vaccines VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	PHC70	Value-Test Case Fixed
OBX-5.2	Text	Private	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

	OBX: Observation/Result			
Location	Data Hement	Data	Categorization	
OBX-1	Set ID - OBX	2	Value-Profile Fixed	
OBX-2	Value Type	CE	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed	
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper	
OBX-5	Observation Value			
OBX-5.1	Identifier	V01	Value-Test Case Fixed	
OBX-5.2	Text	Not VFC Eligible	Presence-Test Case Proper	
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150624	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed	
OBX-17.2	Text	per immunization	Presence-Test Case Proper	
	1	1	T	

CDCPHINVS

Value-Profile Fixed

OBX-17.3

Name of Coding System

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300004211211015	Value-Test Case Fixed
OBX-5.2	Text	Hepatitis A Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150624	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	PHC70	Value-Test Case Fixed
OBX-5.2	Text	Private	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	V01	
OBX-5.2	Text	Not VFC Eligible	
OBX-5.3	Name of Coding System	HL70064	
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed

OBX-17.2

OBX-17.3

Text

Name of Coding System

per immunization

CDCPHINVS

Presence-Test Case Proper

Value-Profile Fixed

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300012711210806	Value-Test Case Fixed
OBX-5.2	Text	MMR Vaccine (Measles, Mumps, and Rubella) VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150624	
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

## **Test Data Specification**

Patient Information	
Element	Data
Patient Name	Tyler Owen Banks
Mother's Maiden Name	
ID Number	8891
Date/Time of Birth	06/02/2014
Administrative Sex	Male
Patient Address	924 Sycamore Lane Bozeman MT 59715 USA
Local Number	(406)555-5835
Race	White
Ethnic Group	Not Hispanic or Latino
Multiple Birth Indicator	Yes
Birth Order	2

Immunization Registry Information	
Element	Data
Immunization Registry Status	Active
Immunization Registry Status Effective Date	06/02/2004
Publicity Code	Reminder/recall - to provider
Publicity Code Effective Date	06/24/2015
Protection Indicator	No
Protection Indicator Effective Date	06/24/2015

Guardian or Responsible Party	
Element	Data
Name	Karl Leonard Banks
Relationship	Father
Address	924 Sycamore Lane Bozeman MT 59715 USA
Phone Number	(406)555-5835

## -Vaccine Administration Information[\*]-

### -Vaccine Administration Information-

Element	Data
Administered Vaccine	HIBERIX
Date/Time Start of Administration	06/24/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	328734
Substance Expiration Date	09/23/2015
Substance Manufacturer Name	GlaxoSmithKline
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Intramuscular
Administration Site	Right Thigh
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Private
Vaccine Funding Program Eligibility	Not VFC Eligible
Document Type	Multi Pediatric Vaccines VIS
Date Vis Presented	06/24/2015

## -Vaccine Administration Information-

Element	Data
Administered Vaccine	VAQTA
Date/Time Start of Administration	06/24/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	208940
Substance Expiration Date	01/20/2016
Substance Manufacturer Name	Merck and Co., Inc.
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Intramuscular
Administration Site	Right Thigh
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Private
Vaccine Funding Program Eligibility	Not VFC Eligible
Document Type	Hepatitis A Vaccine VIS
Date Vis Presented	06/24/2015

### -Vaccine Administration Information-

Element	Data
Administered Vaccine	M-M-R II
Date/Time Start of Administration	06/24/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	134301
Substance Expiration Date	10/28/2015
Substance Manufacturer Name	Merck and Co., Inc.
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Subcutaneous
Administration Site	Left Thigh
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data	
Vaccine Funding Source	Private	
Vaccine Funding Program Eligibility	Not VFC Eligible	
Document Type	MMR Vaccine (Measles, Mumps, and Rubella) VIS	
Date Vis Presented	06/24/2015	

## -Vaccine Administration Information-

Element	Data
Administered Vaccine	varicella
Date/Time Start of Administration	06/24/2015
Administered Amount	999
Administered Units	
Administration Notes	
Administering Provider	
Substance Lot Number	
Substance Expiration Date	
Substance Manufacturer Name	
Substance/Treatment Refusal Reason	Parental decision
Completion Status	Refused
Action Code	Add
Route	
Administration Site	
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	

## 1.5.2. IZ-AD-5.2 Receive ACK Z23

Test Step Type: TA\_RESPONDER

Tests the ability to consume a valid ACK message

### **Test Story**

### Description

The IIS returns a positive acknowledgement message indicating that no errors were found during the course of filing the message.

### Comments

No Comments

### **Pre-condition**

A VXU message is generated by the EHR.

### Post-Condition

No PostCondition

### **Test Objectives**

### **Evaluation Criteria**

The acknowledgement message is consumed by the system responsible for the content of the administration message without error.

### Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

### **Message Contents**

Location	Data Element	Message Header Data	Categorization
		Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	^~\&	
MSH-3	Sending Application	A MODELLO A DE	
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID		
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID		
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624093847.822-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-5.2 Receive ACK Z23	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE NE	
MSH-21	Message Profile Identifier	INE	
		722	
MSH-21.1	Entity Identifier	Z23 CDCPHINVS	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID		
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID		
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code		
MSH-22.10	Organization Identifier		
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code		
MSH-23.10	Organization Identifier		

MSA : Message Acknowledgment			
Data Element	Data	Categorization	
Acknowledgment Code	AA		
Message Control ID	NIST-IZ-AD-5.1_Send_V04_Z22		
	Data Element Acknowledgment Code	Data Element     Data       Acknowledgment Code     AA	Data Element     Data     Categorization       Acknowledgment Code     AA

_	Patient Information			
	1 attent information			
	Element Data			
	This information will be automatically supplied by the System			

### **Juror Document**

Return an Acknowledgement			
Test Case ID IZ-AD-5_Refusal			
Juror ID			
Juror Name			
HIT System Tested			
Inspection Date/Time			
Louis Salama (Duris D	Pass Fail		
Inspection Settlement (Pass/Fail)			
Reason Failed			
Juror Comments			

### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which NO Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK message correctly; a positive notification indicating that the ACK message was processed correctly need not be made visible in the system.

# 1.6. IZ-AD-6\_Update\_Record

Child updated administration

## **Test Story**

Description	
A child is seen at a clinic. A previously documented vaccination is updated to correct inaccurate information.	
Comments	
No Comments	
Pre-condition Pre-condition	
The IZ-AD-5_Refusal test case has been successfully completed.	
Post-Condition	
No PostCondition	
Test Objectives	
This test case asses the ability of the EHR to create an update message for a previously sent administration.	
Evaluation Criteria	
Notes	
No Note	

### 1.6.1. IZ-AD-6.1 Send V04 Z22

Test Step Type: SUT INITIATOR

Tests the ability to create a valid VXU^V04 message

### **Test Story**

### Description

After documenting vaccinations for Tyler Owen Banks the clinician, Lily Jackson (ID 456) recognizes that an error was made during data entry for the Hepatitis A vaccine. The Lot Number was entered incorrectly. She updates the data in the EHR and transmits it to the IIS.

### Comments

No Comments

### Pre-condition

The IZ-AD-5.1 Send\_V04\_Z22 test step has been successfully completed.

### Post-Condition

No PostCondition

### **Test Objectives**

Support for sending an update notification.

### **Evaluation Criteria**

Message Validation Report.

Lot number that appears in RXA-15 in the message submitted for Test Case 5 will be changed in the message submitted for Test Case 6.

### Notes

Lot number in test message changed from 208940 in Test Case 5 to 208490 in Test Case 6.

Since lot numbers cannot be pre-defined in the Test Data, the Test Suite does not automatically check for exact data in RXA-15; therefore, the Tester must manually verify that the lot number used in the test message for Test Case 5 was changed in the test message for Test Case 6.

For new administration messages, the vaccine is communicated using NDC codes in RXA-5 (Administered Code). For a given vaccine, one or more NDC codes may be appropriate to message. For this reason, RXA-5.1 is categorized as "Value - Test Case Fixed List" and allows for multiple valid values. The Message Content and Example Message data contain a single representative valid NDC code for example purposes.

ONC has determined that, from a regulatory/program perspective, an HIT Module cannot be required to be able to generate messages with the Vaccine Funding Source OBX segment for 2015 Edition certification testing. For certification purposes, ONC permits Testers to ignore the error notification generated by the NIST Immunization Test Suite when this segment is missing. Since the product under test will have to meet state reporting requirements when implemented, and many states require this information, it may be beneficial for HIT Modules to demonstrate support for the Vaccine Funding Source OBX segment during 2015 Edition certification testing.

### **Message Contents**

MSH : Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
4SH-2	Encoding Characters	\^\&	Value-Profile Fixed
MSH-3	Sending Application	~w	value-1 forme rixed
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID	NISI ETIKATI	Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility		manerent
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID	NISI ETIMAC	Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application		Indirection
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID	NOT HOW I	Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility		Indirecti
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID	TUSTIISTAC	Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		Indirecent
MSH-7.1	Time	20150624093847.808-0500	Presence-System Generated
MSH-9	Message Type	20130024073847.808-0300	Trescrice-system cenerated
MSH-9.1	Message Code	VXU	Value-Profile Fixed
MSH-9.2	Trigger Event	V04	Value-Profile Fixed
MSH-9.3	Message Structure	VXU V04	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-AD-6.1 Send V04 Z22	Presence-System Generated
MSH-11	Processing ID	14151-12-AD-0.1_S.lid_V04_E22	Trescrice-system cenerated
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID	1	Trescrice-Content manterent
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier	TILL	value-1 forme 1 fact
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID	COCITIONS	Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		Indirecti
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority	NOI LINGAC	1 rescrice-configuration
MSH-22.6.1	Namespace ID		Indifferent
MSH-22.6.2	Universal ID		Indifferent
MSH-22.6.3	Universal ID Type		Indifferent
MSH-22.7	Identifier Type Code		Indifferent
MSH-22.10	Organization Identifier		Indifferent
MSH-23	Receiving Responsible Organization		HUHICICH
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority	INDI HOUAC	1 reserve-configuration
MSH-23.6.1			Indifferent
	Namespace ID Universal ID		
MSH-23.6.2			Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
MSH-23.7	Identifier Type Code		Indifferent
MSH-23.10	Organization Identifier		Indifferent

#### PID · Patient Identification

Location	Data Element	Data	Categorization
PID-1	Set ID - PID	1	Value-Profile Fixed
PID-3	Patient Identifier List	-	value-1 forme 1 facet
PID-3.1	ID Number	8891	Presence-Content Indifferent
PID-3.4	Assigning Authority	0071	rescrice-content manerent
PID-3.4.1	Namespace ID	NIST-MPI-1	Presence-Content Indifferent
PID-3.4.2	Universal ID	14151 -1411 1-1	Indifferent
PID-3.4.3	Universal ID Type		Indifferent
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed
PID-5	Patient Name	THE CONTRACTOR OF THE CONTRACT	value 1 cot case 1 fred
PID-5.1	Family Name		
PID-5.1.1	Surname	Banks	Presence-Content Indifferent
PID-5.2	Given Name	Tyler	Presence-Content Indifferent
PID-5.3	Second and Further Given Names or Initials Thereof	Owen	Presence-Content Indifferent
PID-5.7	Name Type Code	L	Value-Test Case Fixed
PID-6	Mother's Maiden Name		
PID-6.1	Family Name		
PID-6.1.1	Surname		Indifferent
PID-6.7	Name Type Code		Indifferent
PID-7	Date/Time of Birth		
PID-7.1	Time	20140602	Presence-Content Indifferent
PID-8	Administrative Sex	M	Value-Test Case Fixed
PID-10	Race		
PID-10.1	Identifier	2106-3	Value-Test Case Fixed
PID-10.2	Text	White	Presence-Test Case Proper
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed
PID-11	Patient Address		
PID-11.1	Street Address		
PID-11.1.1	Street or Mailing Address	924 Sycamore Lane	Presence-Content Indifferent
PID-11.2	Other Designation		Indifferent
PID-11.3	City	Bozeman	Presence-Content Indifferent
PID-11.4	State or Province	МТ	Presence-Content Indifferent
PID-11.5	Zip or Postal Code	59715	Presence-Content Indifferent
PID-11.6	Country	USA	Presence-Content Indifferent
PID-11.7	Address Type	P	Value-Test Case Fixed List
PID-13	Phone Number - Home		
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
PID-13.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
PID-13.4	Email Address		Indifferent
PID-13.6	Area/City Code	406	Presence-Content Indifferent
PID-13.7	Local Number	5555835	Presence-Content Indifferent
PID-22	Ethnic Group		
PID-22.1	Identifier	2186-5	Value-Test Case Fixed
PID-22.2	Text	Not Hispanic or Latino	Presence-Test Case Proper
PID-22.3	Name of Coding System	CDCREC	Value-Profile Fixed
PID-24	Multiple Birth Indicator	Y	Value-Test Case Fixed
PID-25	Birth Order	2	Value-Test Case Fixed
PID-29	Patient Death Date and Time		
PID-29.1	Time		NonPresence
PID-30	Patient Death Indicator	N	Value-Test Case Fixed

### PD1 : Patient Additional Demographic

12101 Material Printing Printing			
Location	Data Element	Data	Categorization
PD1-11	Publicity Code		
PD1-11.1	Identifier	08	Value-Test Case Fixed
PD1-11.2	Text	Reminder/recall - to provider	Presence-Test Case Proper
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed
PD1-12	Protection Indicator	N	Value-Test Case Fixed
PD1-13	Protection Indicator Effective Date	20150624	Presence-Content Indifferent
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed
PD1-17	Immunization Registry Status Effective Date	20040602	Presence-Content Indifferent
PD1-18	Publicity Code Effective Date	20150624	Presence-Content Indifferent

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-1	NIN.	:	next	OI.	NIII.	I	Associated	rarues	

Location	Data Element	Data	Categorization
NK1-1	Set ID - NK1	1	Value-Profile Fixed
NK1-2	Name		
NK1-2.1	Family Name		
NK1-2.1.1	Surname	Banks	Presence-Content Indifferent
NK1-2.2	Given Name	Karl	Presence-Content Indifferent
NK1-2.3	Second and Further Given Names or Initials Thereof	Leonard	Presence-Content Indifferent
NK1-2.7	Name Type Code	L	Value-Test Case Fixed
NK1-3	Relationship		
NK1-3.1	Identifier	FTH	Value-Test Case Fixed
NK1-3.2	Text	Father	Presence-Test Case Proper
NK1-3.3	Name of Coding System	HL70063	Value-Profile Fixed
NK1-4	Address		
NK1-4.1	Street Address		
NK1-4.1.1	Street or Mailing Address	924 Sycamore Lane	Presence-Content Indifferent
NK1-4.2	Other Designation		Indifferent
NK1-4.3	City	Bozeman	Presence-Content Indifferent
NK1-4.4	State or Province	MT	Presence-Content Indifferent
NK1-4.5	Zip or Postal Code	59715	Presence-Content Indifferent
NK1-4.6	Country	USA	Presence-Content Indifferent
NK1-4.7	Address Type	P	Value-Test Case Fixed List
NK1-5	Phone Number		
NK1-5.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
NK1-5.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
NK1-5.4	Email Address		Indifferent
NK1-5.6	Area/City Code	406	Presence-Content Indifferent
NK1-5.7	Local Number	5555835	Presence-Content Indifferent

	-orc	:	Common	Order*
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	5027	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	12128	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

Data Element	Data	Categorization
		Value-Profile Fixed
		Value-Profile Fixed
		value 1 forme 1 facet
	20150624	Presence-Content Indifferent
	20130024	i resence-content indirerent
	00006 4005 01	Value-Test Case Fixed List
		Presence-Test Case Proper
		Value-Profile Fixed
		Presence-Test Case Proper
	0.5	Trescrice-Test case Troper
	mI	Value-Test Case Fixed
		Presence-Test Case Proper
	UCUIVI	Value-Profile Fixed
	00	Value Test Con Fixed
		Value-Test Case Fixed
		Presence-Test Case Proper
	INIPUUI	Value-Profile Fixed
	I TOO 4	D G
	/824	Presence-Content Indifferen
		Presence-Content Indifferen
	Lily	Presence-Content Indifferen
Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferen
Assigning Authority		
Namespace ID	NIST-PI-1	Presence-Content Indifferen
Universal ID		Indifferent
Universal ID Type		Indifferent
Name Type Code	L	Value-Test Case Fixed
Identifier Type Code	PRN	Value-Test Case Fixed List
Administered-at Location		
Facility		
Namespace ID	NIST-Clinic-1	Presence-Content Indifferen
Universal ID		Indifferent
Universal ID Type		Indifferent
Substance Lot Number	208490	Presence-Content Indifferen
Substance Expiration Date		
Time	20160120	Presence-Content Indifferent
	MSD	Value-Test Case Fixed
<del></del>		Presence-Test Case Proper
		Value-Profile Fixed
	141477	value-1 TOTHE 1 IACC
		NonPresence
		NonPresence
Name of Coding System		NonPresence
		Noneresence
	Give Sub-ID Counter  Administration Sub-ID Counter  Date/Time Start of Administration  Time  Administered Code  Identifier  Text  Name of Coding System  Administered Units  Identifier  Text  Name of Coding System  Administration Notes  Identifier  Text  Name of Coding System  Administration Notes  Identifier  Text  Name of Coding System  Administering Provider  ID Number  Family Name  Surname  Given Name  Second and Further Given Names or Initials Thereof  Assigning Authority  Namespace ID  Universal ID  Universal ID Type  Name Type Code  Identifier Type Code  Administered-at Location  Facility  Namespace ID  Universal ID  Vamespace ID  Universal ID  Universal ID  Universal ID  Universal ID  Vamespace ID  Universal ID  Universal ID  Universal ID  Universal ID  Vamespace ID  Universal ID  Vamespace ID  Universal ID  Universal ID  Vamespace ID  Vamespace ID  Universal ID  Vamespace ID  V	Give Sib-ID Counter 1 Date/Time Sart of Administration 1 Time 20150624 Administered Code 1 Identifier 00006-4095-01 Text VAQTA Name of Coding System NDC Administered Amount 0.5 Administered Amount 0.5 Administered Units 1 Identifier mL mL mL Name of Coding System UCUM Administration Notes 1 Identifier 00 UCUM Administration Notes 1 Identifier 00 Name of Coding System NP001 Administration Notes 1 Identifier 10 Name of Coding System NP001 Administration Notes 1 Identifier 10 Name of Coding System NP001 Administration Notes 1 Identifier 10 Name of Coding System NP001 Administering Provider 1D Number 7824 Family Name 1 Surname 1 Surname 1 Surname 1 Surname 1 Assigning Authority 1 Namespace ID NIST-PI-1 Universal ID Type 1 Name Type Code 1 Identifier Type Code PRN Administered-at Location 1 Facility 1 Namespace ID NIST-Clinic-1 Universal ID Type 1 Substance Expiration Date 2 Substance Expiration Date 2 Time 20160120 Substance Handle Resson 1 Identifier MSD 1 Identifier MSD MYX Substance Treatment Refisal Reason 1 Identifier Text Identifier Identifier Text Identifier Identifier Text Identifier Identifier Identifier Text Identifier Identi

RXR : Pharmacy/Treatment Route				
Location	Data Element	Data	Categorization	
RXR-1	Route			
RXR-1.1	Identifier	C28161	Value-Test Case Fixed	
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper	
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed	
RXR-2	Administration Site			
RXR-2.1	Identifier	RT	Value-Test Case Fixed	
RXR-2.2	Text	Right Thigh	Presence-Test Case Proper	
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed	

СР

U

Value-Test Case Fixed

Value-Test Case Fixed

Completion Status

Action Code - RXA

RXA-20

RXA-21

### OBX[\*]

# OBX: Observation/Result

Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	PHC70	Value-Test Case Fixed
OBX-5.2	Text	Private	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150624	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

## OBX: Observation/Result

Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	2	Value-Profile Fixed	
OBX-2	Value Type	CE	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed	
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper	
OBX-5	Observation Value			
OBX-5.1	Identifier	V01	Value-Test Case Fixed	
OBX-5.2	Text	Not VFC Eligible	Presence-Test Case Proper	
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150624	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed	
OBX-17.2	Text	per immunization	Presence-Test Case Proper	
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed	

OBX: Observation/Result				
Location	Data Hement	Data	Categorization	
OBX-1	Set ID - OBX	3	Value-Profile Fixed	
OBX-2	Value Type	CE	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed	
OBX-3.2	Text	Document Type	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper	
OBX-5	Observation Value			
OBX-5.1	Identifier	253088698300004211211015	Value-Test Case Fixed	
OBX-5.2	Text	Hepatitis A Vaccine VIS	Presence-Test Case Proper	
OBX-5.3	Name of Coding System	cdcgs1vis	Value-Profile Fixed	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150624	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier		Indifferent	
OBX-17.2	Text		Indifferent	
OBX-17.3	Name of Coding System		Indifferent	

OBX: Observation/Result				
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	4	Value-Profile Fixed	
OBX-2	Value Type	DT	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed	
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper	
OBX-5	Observation Value	20150624	Presence-Content Indifferent	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150624	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier		Indifferent	
OBX-17.2	Text		Indifferent	
OBX-17.3	Name of Coding System		Indifferent	

# **Test Data Specification**

Patient Information				
Element	Data			
Patient Name	Tyler Owen Banks			
Mother's Maiden Name				
ID Number	8891			
Date/Time of Birth	06/02/2014			
Administrative Sex	Male			
Patient Address	924 Sycamore Lane Bozeman MT 59715 USA			
Local Number	(406)555-5835			
Race	White			
Ethnic Group	Not Hispanic or Latino			
Multiple Birth Indicator	Yes			
Birth Order	2			

# -Immunization Registry Information-

Data
Active
06/02/2004
Reminder/recall - to provider
06/24/2015
No
06/24/2015

# -Guardian or Responsible Party-

Element	Data
Name	Karl Leonard Banks
Relationship	Father
Address	924 Sycamore Lane Bozeman MT 59715 USA
Phone Number	(406)555-5835

# Vaccine Administration Information-

Element	Data		
Administered Vaccine	VAQTA		
Date/Time Start of Administration	06/24/2015		
Administered Amount	0.5		
Administered Units	mL		
Administration Notes	New Record		
Administering Provider	Lily Jackson		
Substance Lot Number	208490		
Substance Expiration Date	01/20/2016		
Substance Manufacturer Name	Merck and Co., Inc.		
Substance/Treatment Refusal Reason			
Completion Status	Complete		
Action Code	Update		
Route	Intramuscular		
Administration Site	Right Thigh		
Entering Organization	NISTEHRFacility		
Entered By	Lily Jackson		
Ordered By	Wilma Thomas		

Element	Data	
Vaccine Funding Source	Private	
Vaccine Funding Program Eligibility	Not VFC Eligible	
Document Type	Hepatitis A Vaccine VIS	
Date Vis Presented	06/24/2015	

# 1.6.2. IZ-AD-6.2 Receive ACK Z23

Test Step Type: TA\_RESPONDER ests the ability to consume a valid ACK message

# **Test Story**

## Description

The IIS returns a positive acknowledgement message indicating that no errors were found during the course of filing the message.

### Comments

No Comments

### **Pre-condition**

A VXU message is generated by the EHR.

#### Post-Condition

No PostCondition

## **Test Objectives**

### **Evaluation Criteria**

The acknowledgement message is consumed by the system responsible for the content of the administration message without error.

### Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

Location	Data Element	Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	\~\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID	THOI THE IT	
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID	Nisi iistac	
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application	NECTELIDADD	
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150624093847.822-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-6.2 Receive ACK Z23	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID	-   -   -   -   -   -   -   -   -   -	
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE NE	
MSH-16	Application Acknowledgment Type	NE NE	
MSH-21	Message Profile Identifier	IND	
MSH-21.1	Entity Identifier	Z23	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID	CDCI IIIIVVS	
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization	NICTUCEAC	
MSH-22.1 MSH-22.6	Organization Name	NISTIISFAC	
	Assigning Authority		
MSH-22.6.1	Namespace ID		
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code		
MSH-22.10	Organization Identifier		
MSH-23	Receiving Responsible Organization	NIGHEN INC. C	
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code		
MSH-23.10	Organization Identifier		

MSA : Message Acknowledgment				
Data Element	Data	Categorization		
Acknowledgment Code	AA			
Message Control ID	NIST-IZ-AD-6.1_Send_V04_Z22			
	Data Element Acknowledgment Code	Data Element     Data       Acknowledgment Code     AA	Data Element         Data         Categorization           Acknowledgment Code         AA	

Patient Information				
r attent finormation				
Element Data				
This information will be automatically supplied by the System				
This information will be automatically supplied by the System				

# **Juror Document**

Return an Acknowledgement				
Test Case ID IZ-AD-6_Update_Record				
Juror ID				
Juror Name				
HIT System Tested				
Inspection Date/Time				
Louis Salama (Duris D	Pass Fail			
Inspection Settlement (Pass/Fail)				
Reason Failed				
Juror Comments				

### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which NO Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

### Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK message correctly; a positive notification indicating that the ACK message was processed correctly need not be made visible in the system.

# 1.7. IZ-AD-7\_Historical\_IIS-Error

Historical administration resulting in fatal error

# **Test Story**

## Description

A patient is seen at a clinic. A historical vaccination is recorded but the IIS is unable to process the administration message, rejects it and returns a fatal error in the acknowledgement message.

### Comments

The test case simulates the IIS issuing an acknowledgement error due to an internal error even though the message is valid.

### **Pre-condition**

No PreCondition

### **Post-Condition**

The returned error must be visible in the EHR.

## **Test Objectives**

This test case assesses the ability of the EHR to accept an acknowledgement message with a fatal error being returned by the IIS.

### **Evaluation Criteria**

Administered Message: Validation Report with no Errors

Acknowledgement Message: An indication of a error (See Juror Document)

### Notes

No Note

# 1.7.1. IZ-AD-7.1\_Send\_V04\_Z22

Test Step Type: SUT INITIATOR

Tests the ability to create a valid VXU^V04 message

# **Test Story**

### Description

A 66 year old female, Helen Barrett, comes to a clinic for a physical. A clinic staff member collects basic patient demographic information including name, date of birth and sex. She indicates that reminders and recalls may be sent by any method. The patient reports that she received a Zoster vaccination at a local pharmacy on her 65th birthday. The clinic staff determine that no further vaccinations are required. A clinician, Lily Jackson (ID 7824) enters the historical data into the EHR and transmits it to the IIS.

#### Comments

No Comments

### **Pre-condition**

No PreCondition

### **Post-Condition**

No PostCondition

### **Test Objectives**

Support for Sending Responsible Organization (MSH-22) and Receiving Responsible Organization (MSH-23) to include:

- 1. Identifier
- 2. Identifier Type Code
- 3. Assigning Authority for the Identifier

Support for both phone number and e-mail.

### **Evaluation Criteria**

Message Validation Report.

Notes

MSH : Message Header

Location	Data Element	Data	Categorization	
MSH-1	Field Separator		Value-Profile Fixed	
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed	
MSH-3		Sending Application		
MSH-3.1	Namespace ID			
MSH-3.2	Universal ID	T UST LATE IN T	Presence-Configuration Indifferent	
MSH-3.3	Universal ID Type		Indifferent	
MSH-4	Sending Facility		Indirectors	
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration	
MSH-4.2	Universal ID	Tubi Linu i e	Indifferent	
MSH-4.3	Universal ID Type		Indifferent	
MSH-5	Receiving Application		Indifferent	
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration	
MSH-5.2	Universal ID	INSTITUTE I	Indifferent	
MSH-5.3	Universal ID Type		Indifferent	
MSH-6	Receiving Facility		manerent	
		NICTUCEAC	Duncan or Confirmation	
MSH-6.1	Namespace ID Universal ID	NISTIISFAC	Presence-Configuration	
MSH-6.2			Indifferent	
MSH-6.3	Universal ID Type		Indifferent	
MSH-7	Date/Time Of Message	20150625121047 020 0500	D 0 + 0 + 1	
MSH-7.1	Time	20150625121047.839-0500	Presence-System Generated	
MSH-9	Message Type			
MSH-9.1	Message Code	VXU	Value-Profile Fixed	
MSH-9.2	Trigger Event	V04	Value-Profile Fixed	
MSH-9.3	Message Structure	VXU_V04	Value-Profile Fixed	
MSH-10	Message Control ID	NIST-IZ-AD-7.1_Send_V04_Z22	Presence-System Generated	
MSH-11	Processing ID			
MSH-11.1	Processing ID	P	Presence-Content Indifferent	
MSH-12	Version ID			
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed	
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed	
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed	
MSH-21	Message Profile Identifier			
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed	
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed	
MSH-21.3	Universal ID		Indifferent	
MSH-21.4	Universal ID Type		Indifferent	
MSH-22	Sending Responsible Organization			
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration	
MSH-22.6	Assigning Authority			
MSH-22.6.1	Namespace ID	NIST-AA-IZ-1	Presence-Configuration	
MSH-22.6.2	Universal ID		Indifferent	
MSH-22.6.3	Universal ID Type		Indifferent	
MSH-22.7	Identifier Type Code	XX	Value-Test Case Fixed	
MSH-22.10	Organization Identifier	100-6482	Presence-Configuration	
MSH-23	Receiving Responsible Organization			
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration	
MSH-23.6	Assigning Authority			
MSH-23.6.1	Namespace ID	NIST-AA-IZ-1	Presence-Configuration	
MSH-23.6.2	Universal ID		Indifferent	
MSH-23.6.3	Universal ID Type		Indifferent	
MSH-23.7	Identifier Type Code	XX	Value-Test Case Fixed	
	Organization Identifier	100-3322	Presence-Configuration	

– PII	· Dation	t Idanti	fication

PID : Patient Identification				
Location	Data Element	Data	Categorization	
PID-1	Set ID - PID	1	Value-Profile Fixed	
PID-3	Patient Identifier List		T   100	
PID-3.1	ID Number	7120	Presence-Content Indifferent	
PID-3.4	Assigning Authority			
PID-3.4.1	Namespace ID	NIST-MPI-1	Presence-Content Indifferent	
PID-3.4.2	Universal ID		Indifferent	
PID-3.4.3	Universal ID Type		Indifferent	
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed	
PID-5	Patient Name			
PID-5.1	Family Name			
PID-5.1.1	Surname	Barrett	Presence-Content Indifferent	
PID-5.2	Given Name	Helen	Presence-Content Indifferent	
PID-5.3	Second and Further Given Names or Initials Thereof		Indifferent	
PID-5.7	Name Type Code	L	Value-Test Case Fixed	
PID-6	Mother's Maiden Name			
PID-6.1	Family Name			
PID-6.1.1	Surname		Indifferent	
PID-6.7	Name Type Code		Indifferent	
PID-7	Date/Time of Birth			
PID-7.1	Time	19500317	Presence-Content Indifferent	
PID-8	Administrative Sex	F	Value-Test Case Fixed	
PID-10	Race			
PID-10.1	Identifier	2106-3	Value-Test Case Fixed	
PID-10.2	Text	White	Presence-Test Case Proper	
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed	
PID-11	Patient Address		Taide 1 101He 1 21ed	
PID-11.1	Street Address			
PID-11.1.1	Street or Mailing Address	763 Main St	Presence-Content Indifferent	
PID-11.2	Other Designation	703 Willin &	Indifferent	
PID-11.3	City	Bozeman	Presence-Content Indifferent	
PID-11.4	State or Province	MT	Presence-Content Indifferent	
PID-11.5	Zip or Postal Code	59715	Presence-Content Indifferent	
PID-11.6	Country	USA	Presence-Content Indifferent	
PID-11.7	Address Type	P	Value-Test Case Fixed List	
	Phone Number - Home	P	value-1 est Case Fixed List	
PID-13[1]	Telecommunication Use Code	PRN	Value-Test Case Fixed	
PID-13[1].2				
PID-13[1].3	Telecommunication Equipment Type	PH	Value-Test Case Fixed	
PID-13[1].4	Email Address		NonPresence	
PID-13[1].6	Area/City Code	406	Presence-Content Indifferent	
PID-13[1].7	Local Number	5554064	Presence-Content Indifferent	
PID-13[2]	Phone Number - Home			
PID-13[2].2	Telecommunication Use Code	NET	Value-Test Case Fixed	
PID-13[2].3	Telecommunication Equipment Type		Indifferent	
PID-13[2].4	Email Address	Helen.Barrett@isp.com	Presence-Content Indifferent	
PID-13[2].6	Area/City Code		NonPresence	
PID-13[2].7	Local Number		NonPresence	
PID-22	Ethnic Group			
PID-22.1	Identifier	2186-5	Value-Test Case Fixed	
PID-22.2	Text	Not Hispanic or Latino	Presence-Test Case Proper	
PID-22.3	Name of Coding System	CDCREC	Value-Profile Fixed	
PID-24	Multiple Birth Indicator	N	Value-Test Case Fixed	
PID-25	Birth Order	1	Indifferent	
PID-29	Patient Death Date and Time			
PID-29.1	Time		NonPresence	
PID-30	Patient Death Indicator	N	Value-Test Case Fixed	
112 30	1 with Dani indicator		Turke 1 on Case 1 IACC	

-PD1	:	Patient	Additional	Demographic '
------	---	---------	------------	---------------

5 1				
Location	Data Element	Data	Categorization	
PD1-11	Publicity Code			
PD1-11.1	Identifier	02	Value-Test Case Fixed	
PD1-11.2	Text	Reminder/recall - any method	Presence-Test Case Proper	
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed	
PD1-12	Protection Indicator	Y	Value-Test Case Fixed	
PD1-13	Protection Indicator Effective Date	20150625	Presence-Content Indifferent	
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed	
PD1-17	Immunization Registry Status Effective Date	19500317	Presence-Content Indifferent	
PD1-18	Publicity Code Effective Date	20150625	Presence-Content Indifferent	

ORC : Common Order

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		Indifferent
ORC-2.2	Namespace ID		Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	53100	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID	Universal ID	
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number		Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname		Indifferent
ORC-12.3	Given Name		Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof		Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID		Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code		Indifferent
ORC-12.13	Identifier Type Code		Indifferent
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150317	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	121	Value-Test Case Fixed
RXA-5.2	Text	zoster	Presence-Test Case Proper
RXA-5.3	Name of Coding System	CVX	Value-Profile Fixed
RXA-6	Administered Amount	999	Value-Test Case Fixed
RXA-7	Administered Units		
RXA-7.1	Identifier		NonPresence
RXA-7.2	Text		NonPresence
RXA-7.3	Name of Coding System		NonPresence
RXA-9	Administration Notes		
RXA-9.1	Identifier	01	Value-Test Case Fixed
RXA-9.2	Text	Historical Administration	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number		Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname		Indifferent
RXA-10.3	Given Name		Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof		Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID		Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code		Indifferent
RXA-10.13	Identifier Type Code		Indifferent
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID		Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number		Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time		Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier		Indifferent
RXA-17.2	Text		Indifferent
RXA-17.3	Name of Coding System		Indifferent
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

# **Test Data Specification**

Patient Information		
Element	Data	
Patient Name	Helen Barrett	
Mother's Maiden Name		
ID Number	7120	
Date/Time of Birth	03/17/1950	
Administrative Sex	Female	
Patient Address	763 Main St Bozeman MT 59715 USA	
Local Number	(406)555-4064	
Email	Helen.Barrett@isp.com	
Race	White	
Ethnic Group	Not Hispanic or Latino	
Multiple Birth Indicator	No	
Birth Order	1	

–Immuni	ization	Registry	Information -

Element	Data
Immunization Registry Status	Active
Immunization Registry Status Effective Date	03/17/1950
Publicity Code	Reminder/recall - any method
Publicity Code Effective Date	06/25/2015
Protection Indicator	Yes
Protection Indicator Effective Date	06/25/2015

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Element	Data
Administered Vaccine	zoster
Date/Time Start of Administration	03/17/2015
Administered Amount	999
Administered Units	
Administration Notes	Historical Administration
Administering Provider	
Substance Lot Number	
Substance Expiration Date	
Substance Manufacturer Name	
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	
Administration Site	
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	

# 1.7.2. IZ-AD-7.2 Receive ACK Z23

Test Step Type: TA RESPONDER

Tests the ability to consume an ACK message containing a fatal error

## **Test Story**

### Description

The IIS has a mapping error in their CVX table and is unable to recognize the CVX code sent in RXA-5 even though it is valid. The IIS is unable to identify the appropriate vaccine, which is a required element, and rejects the message. The acknowledgement message returned contains an error for the table mapping.

#### Comments

No Comments

### **Pre-condition**

A VXU message is generated by the EHR.

### **Post-Condition**

No PostCondition

### **Test Objectives**

Support for accepting an acknowledgement message with a fatal error being returned by the IIS and to display some notification to an end user.

#### **Evaluation Criteria**

The error returned in the acknowledgement message is visible in the system responsible for the content of the administration message.

### Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

MSH : Message Header					
Location	Data Element	Data	Categorization		
MSH-1	Field Separator				
MSH-2	Encoding Characters	~\&			
MSH-3	Sending Application				
MSH-3.1	Namespace ID	NISTIISAPP			
MSH-3.2	Universal ID				
MSH-3.3	Universal ID Type				
MSH-4	Sending Facility				
MSH-4.1	Namespace ID	NISTIISFAC			
MSH-4.2	Universal ID				
MSH-4.3	Universal ID Type				
MSH-5	Receiving Application				
MSH-5.1	Namespace ID	NISTEHRAPP			
MSH-5.2	Universal ID				
MSH-5.3	Universal ID Type				
MSH-6	Receiving Facility				
MSH-6.1	Namespace ID	NISTEHRFAC			
MSH-6.2	Universal ID				
MSH-6.3	Universal ID Type				
MSH-7	Date/Time Of Message				
MSH-7.1	Time	20150625121047.853-0500			
MSH-9	Message Type				
MSH-9.1	Message Code	ACK			
MSH-9.2	Trigger Event	V04			
MSH-9.3	Message Structure	ACK			
MSH-10	Message Control ID	NIST-IZ-AD-7.2 Receive ACK Z23			
MSH-11	Processing ID				
MSH-11.1	Processing ID	P			
MSH-12	Version ID				
MSH-12.1	Version ID	2.5.1			
MSH-15	Accept Acknowledgment Type	NE			
MSH-16	Application Acknowledgment Type	NE			
MSH-21	Message Profile Identifier				
MSH-21.1	Entity Identifier	Z23			
MSH-21.2	Namespace ID	CDCPHINVS			
MSH-21.3	Universal ID				
MSH-21.4	Universal ID Type				
MSH-22	Sending Responsible Organization				
MSH-22.1	Organization Name	NISTIISFAC			
MSH-22.6	Assigning Authority				
MSH-22.6.1	Namespace ID	NIST-AA-IZ-1			
MSH-22.6.2	Universal ID				
MSH-22.6.3	Universal ID Type				
MSH-22.7	Identifier Type Code	XX			
MSH-22.10	Organization Identifier	100-3322			
MSH-23	Receiving Responsible Organization	100 0022			
MSH-23.1	Organization Name	NISTEHRFAC			
MSH-23.6	Assigning Authority				
MSH-23.6.1	Namespace ID	NIST-AA-IZ-1			
MSH-23.6.2	Universal ID				
MSH-23.6.3	Universal ID Type				
MSH-23.7	Identifier Type Code	XX			

# MSA: Message Acknowledgment

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AE	
MSA-2	Message Control ID	NIST-IZ-AD-7.1_Send_V04_Z22	

ERR : Error			
Location	Data Element	Data	Categorization
ERR-2	Error Location		
ERR-2.1	Segment ID	RXA	
ERR-2.2	Segment Sequence	1	
ERR-2.3	Field Position	5	
ERR-2.4	Field Repetition	1	
ERR-2.5	Component Number	1	
ERR-2.6	Sub-Component Number		
ERR-3	HL7 Error Code		
ERR-3.1	Identifier	999	
ERR-3.2	Text	Application error	
ERR-3.3	Name of Coding System	HL70357	
ERR-4	Severity	Е	
ERR-5	Application Error Code		
ERR-5.1	Identifier	5	
ERR-5.2	Text	Table value not found	
ERR-5.3	Name of Coding System	HL70533	
ERR-8	User Message	Vaccine code not recognized - message rejected	

# **Test Data Specification**

Patient Information————————————————————————————————————			
Element Data			
This information will be automatically supplied by the System			

## **Juror Document**

Return an Acknowledgement			
Test Case ID	IZ-AD-7_Historical_IIS-Error		
Juror ID			
Juror Name			
HIT System Tested			
Inspection Date/Time			
Total Call and Call To The	Pass Fail		
Inspection Settlement (Pass/Fail)			
Reason Failed			
Juror Comments			

## DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which an Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK error notification message correctly; the issue identified in the error notification must be made visible in the system.

# 1.8. IZ-AD-8\_Admin\_IIS-Warning

New administration resulting in soft error

# **Test Story**

### Description

A patient is seen at a clinic. A new administration is recorded. The IIS is able to process the administration message but finds a soft error (warning) which it returns in the acknowledgement message.

### Comments

The test case simulates the IIS issuing an acknowledgement warning due to an internal warning even though the message is valid.

### **Pre-condition**

No PreCondition

### **Post-Condition**

The returned warning must be visible in the EHR-S.

## **Test Objectives**

The test case targets the EHR-S capability of supporting OIDs (e.g., in MSH-3 and for assigning authorities) for administered message and assesses the ability of the EHR-S to accept an acknowledgement message with a soft error (warning) being returned by the IIS.

### **Evaluation Criteria**

Administered Message: Validation Report with no Errors

Acknowledgement Message: An indication of a warning (See Juror Document)

### Notes

No Note

# 1.8.1. IZ-AD-8.1 Send V04 Z22

Test Step Type: SUT INITIATOR

Tests the ability to create a valid VXU^V04 message

### **Test Story**

### Description

A 1 month old female, Ashley Jennifer Broadway, is brought to a clinic for a well child visit by her mother Ellen Broadway (nee Layton). A clinic staff member collects basic patient demographic information including name, date of birth and sex. A clinic provider, Wilma Thomas (physician ID 654) reviews the patient's vaccination history and determines that the child requires a Hep B vaccination. The child is covered by insurance and does not qualify for all Vaccine For Children (VFC) supplied vaccines. The mother is given the Vaccine Information Sheet (VIS) to review. After reading it, she agrees that the child should receive the Hep B vaccine. She also agrees that the data should be shared once it is incorporated into the local IIS. She indicates that reminders and recalls should not be made via a phone call. An appropriate dose of Hep B (ENGERIX-B) is selected from the clinic's stock of privately funded vaccines. A clinician, Lily Jackson (ID 7824) prepares and administers the doses to the patient and enters the data into the EHR and transmits it to the IIS.

#### Comments

No Comments

#### Pre-condition

No PreCondition

#### Post-Condition

No PostCondition

### **Test Objectives**

Support of OIDs.

### **Evaluation Criteria**

Message Validation Report.

#### Notes

For new administration messages, the vaccine is communicated using NDC codes in RXA-5 (Administered Code). For a given vaccine, one or more NDC codes may be appropriate to message. For this reason, RXA-5.1 is categorized as "Value - Test Case Fixed List" and allows for multiple valid values. The Message Content and Example Message data contain a single representative valid NDC code for example purposes.

ONC has determined that, from a regulatory/program perspective, an HIT Module cannot be required to be able to generate messages with the Vaccine Funding Source OBX segment for 2015 Edition certification testing. For certification purposes, ONC permits Testers to ignore the error notification generated by the NIST Immunization Test Suite when this segment is missing. Since the product under test will have to meet state reporting requirements when implemented, and many states require this information, it may be beneficial for HIT Modules to demonstrate support for the Vaccine Funding Source OBX segment during 2015 Edition certification testing.

MSH: Message Header

	MSH:	Message Header	
Location	Data Element	Data	Categorization
MSH-1	Field Separator	i i	Value-Profile Fixed
MSH-2	Encoding Characters	~\&	Value-Profile Fixed
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID	2.16.840.1.113883.3.72.5.40.1	Presence-Test Case Proper
MSH-3.3	Universal ID Type	ISO	Value-Profile Fixed
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID	2.16.840.1.113883.3.72.5.40.2	Presence-Test Case Proper
MSH-4.3	Universal ID Type	ISO	Value-Profile Fixed
MSH-5	Receiving Application		Table Fried
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID	2.16.840.1.113883.3.72.5.40.3	Presence-Test Case Proper
MSH-5.3	Universal ID Type	ISO	Value-Profile Fixed
MSH-6	Receiving Facility	130	value-i forme rixed
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID	2.16.840.1.113883.3.72.5.40.4	-
			Presence-Test Case Proper
MSH-6.3	Universal ID Type	ISO	Value-Profile Fixed
MSH-7	Date/Time Of Message	20150625102220 757 0500	D C + C + 1
MSH-7.1	Time	20150625103328.757-0500	Presence-System Generated
MSH-9	Message Type	TAWY	VI D GI F: 1
MSH-9.1	Message Code	VXU	Value-Profile Fixed
MSH-9.2	Trigger Event	V04	Value-Profile Fixed
MSH-9.3	Message Structure	VXU_V04	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-AD-8.1_Send_V04_Z22	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-IZ-1	Presence-Configuration
MSH-22.6.2	Universal ID	2.16.840.1.113883.3.72.5.40.9	Presence-Test Case Proper
MSH-22.6.3	Universal ID Type	ISO	Value-Profile Fixed
MSH-22.7	Identifier Type Code	XX	Value-Test Case Fixed
MSH-22.10	Organization Identifier	100-6482	Presence-Configuration
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-IZ-1	Presence-Configuration
MSH-23.6.2	Universal ID	2.16.840.1.113883.3.72.5.40.9	Presence-Test Case Proper
MSH-23.6.3	Universal ID Type	ISO	Value-Profile Fixed
MSH-23.7	Identifier Type Code	XX	Value-Test Case Fixed
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— PID	<ul> <li>Patien</li> </ul>	t Identi	fication

PID : Patient Identification				
Location	Data Element	Data	Categorization	
PID-1	Set ID - PID	1	Value-Profile Fixed	
PID-3	Patient Identifier List			
PID-3.1	ID Number	77100	Presence-Content Indifferent	
PID-3.4	Assigning Authority			
PID-3.4.1	Namespace ID	NIST-MPI-1	Presence-Content Indifferent	
PID-3.4.2	Universal ID	2.16.840.1.113883.3.72.5.40.5	Presence-Test Case Proper	
PID-3.4.3	Universal ID Type	ISO	Value-Profile Fixed	
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed	
PID-5	Patient Name			
PID-5.1	Family Name			
PID-5.1.1	Surname	Broadway	Presence-Content Indifferent	
PID-5.2	Given Name	Ashley	Presence-Content Indifferent	
PID-5.3	Second and Further Given Names or Initials Thereof	Jennifer	Presence-Content Indifferent	
PID-5.7	Name Type Code	L	Value-Test Case Fixed	
PID-6	Mother's Maiden Name			
PID-6.1	Family Name			
PID-6.1.1	Surname	Layton	Presence-Content Indifferent	
PID-6.7	Name Type Code	M	Value-Profile Fixed	
PID-7	Date/Time of Birth		Value 1 To the 1 Bled	
PID-7.1	Time	20150516	Presence-Content Indifferent	
PID-8	Administrative Sex	F	Value-Test Case Fixed	
PID-10	Race	F	value-1 est ease 1 ixed	
PID-10.1	Identifier	2054-5	Value-Test Case Fixed	
PID-10.2	Text	African American	Presence-Test Case Proper	
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed	
	Patient Address	CDCREC	value-Florile Fixed	
PID-11				
PID-11.1	Street Address	00131 4 104 6	D C I I'C .	
PID-11.1.1	Street or Mailing Address	901 North 12th St	Presence-Content Indifferent	
PID-11.2	Other Designation	75	Indifferent	
PID-11.3	City	Bozeman	Presence-Content Indifferent	
PID-11.4	State or Province	MT	Presence-Content Indifferent	
PID-11.5	Zip or Postal Code	59715	Presence-Content Indifferent	
PID-11.6	Country	USA	Presence-Content Indifferent	
PID-11.7	Address Type	P	Value-Test Case Fixed List	
PID-13	Phone Number - Home			
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed	
PID-13.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed	
PID-13.4	Email Address		NonPresence	
PID-13.6	Area/City Code	406	Presence-Content Indifferent	
PID-13.7	Local Number	5552262	Presence-Content Indifferent	
PID-22	Ethnic Group			
PID-22.1	Identifier	2186-5	Value-Test Case Fixed	
PID-22.2	Text	Not Hispanic or Latino	Presence-Test Case Proper	
PID-22.3	Name of Coding System	CDCREC	Value-Profile Fixed	
PID-24	Multiple Birth Indicator	N	Value-Test Case Fixed	
PID-25	Birth Order	1	Indifferent	
PID-29	Patient Death Date and Time			
PID-29.1	Time		NonPresence	
PID-30	Patient Death Indicator	N	Value-Test Case Fixed	

PD1 : Patient Additional Demographic

Location	Data Element	Data	Categorization
PD1-11	Publicity Code		
PD1-11.1	Identifier	03	Value-Test Case Fixed
PD1-11.2	Text	Reminder/recall - no calls	Presence-Test Case Proper
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed
PD1-12	Protection Indicator	N	Value-Test Case Fixed
PD1-13	Protection Indicator Effective Date	20150625	Presence-Content Indifferent
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed
PD1-17	Immunization Registry Status Effective Date	20150516	Presence-Content Indifferent
PD1-18	Publicity Code Effective Date	20150625	Presence-Content Indifferent

-NK1	Nevt	of Kin	/ Associated	Parties =
NN	next	OI MIII	Associateu	rarues

Location	Data Element	Data	Categorization
Location		Data	Ü
NK1-1	Set ID - NK1	1	Value-Profile Fixed
NK1-2	Name		
NK1-2.1	Family Name		
NK1-2.1.1	Surname	Broadway	Presence-Content Indifferent
NK1-2.2	Given Name	Ellen	Presence-Content Indifferent
NK1-2.3	Second and Further Given Names or Initials Thereof		Indifferent
NK1-2.7	Name Type Code	L	Value-Test Case Fixed
NK1-3	Relationship		
NK1-3.1	Identifier	MTH	Value-Test Case Fixed
NK1-3.2	Text	Mother	Presence-Test Case Proper
NK1-3.3	Name of Coding System	HL70063	Value-Profile Fixed
NK1-4	Address		
NK1-4.1	Street Address		
NK1-4.1.1	Street or Mailing Address	901 North 12th St	Presence-Content Indifferent
NK1-4.2	Other Designation		Indifferent
NK1-4.3	City	Bozeman	Presence-Content Indifferent
NK1-4.4	State or Province	MT	Presence-Content Indifferent
NK1-4.5	Zip or Postal Code	59715	Presence-Content Indifferent
NK1-4.6	Country	USA	Presence-Content Indifferent
NK1-4.7	Address Type	P	Value-Test Case Fixed List
NK1-5	Phone Number		
NK1-5.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
NK1-5.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
NK1-5.4	Email Address		Indifferent
NK1-5.6	Area/City Code	406	Presence-Content Indifferent
NK1-5.7	Local Number	5552262	Presence-Content Indifferent

-orc	:	Common	Order-
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	3881	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID	2.16.840.1.113883.3.72.5.40.10	Presence-Test Case Proper
ORC-2.4	Universal ID Type	ISO	Value-Profile Fixed
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	13926	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID	2.16.840.1.113883.3.72.5.40.10	Presence-Test Case Proper
ORC-3.4	Universal ID Type	ISO	Value-Profile Fixed
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID	2.16.840.1.113883.3.72.5.40.7	Presence-Test Case Proper
ORC-10.9.3	Universal ID Type	ISO	Value-Profile Fixed
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID	2.16.840.1.113883.3.72.5.40.7	Presence-Test Case Proper
ORC-12.9.3	Universal ID Type	ISO	Value-Profile Fixed
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

RXA: Pharmacy/Treatment Administration					
Location	Data Element	Data	Categorization		
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed		
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed		
RXA-3	Date/Time Start of Administration				
RXA-3.1	Time	20150625	Presence-Content Indifferent		
RXA-5	Administered Code				
RXA-5.1	Identifier	58160-0820-01	Value-Test Case Fixed List		
RXA-5.2	Text	ENGERIX-B	Presence-Test Case Proper		
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed		
RXA-6	Administered Amount	0.5	Presence-Test Case Proper		
RXA-7	Administered Units		,		
RXA-7.1	Identifier	mL	Value-Test Case Fixed		
RXA-7.2	Text	mL	Presence-Test Case Proper		
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed		
RXA-9	Administration Notes				
RXA-9.1	Identifier	00	Value-Test Case Fixed		
RXA-9.2	Text	New Record	Presence-Test Case Proper		
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed		
RXA-10	Administering Provider				
RXA-10.1	ID Number	7824	Presence-Content Indifferent		
RXA-10.2	Family Name				
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent		
RXA-10.3	Given Name	Lily	Presence-Content Indifferent		
RXA-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent		
RXA-10.9	Assigning Authority				
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent		
RXA-10.9.2	Universal ID	2.16.840.1.113883.3.72.5.40.7	Presence-Test Case Proper		
RXA-10.9.3	Universal ID Type	ISO	Value-Profile Fixed		
RXA-10.10	Name Type Code	L	Value-Test Case Fixed		
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List		
RXA-11	Administered-at Location				
RXA-11.4	Facility				
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent		
RXA-11.4.2	Universal ID	2.16.840.1.113883.3.72.5.40.12	Presence-Test Case Proper		
RXA-11.4.3	Universal ID Type	ISO	Value-Profile Fixed		
RXA-15	Substance Lot Number	797397	Presence-Content Indifferent		
RXA-16	Substance Expiration Date				
RXA-16.1	Time	20151203	Presence-Content Indifferent		
RXA-17	Substance Manufacturer Name				
RXA-17.1	Identifier	SKB	Value-Test Case Fixed		
RXA-17.2	Text	GlaxoSmithKline	Presence-Test Case Proper		
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed		
RXA-18	Substance/Treatment Refusal Reason				
RXA-18.1	Identifier		NonPresence		
RXA-18.2	Text		NonPresence		
RXA-18.3	Name of Coding System		NonPresence		
RXA-20	Completion Status	СР	Value-Test Case Fixed		
RXA-21	Action Code - RXA	A	Value-Test Case Fixed		

RXR : Pharmacy/Treatment Route				
Location	Data Element	Data	Categorization	
RXR-1	Route			
RXR-1.1	Identifier	C28161	Value-Test Case Fixed	
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper	
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed	
RXR-2	Administration Site			
RXR-2.1	Identifier	LT	Value-Test Case Fixed	
RXR-2.2	Text	Left Thigh	Presence-Test Case Proper	
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed	

### -OBX[\*]-

# OBX: Observation/Result

Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	PHC70	Value-Test Case Fixed
OBX-5.2	Text	Private	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

## OBX: Observation/Result

Oba: Observation/Result				
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	2	Value-Profile Fixed	
OBX-2	Value Type	CE	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed	
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper	
OBX-5	Observation Value			
OBX-5.1	Identifier	V01	Value-Test Case Fixed	
OBX-5.2	Text	Not VFC Eligible	Presence-Test Case Proper	
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150625	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed	
OBX-17.2	Text	per immunization	Presence-Test Case Proper	
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed	

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300005911230512	Value-Test Case Fixed
OBX-5.2	Text	Hepatitis B Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150625	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

# **Test Data Specification**

Patient Information		
Element	Data	
Patient Name	Ashley Jennifer Broadway	
Mother's Maiden Name	Layton	
ID Number	77100	
Date/Time of Birth	05/16/2015	
Administrative Sex	Female	
Patient Address	901 North 12th St Bozeman MT 59715 USA	
Local Number	(406)555-2262	
Race	African American	
Ethnic Group	Not Hispanic or Latino	
Multiple Birth Indicator	No	
Birth Order	1	

# Immunization Registry Information-

Element	Data
Immunization Registry Status	Active
Immunization Registry Status Effective Date	05/16/2015
Publicity Code	Reminder/recall - no calls
Publicity Code Effective Date	06/25/2015
Protection Indicator	No
Protection Indicator Effective Date	06/25/2015

# -Guardian or Responsible Party-

Element	Data
Name	Ellen Broadway
Relationship	Mother
Address	901 North 12th St Bozeman MT 59715 USA
Phone Number	(406)555-2262

# -Vaccine Administration Information-

Element	Data
Administered Vaccine	ENGERIX-B
Date/Time Start of Administration	06/25/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	797397
Substance Expiration Date	12/03/2015
Substance Manufacturer Name	GlaxoSmithKline
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Intramuscular
Administration Site	Left Thigh
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Private
Vaccine Funding Program Eligibility	Not VFC Eligible
Document Type	Hepatitis B Vaccine VIS
Date Vis Presented	06/25/2015

# 1.8.2. IZ-AD-8.2 Receive ACK Z23

Test Step Type: TA RESPONDER

Tests the ability to consume an ACK message containing a warning

# **Test Story**

### **Description**

A mapping error in the IIS software results in the IIS being unable to recognize the administration site sent in RXR-2 even though it is valid. The acknowledgement message returned contains a warning for an invalid value.

### **Comments**

No Comments

### **Pre-condition**

A VXU message is generated by the EHR.

### **Post-Condition**

No PostCondition

### **Test Objectives**

Support for accepting an acknowledgement message with a warning being returned by the IIS and to display some notification to an end user.

#### **Evaluation Criteria**

The warning returned in the acknowledgement message is visible in the system responsible for the content of the administration message.

### **Notes**

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

Location	Data Element	Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	\~\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID	2.16.840.1.113883.3.72.5.40.3	
MSH-3.3	Universal ID Type	ISO	
MSH-4	Sending Facility	133	
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID		
MSH-4.3		2.16.840.1.113883.3.72.5.40.4   ISO	
	Universal ID Type	150	
MSH-5	Receiving Application	NIGHTI ID A DD	
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID	2.16.840.1.113883.3.72.5.40.1	
MSH-5.3	Universal ID Type	ISO	
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID	2.16.840.1.113883.3.72.5.40.2	
MSH-6.3	Universal ID Type	ISO	
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150625103328.758-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-8.2_Receive_ACK_Z23	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE	
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z23	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID		
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-IZ-1	
MSH-22.6.2	Universal ID	2.16.840.1.113883.3.72.5.40.9	
MSH-22.6.3	Universal ID Type	ISO	
MSH-22.7	Identifier Type Code	XX	
MSH-22.10	Organization Identifier	100-3322	
MSH-23	Receiving Responsible Organization	100-3322	
MSH-23.1	Organization Name	NISTEHRFAC	
	Assigning Authority	1 WOI LA HV AC	
MSH-23.6		NICT AA 17 1	
MSH-23.6.1	Namespace ID	NIST-AA-IZ-1	
MSH-23.6.2	Universal ID	2.16.840.1.113883.3.72.5.40.9	
MSH-23.6.3	Universal ID Type	ISO	
MSH-23.7	Identifier Type Code	XX	
MSH-23.10	Organization Identifier	100-6482	

## MSA: Message Acknowledgment

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AE	
MSA-2	Message Control ID	NIST-IZ-AD-8.1_Send_V04_Z22	

ERR : Error			
Location	Data Element	Data	Categorization
ERR-2	Error Location		
ERR-2.1	Segment ID	RXR	
ERR-2.2	Segment Sequence	1	
ERR-2.3	Field Position	2	
ERR-2.4	Field Repetition	1	
ERR-2.5	Component Number	1	
ERR-2.6	Sub-Component Number		
ERR-3	HL7 Error Code		
ERR-3.1	Identifier	999	
ERR-3.2	Text	Application error	
ERR-3.3	Name of Coding System	HL70357	
ERR-4	Severity	W	
ERR-5	Application Error Code		
ERR-5.1	Identifier	5	
ERR-5.2	Text	Table value not found	
ERR-5.3	Name of Coding System	HL70533	
ERR-8	User Message	Administration Site not recognized - site data will not be saved	

# **Test Data Specification**

Patient Information—		
This information will be automatically supplied by the System		

# **Juror Document**

Return an Acknowledgement		
Test Case ID IZ-AD-8_Admin_IIS-Warning		
Juror ID		
Juror Name		
HIT System Tested		
Inspection Date/Time		
Land Call and David	Pass Fail	
Inspection Settlement (Pass/Fail)		
Reason Failed		
Juror Comments		

## DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which an Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK error notification message correctly; the issue identified in the error notification must be made visible in the system.

# 1.9. IZ-AD-9\_Admin\_IIS-2Warnings

New administration resulting in multiple soft errors

# **Test Story**

## Description

A patient is seen at a clinic. A new administration is recorded. The IIS is able to process the administration message but finds multiple soft errors (warnings) which it returns in the acknowledgement message.

### Comments

The test case simulates the IIS issuing an acknowledgement warning due to an internal warning even though the message is valid.

### **Pre-condition**

No PreCondition

### **Post-Condition**

The returned warnings must be visible in the EHR.

## **Test Objectives**

This test case assesses the ability of the EHR to accept an acknowledgement message with multiple soft errors (warnings) being returned by the IIS.

## **Evaluation Criteria**

Administered Message: Validation Report with no Errors

Acknowledgement Message: An indication of warnings (See Juror Document)

### Notes

No Note

# 1.9.1. IZ-AD-9.1 Send V04 Z22

Test Step Type: SUT INITIATOR

Tests the ability to create a valid VXU^V04 message

### **Test Story**

### Description

A 4 year old female, Lacy Wells, is brought to a clinic for a well child visit by her guardian Janelle Trudeau. A clinic staff member collects basic patient demographic information including name, date of birth and sex. A clinic provider, Wilma Thomas (physician ID 654) reviews the patient's vaccination history and determines that the child requires DTaP, polio, MMR and varicella vaccinations. The child is covered by insurance and does not qualify for all Vaccine For Children (VFC) supplied vaccines. The guardian is given the appropriate Vaccine Information Sheet (VIS) to review. After reading it, she agrees that the child should receive all the vaccines. She also agrees that the data should be shared once it is incorporated into the local IIS. She indicates that all reminder and recall notifications should be routed to the provider. Appropriate doses of DTap-IPV (KINRIX) and MMRV (ProQuad) are selected from the clinic's stock of privately funded vaccines. A clinician, Lily Jackson (ID 7824) prepares and administers the doses to the patient and enters the data into the EHR and transmits it to the IIS.

#### Comments

No Comments

#### Pre-condition

No PreCondition

#### **Post-Condition**

No PostCondition

### **Test Objectives**

### **Evaluation Criteria**

Message Validation Report.

#### Notes

For new administration messages, the vaccine is communicated using NDC codes in RXA-5 (Administered Code). For a given vaccine, one or more NDC codes may be appropriate to message. For this reason, RXA-5.1 is categorized as "Value - Test Case Fixed List" and allows for multiple valid values. The Message Content and Example Message data contain a single representative valid NDC code for example purposes.

ONC has determined that, from a regulatory/program perspective, an HIT Module cannot be required to be able to generate messages with the Vaccine Funding Source OBX segment for 2015 Edition certification testing. For certification purposes, ONC permits Testers to ignore the error notification generated by the NIST Immunization Test Suite when this segment is missing. Since the product under test will have to meet state reporting requirements when implemented, and many states require this information, it may be beneficial for HIT Modules to demonstrate support for the Vaccine Funding Source OBX segment during 2015 Edition certification testing.

MSH: Message Header

		Message Header	
Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	^\&	Value-Profile Fixed
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID		Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID		Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTIISAPP	Indifferent
MSH-5.2	Universal ID		Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID	Tubi iid iid	Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		Indirection
MSH-7.1	Time	20150625115038.030-0500	Presence-System Generated
MSH-9	Message Type	201200221120201320 0200	Testine System Continued
MSH-9.1	Message Code	VXU	Value-Profile Fixed
MSH-9.2	Trigger Event	V04	Value-Profile Fixed
MSH-9.3	Message Structure	VXU V04	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-AD-9.1 Send V04 Z22	Presence-System Generated
MSH-11	Processing ID	14151-12-715-9.1_001id_404_222	Trescrice-by sterif centrated
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID	1	1 resence-content marrierent
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier	Lizan.	VI D GI F: 1
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		1
MSH-22.1	Organization Name	NISTEHRFAC	Indifferent
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID		Indifferent
MSH-22.6.2	Universal ID		Indifferent
MSH-22.6.3	Universal ID Type		Indifferent
MSH-22.7	Identifier Type Code		Indifferent
MSH-22.10	Organization Identifier		Indifferent
MSH-23	Receiving Responsible Organization		Indirection
MSH-23.1	Organization Name	NISTIISFAC	Indifferent
MSH-23.6	Assigning Authority	1 and that I was	manoren
			Indifferent
MSH-23.6.1	Namespace ID		Indifferent
MSH-23.6.2	Universal ID		Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
MSH-23.7	Identifier Type Code		Indifferent
MSH-23.10	Organization Identifier		Indifferent

### PID : Patient Identification

Data Flement     Set ID - PID     Patient Identifier List     ID Number	Data 1	Categorization Value-Profile Fixed
Patient Identifier List	1	Value-Profile Fixed
ID Number		
	22533	Presence-Content Indifferent
Assigning Authority		
Namespace ID	NIST-MPI-1	Presence-Content Indifferent
Universal ID		Indifferent
Universal ID Type		Indifferent
	MR	Value-Test Case Fixed
Patient Name		
Family Name		
Surname	Wells	Presence-Content Indifferent
Given Name	Lacy	Presence-Content Indifferent
Second and Further Given Names or Initials Thereof		Indifferent
Name Type Code	L	Value-Test Case Fixed
Mother's Maiden Name		
Family Name		
Surname		Indifferent
Name Type Code		Indifferent
Date/Time of Birth		
Time	20110430	Presence-Content Indifferent
Administrative Sex	F	Value-Test Case Fixed
Race		
Identifier	2106-3	Value-Test Case Fixed
Text	White	Presence-Test Case Proper
Name of Coding System	CDCREC	Value-Profile Fixed
Patient Address		
Street Address		
Street or Mailing Address	12 North Oak St	Presence-Content Indifferent
Other Designation		Indifferent
City	Bozeman	Presence-Content Indifferent
State or Province	МТ	Presence-Content Indifferent
Zip or Postal Code	59715	Presence-Content Indifferent
<u> </u>	USA	Presence-Content Indifferent
Address Type	P	Value-Test Case Fixed List
Phone Number - Home		
Telecommunication Use Code	PRN	Value-Test Case Fixed
Telecommunication Equipment Type	PH	Value-Test Case Fixed
		NonPresence
	406	Presence-Content Indifferent
	5552914	Presence-Content Indifferent
Ethnic Group		
Identifier	2186-5	Value-Test Case Fixed
Text		Presence-Test Case Proper
	CDCREC	Value-Profile Fixed
		Indifferent
*		Indifferent
		NonPresence
	N	Indifferent
	Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code Mother's Maiden Name Family Name Surname Name Type Code Date/Time of Birth Time Administrative Sex Race Identifier Text Name of Coding System Patient Address Street Address Street or Mailing Address Other Designation City State or Province Zip or Postal Code Country Address Type Phone Number - Home Telecommunication Use Code Telecommunication Equipment Type Email Address Area/City Code Local Number Ethnic Group Identifier	Identifier Type Code   MR     Patient Name   Family Name   Wells     Given Name   Lacy     Second and Further Given Names or Initials Thereof     Name Type Code   L     Mother's Maiden Name   Family Name     Family Name   Surname   Name Type Code     Date/Time of Birth   Date/Time of Birth     Time   20110430     Administrative Sex   F     Race   Identifier   2106-3     Text   White   Name of Coding System   CDCREC     Patient Address   Street Address     Street Address   Street Address   12 North Oak Street     Other Designation   City   Bozeman     Sate or Province   MT     Zip or Postal Code   59715     Country   USA     Address Type   P     Phone Number - Home     Telecommunication Use Code   PRN     Telecommunication Equipment Type   Email Address     Area/City Code   406     Local Number   5552914     Ethnic Group     Identifier   2186-5     Text   Not Hispanic or Latino     Name of Coding System   CDCREC     Date

PD1 : Patient Additional Demographic

PDI: Patient Additional Demographic					
Location	Data Element	Data	Categorization		
PD1-11	Publicity Code				
PD1-11.1	Identifier	08	Value-Test Case Fixed		
PD1-11.2	Text	Reminder/recall - to provider	Presence-Test Case Proper		
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed		
PD1-12	Protection Indicator	N	Indifferent		
PD1-13	Protection Indicator Effective Date	20150625	Indifferent		
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed		
PD1-17	Immunization Registry Status Effective Date	20110430	Presence-Content Indifferent		
PD1-18	Publicity Code Effective Date	20150625	Presence-Content Indifferent		

NK1 : Next of Kin / Associated Parties

Location	Data Element	Data	Categorization
NK1-1	Set ID - NK1	1	Value-Profile Fixed
NK1-2	Name		
NK1-2.1	Family Name		
NK1-2.1.1	Surname	Trudeau	Presence-Content Indifferent
NK1-2.2	Given Name	Janelle	Presence-Content Indifferent
NK1-2.3	Second and Further Given Names or Initials Thereof		Indifferent
NK1-2.7	Name Type Code	L	Value-Test Case Fixed
NK1-3	Relationship		
NK1-3.1	Identifier	GRD	Value-Test Case Fixed
NK1-3.2	Text	Guardian	Presence-Test Case Proper
NK1-3.3	Name of Coding System	HL70063	Value-Profile Fixed
NK1-4	Address		
NK1-4.1	Street Address		
NK1-4.1.1	Street or Mailing Address	12 North Oak St	Presence-Content Indifferent
NK1-4.2	Other Designation		Indifferent
NK1-4.3	City	Bozeman	Presence-Content Indifferent
NK1-4.4	State or Province	MT	Presence-Content Indifferent
NK1-4.5	Zip or Postal Code	59715	Presence-Content Indifferent
NK1-4.6	Country	USA	Presence-Content Indifferent
NK1-4.7	Address Type	P	Value-Test Case Fixed List
NK1-5	Phone Number		
NK1-5.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
NK1-5.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
NK1-5.4	Email Address		Indifferent
NK1-5.6	Area/City Code	406	Presence-Content Indifferent
NK1-5.7	Local Number	5552914	Presence-Content Indifferent

### ORC[\*]

ORC : Common Order

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	657	Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	68544	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Indifferent
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Indifferent
ORC-17.2	Text	NISTEHRFacility	Indifferent
ORC-17.3	Name of Coding System	HL70362	Indifferent

ORC : Common Ord	der⁼
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Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	7553	Presence-Content Indifferent
ORC-2.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	8671	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number	654	Presence-Content Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname	Thomas	Presence-Content Indifferent
ORC-12.3	Given Name	Wilma	Presence-Content Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof	Elizabeth	Presence-Content Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code	L	Value-Test Case Fixed
ORC-12.13	Identifier Type Code	MD	Value-Test Case Fixed List
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

### RXA[\*] =

## RXA: Pharmacy/Treatment Administration =

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20150625	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	00006-4171-01	Value-Test Case Fixed List
RXA-5.2	Text	ProQuad	Presence-Test Case Proper
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed
RXA-6	Administered Amount	0.5	Presence-Test Case Proper
RXA-7	Administered Units		
RXA-7.1	Identifier	mL	Value-Test Case Fixed
RXA-7.2	Text	mL	Presence-Test Case Proper
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed
RXA-9	Administration Notes		
RXA-9.1	Identifier	00	Value-Test Case Fixed
RXA-9.2	Text	New Record	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent
RXA-10.3	Given Name	Lily	Presence-Content Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof	Sizanne	Presence-Content Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code	L	Indifferent
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number	407453	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20151015	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	MSD	Value-Test Case Fixed
RXA-17.2	Text	Merck and Co., Inc.	Presence-Test Case Proper
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	A	Value-Test Case Fixed

RXA : Pharmacy/Treatment Administration				
Location	Data Element	Data	Categorization	
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed	
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed	
RXA-3	Date/Time Start of Administration			
RXA-3.1	Time	20150625	Presence-Content Indifferent	
RXA-5	Administered Code			
RXA-5.1	Identifier	58160-0812-01	Value-Test Case Fixed List	
RXA-5.2	Text	KINRIX	Presence-Test Case Proper	
RXA-5.3	Name of Coding System	NDC	Value-Profile Fixed	
RXA-6	Administered Amount	0.5	Presence-Test Case Proper	
RXA-7	Administered Units			
RXA-7.1	Identifier	mL	Value-Test Case Fixed	
RXA-7.2	Text	mL	Presence-Test Case Proper	
RXA-7.3	Name of Coding System	UCUM	Value-Profile Fixed	
RXA-9	Administration Notes			
RXA-9.1	Identifier	00	Value-Test Case Fixed	
RXA-9.2	Text	New Record	Presence-Test Case Proper	
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed	
RXA-10	Administering Provider			
RXA-10.1	ID Number	7824	Presence-Content Indifferent	
RXA-10.2	Family Name			
RXA-10.2.1	Surname	Jackson	Presence-Content Indifferent	
RXA-10.3	Given Name	Lily	Presence-Content Indifferent	
RXA-10.4	Second and Further Given Names or Initials Thereof	Sızanne	Presence-Content Indifferent	
RXA-10.9	Assigning Authority			
RXA-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent	
RXA-10.9.2	Universal ID		Indifferent	
RXA-10.9.3	Universal ID Type		Indifferent	
RXA-10.10	Name Type Code	L	Value-Test Case Fixed	
RXA-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List	
RXA-11	Administered-at Location			
RXA-11.4	Facility			
RXA-11.4.1	Namespace ID	NIST-Clinic-1	Presence-Content Indifferent	
RXA-11.4.2	Universal ID		Indifferent	
RXA-11.4.3	Universal ID Type		Indifferent	
RXA-15	Substance Lot Number	88402	Presence-Content Indifferent	
RXA-16	Substance Expiration Date			
RXA-16.1	Time	20150730	Presence-Content Indifferent	
RXA-17	Substance Manufacturer Name			
RXA-17.1	Identifier	SKB	Value-Test Case Fixed	
RXA-17.2	Text	GlaxoSmithKline	Presence-Test Case Proper	
RXA-17.3	Name of Coding System	MVX	Value-Profile Fixed	
RXA-18	Substance/Treatment Refusal Reason			
RXA-18.1	Identifier		NonPresence	
RXA-18.2	Text		NonPresence	
RXA-18.3	Name of Coding System		NonPresence	
RXA-20	Completion Status	CP	Value-Test Case Fixed	
RXA-21	Action Code - RXA	A	Value-Test Case Fixed	

## 

## RXR: Pharmacy/Treatment Route

Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C38299	Value-Test Case Fixed
RXR-1.2	Text	Subcutaneous	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	RD	Value-Test Case Fixed
RXR-2.2	Text	Right Deltoid	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

RXR : Pharmacy/Treatment Route			
Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C28161	Value-Test Case Fixed
RXR-1.2	Text	Intramuscular	Presence-Test Case Proper
RXR-1.3	Name of Coding System	NCIT	Value-Profile Fixed
RXR-2	Administration Site		
RXR-2.1	Identifier	LD	Value-Test Case Fixed
RXR-2.2	Text	Left Deltoid	Presence-Test Case Proper
RXR-2.3	Name of Coding System	HL70163	Value-Profile Fixed

-о	BX	[*]	ľ

	OBX: Observation/Result				
Location	Data Element	Data	Categorization		
OBX-1	Set ID - OBX	1	Value-Profile Fixed		
OBX-2	Value Type	CE	Value-Test Case Fixed		
OBX-3	Observation Identifier				
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed		
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper		
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed		
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper		
OBX-5	Observation Value				
OBX-5.1	Identifier	PHC70	Value-Test Case Fixed		
OBX-5.2	Text	Private	Presence-Test Case Proper		
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed		
OBX-6	Units				
OBX-6.1	Identifier		NonPresence		
OBX-6.2	Text		NonPresence		
OBX-6.3	Name of Coding System		NonPresence		
OBX-11	Observation Result Status	F	Value-Profile Fixed		
OBX-14	Date/Time of the Observation				
OBX-14.1	Time	20150625	Presence-Content Indifferent		
OBX-17	Observation Method				
OBX-17.1	Identifier		Indifferent		
OBX-17.2	Text		Indifferent		
OBX-17.3	Name of Coding System		Indifferent		

OBX:	Observation	ı/Result

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	V01	Value-Test Case Fixed
OBX-5.2	Text	Not VFC Eligible	Presence-Test Case Proper
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Indifferent
OBX-17.2	Text	per immunization	Indifferent
OBX-17.3	Name of Coding System	CDCPHINVS	Indifferent

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300013411210806	Value-Test Case Fixed
OBX-5.2	Text	MMRV Vaccine (Measles, Mumps, Rubella, and Varicella) VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgslvis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent

Indifferent

Indifferent

OBX-17.2

OBX-17.3

Text

Name of Coding System

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150625	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

	OBX: Observation/Result		
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30963-3	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Source	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	1	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	PHC70	Value-Test Case Fixed
OBX-5.2	Text	Private	Presence-Test Case Proper
OBX-5.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent

Indifferent

Name of Coding System

OBX-17.3

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	64994-7	Value-Test Case Fixed
OBX-3.2	Text	Vaccine Funding Program Eligibility	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	2	Presence-Test Case Proper
OBX-5	Observation Value	Observation Value	
OBX-5.1	Identifier	V01	Value-Test Case Fixed
OBX-5.2	Text	Not VFC Eligible	Presence-Test Case Proper
OBX-5.3	Name of Coding System	HL70064	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier	VXC40	Value-Test Case Fixed
OBX-17.2	Text	per immunization	Presence-Test Case Proper
OBX-17.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300017211210806	Value-Test Case Fixed
OBX-5.2	Text	Polio Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
07771 - 4	1		

Indifferent

Name of Coding System

OBX-17.3

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	Value-Profile Fixed
OBX-2	Value Type	DT	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	3	Presence-Test Case Proper
OBX-5	Observation Value	20150625	Presence-Content Indifferent
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	5	Value-Profile Fixed
OBX-2	Value Type	CE	Value-Test Case Fixed
OBX-3	Observation Identifier		
OBX-3.1	Identifier	69764-9	Value-Test Case Fixed
OBX-3.2	Text	Document Type	Presence-Test Case Proper
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed
OBX-4	Observation Sub-ID	4	Presence-Test Case Proper
OBX-5	Observation Value		
OBX-5.1	Identifier	253088698300003511210806	Value-Test Case Fixed
OBX-5.2	Text	DTaP (Diphtheria, Tetanus, Pertussis) Vaccine VIS	Presence-Test Case Proper
OBX-5.3	Name of Coding System	cdcgs1 vis	Value-Profile Fixed
OBX-6	Units		
OBX-6.1	Identifier		NonPresence
OBX-6.2	Text		NonPresence
OBX-6.3	Name of Coding System		NonPresence
OBX-11	Observation Result Status	F	Value-Profile Fixed
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20150625	Presence-Content Indifferent
OBX-17	Observation Method		
OBX-17.1	Identifier		Indifferent
OBX-17.2	Text		Indifferent
OBX-17.3	Name of Coding System		Indifferent

	OBX: Observation/Result			
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	6	Value-Profile Fixed	
OBX-2	Value Type	DT	Value-Test Case Fixed	
OBX-3	Observation Identifier			
OBX-3.1	Identifier	29769-7	Value-Test Case Fixed	
OBX-3.2	Text	Date Vis Presented	Presence-Test Case Proper	
OBX-3.3	Name of Coding System	LN	Value-Profile Fixed	
OBX-4	Observation Sub-ID	4	Presence-Test Case Proper	
OBX-5	Observation Value	20150625	Presence-Content Indifferent	
OBX-6	Units			
OBX-6.1	Identifier		NonPresence	
OBX-6.2	Text		NonPresence	
OBX-6.3	Name of Coding System		NonPresence	
OBX-11	Observation Result Status	F	Value-Profile Fixed	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	20150625	Presence-Content Indifferent	
OBX-17	Observation Method			
OBX-17.1	Identifier		Indifferent	
OBX-17.2	Text		Indifferent	
OBX-17.3	Name of Coding System		Indifferent	

# **Test Data Specification**

Patient Information		
Element	Data	
Patient Name	Lacy Wells	
Mother's Maiden Name		
ID Number	22533	
Date/Time of Birth	04/30/2011	
Administrative Sex	Female	
Patient Address	12 North Oak St Bozeman MT 59715 USA	
Local Number	(406)555-2914	
Race	White	
Ethnic Group	Not Hispanic or Latino	
Multiple Birth Indicator	No	
Birth Order	1	

Immunization Registry Information		
Element	Data	
Immunization Registry Status	Active	
Immunization Registry Status Effective Date	04/30/2011	
Publicity Code	Reminder/recall - to provider	
Publicity Code Effective Date	06/25/2015	
Protection Indicator	No	

06/25/2015

Protection Indicator Effective Date

Guardian or Responsible Party	
Data	
Janelle Trudeau	
Guardian	
12 North Oak St Bozeman MT 59715 USA	
(406)555-2914	

# -Vaccine Administration Information[\*]-

# -Vaccine Administration Information-

Element	Data
Administered Vaccine	ProQuad
Date/Time Start of Administration	06/25/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	407453
Substance Expiration Date	10/15/2015
Substance Manufacturer Name	Merck and Co., Inc.
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Subcutaneous
Administration Site	Right Deltoid
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Private
Vaccine Funding Program Eligibility	Not VFC Eligible
Document Type	MMRV Vaccine (Measles, Mumps, Rubella, and Varicella) VIS
Date Vis Presented	06/25/2015

# -Vaccine Administration Information-

Element	Data
Administered Vaccine	KINRIX
Date/Time Start of Administration	06/25/2015
Administered Amount	0.5
Administered Units	mL
Administration Notes	New Record
Administering Provider	Lily Jackson
Substance Lot Number	88402
Substance Expiration Date	07/30/2015
Substance Manufacturer Name	GlaxoSmithKline
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	Intramuscular
Administration Site	Left Deltoid
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	Wilma Thomas

Element	Data
Vaccine Funding Source	Private
Vaccine Funding Program Eligibility	Not VFC Eligible
Document Type	Polio Vaccine VIS
Date Vis Presented	06/25/2015
Document Type	DTaP (Diphtheria, Tetanus, Pertussis) Vaccine VIS
Date Vis Presented	06/25/2015

# 1.9.2. IZ-AD-9.2 Receive ACK Z23

Test Step Type: TA RESPONDER

Tests the ability to consume an ACK message containing multiple warnings

# **Test Story**

## Description

A mapping error in the IIS software results in the IIS being unable to recognize either administration site sent in RXR-2 even though it is valid. The acknowledgement message returned contains warnings for the invalid values.

### Comments

No Comments

### **Pre-condition**

A VXU message is generated by the EHR.

### **Post-Condition**

No PostCondition

## **Test Objectives**

Support for accepting an acknowledgement message with multiple warnings being returned by the IIS and to display some notification to an end user.

### **Evaluation Criteria**

The warnings returned in the acknowledgement message are visible in the system responsible for the content of the administration message.

### Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

## **Message Contents**

MSH : Message Header			
Location	Data Element	Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	~\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID		
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID		
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150625115038.044-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-9.2 Receive ACK Z23	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE NE	
MSH-16	Application Acknowledgment Type	NE NE	
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z23	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID	CDC THIVE	
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority	NOTING AC	
MSH-22.6.1	Namespace ID		
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
	Identifier Type Code		
MSH-22.7	**		
MSH-22.10	Organization Identifier		
MSH-23	Receiving Responsible Organization	NICTELIDEAC	
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code		
MSH-23 10	Organization Identifier		

-MSA:	Message	Acknowledgment <sup>®</sup>

Organization Identifier

MSH-23.10

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AE	
MSA-2	Message Control ID	NIST-IZ-AD-9.1_Send_V04_Z22	

= FRR(*)			
Location	Data Element	Data	Categorization
ERR-2	Error Location		
ERR-2.1	Segment ID	RXR	
ERR-2.2	Segment Sequence	1	
ERR-2.3	Field Position	2	
ERR-2.4	Field Repetition	1	
ERR-2.5	Component Number	1	
ERR-2.6	Sub-Component Number		
ERR-3	HL7 Error Code		
ERR-3.1	Identifier	999	
ERR-3.2	Text	Application error	
ERR-3.3	Name of Coding System	HL70357	
ERR-4	Severity	W	
ERR-5	Application Error Code		
ERR-5.1	Identifier	5	
ERR-5.2	Text	Table value not found	
ERR-5.3	Name of Coding System	HL70533	
ERR-8	User Message	Administration Site not recognized - site data will not be saved	

Location	Data Element	Data	Categorization
ERR-2	Error Location		
ERR-2.1	Segment ID	RXR	
ERR-2.2	Segment Sequence	2	
ERR-2.3	Field Position	2	
ERR-2.4	Field Repetition	1	
ERR-2.5	Component Number	1	
ERR-2.6	Sub-Component Number		
ERR-3	HL7 Error Code		
ERR-3.1	Identifier	999	
ERR-3.2	Text	Application error	
ERR-3.3	Name of Coding System	HL70357	
ERR-4	Severity	W	
ERR-5	Application Error Code		
ERR-5.1	Identifier	5	
ERR-5.2	Text	Table value not found	
ERR-5.3	Name of Coding System	HL70533	
ERR-8	User Message	Administration Site not recognized - site data will not be saved	

# **Test Data Specification**

Patient Information————————————————————————————————————		
Element	Data	
This information will be automatically supplied by	y the System	
		-

# **Juror Document**

Return an Acknowledgement		
Test Case ID	IZ-AD-9_Admin_IIS-2Warnings	
Juror ID		
Juror Name		
HIT System Tested		
Inspection Date/Time		
Inspection Settlement (Pass/Fail)	Pass	Fail
Reason Failed		
Juror Comments		

### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which an Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

#### Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK error notification message correctly; the issue identified in the error notification must be made visible in the system.

# 1.10. IZ-AD-10\_Historical\_IIS-SysError

Historical administration resulting in system error

# **Test Story**

## Description

A patient is seen at a clinic. A historical vaccination is recorded but the IIS is unable to process the administration message, rejects it and returns a fatal error in the acknowledgement message.

## Comments

The test case simulates the IIS issuing an acknowledgement error due to an internal error even though the message is valid.

### **Pre-condition**

No PreCondition

## **Post-Condition**

The returned error must be visible in the EHR.

## **Test Objectives**

This test case assesses the ability of the EHR to accept an acknowledgement message with a fatal system error being returned by the IIS.

### **Evaluation Criteria**

Administered Message: Validation Report with no Errors

Acknowledgement Message: An indication of a error (See Juror Document)

## Notes

No Note

# 1.10.1. IZ-AD-10.1\_Send\_V04\_Z22

Test Step Type: SUT\_INITIATOR

Tests the ability to create a valid VXU^V04 message

# **Test Story**

# Description

A 68 year old male, Manuel Diego Vasquez, comes to a clinic for a physical. A clinic staff member collects basic patient demographic

received a pneumococcal vaccination	oirth and sex. He declines further recall and reminder notifications. The patient reports that he in at a local pharmacy on October 21, 2014. The clinic staff determine that no further vaccinations at
required. A clinician, Lily Jackson (Il	D 7824) enters the historical data into the EHR and transmits it to the IIS.
Comments	
No Comments	
Pre-condition	
No PreCondition	
Post-Condition	
No PostCondition	
Test Objectives	
Evaluation Criteria	
Message Validation Report.	
Notes	
No Note	

# **Message Contents**

MSH : Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed
MSH-3	Sending Application		value i forne i med
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID	THOI LANGET	Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility		indirection
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID	T UST LANGT TO	Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID	T UST THE IT	Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility		indirection
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID	140116110	Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		manoront
MSH-7.1	Time	20150625072816.601-0500	Presence-System Generated
MSH-9	Message Type	20130023072013.001-0300	2 Toolioo System Concluded
MSH-9.1	Message Code	VXU	Value-Profile Fixed
MSH-9.2	Trigger Event	V04	Value-Profile Fixed
MSH-9.3	Message Structure	VXU V04	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-AD-10.1 Send V04 Z22	Presence-System Generated
MSH-11	Processing ID	1451-12-145-10.1_SCHU_VOY_2222	Treschee-System Cherated
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID	-	Trescine Content indurerent
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier	110	value i forme i med
MSH-21.1	Entity Identifier	Z22	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID	CDC TILL VIS	Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority	Tuoi Eriteric	Trescite Comigatation
MSH-22.6.1	Namespace ID		Indifferent
MSH-22.6.2	Universal ID		Indifferent
MSH-22.6.3	Universal ID Type		Indifferent
MSH-22.7	Identifier Type Code		Indifferent
MSH-22.10	Organization Identifier		Indifferent
MSH-23	Receiving Responsible Organization		indirection
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority	THE THE TEN	2 Tesenee Configuration
MSH-23.6.1	Namespace ID		Indifferent
MSH-23.6.2	Universal ID		Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
MSH-23.7	Identifier Type Code		Indifferent
IVIDIT-43./	identifier Type Code		municiciit

– pin	<ul> <li>Patient</li> </ul>	Identification	

Location	Data Element	Data	Categorization		
PID-1	Set ID - PID	1	Value-Profile Fixed		
PID-3	Patient Identifier List				
PID-3.1	ID Number	21142	Presence-Content Indifferent		
PID-3.4	Assigning Authority				
PID-3.4.1	Namespace ID	NIST-MPI-1	Presence-Content Indifferent		
PID-3.4.2	Universal ID	1 102 1711 1	Indifferent		
PID-3.4.3	Universal ID Type		Indifferent		
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed		
PID-5	Patient Name	THE STATE OF THE S	value 1 est case 1 fred		
PID-5.1	Family Name				
PID-5.1.1	Surname	Vasquez	Presence-Content Indifferent		
PID-5.2	Given Name	Manuel	Presence-Content Indifferent		
110-5.2	Second and Further Given Names or	IVERTON			
PID-5.3	Initials Thereof	Diego	Presence-Content Indifferent		
PID-5.7	Name Type Code	L	Value-Test Case Fixed		
PID-6	Mother's Maiden Name				
PID-6.1	Family Name				
PID-6.1.1	Surname		Indifferent		
PID-6.7	Name Type Code		Indifferent		
PID-7	Date/Time of Birth				
PID-7.1	Time	19470215	Presence-Content Indifferent		
PID-8	Administrative Sex	M	Value-Test Case Fixed		
PID-10	Race		value 1 cor case 1 fred		
PID-10.1	Identifier	2106-3	Value-Test Case Fixed		
PID-10.2	Text	White	Presence-Test Case Proper		
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed		
PID-10.5	Patient Address	COCKEC	value-1 forme Fixed		
PID-11.1	Street Address				
PID-11.1.1	Street or Mailing Address	227 Park Ave	Presence-Content Indifferent		
PID-11.2	Other Designation	227 Fair Ave	Indifferent		
PID-11.2 PID-11.3	-	Pozomon	Presence-Content Indifferent		
PID-11.4	City State or Province	Bozeman MT	Presence-Content Indifferent		
			Presence-Content Indifferent		
PID-11.5	Zip or Postal Code	59715			
PID-11.6	Country	USA	Presence-Content Indifferent		
PID-11.7	Address Type	P	Value-Test Case Fixed List		
PID-13[1]	Phone Number - Home	DDD I	WI T C F I		
PID-13[1].2	Telecommunication Use Code	PRN	Value-Test Case Fixed		
PID-13[1].3	Telecommunication Equipment Type	PH	Value-Test Case Fixed		
PID-13[1].4	Email Address	1405	NonPresence		
PID-13[1].6	Area/City Code	406	Presence-Content Indifferent		
PID-13[1].7	Local Number	5555815	Presence-Content Indifferent		
PID-13[2]	Phone Number - Home				
PID-13[2].2	Telecommunication Use Code	NET	Value-Test Case Fixed		
PID-13[2].3	Telecommunication Equipment Type		Indifferent		
PID-13[2].4	Email Address	Manuel. Vasquez@isp.com	Presence-Content Indifferent		
PID-13[2].6	Area/City Code		NonPresence		
PID-13[2].7	Local Number		NonPresence		
PID-22	Ethnic Group				
PID-22.1	Identifier	2135-2	Value-Test Case Fixed		
PID-22.2	Text	Hispanic or Latino	Presence-Test Case Proper		
PID-22.3	Name of Coding System	CDCREC	Value-Profile Fixed		
PID-24	Multiple Birth Indicator	N	Value-Test Case Fixed		
PID-25	Birth Order	1	Indifferent		
PID-29	Patient Death Date and Time	1	municical		
			NonDracance		
PID-29.1	Time	N	NonPresence		
PID-30	Patient Death Indicator	N	Value-Test Case Fixed		

-PD1:	: Patient	Additional	Demographic =

Location	Data Element	Data	Categorization		
PD1-11	Publicity Code				
PD1-11.1	Identifier	01	Value-Test Case Fixed		
PD1-11.2	Text	No reminder/recall	Presence-Test Case Proper		
PD1-11.3	Name of Coding System	HL70215	Value-Profile Fixed		
PD1-12	Protection Indicator	N	Value-Test Case Fixed		
PD1-13	Protection Indicator Effective Date	20150625	Presence-Content Indifferent		
PD1-16	Immunization Registry Status	A	Value-Test Case Fixed		
PD1-17	Immunization Registry Status Effective Date	20150625	Presence-Content Indifferent		
PD1-18	Publicity Code Effective Date	20150625	Presence-Content Indifferent		

ORC : Common Order

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		Indifferent
ORC-2.2	Namespace ID		Indifferent
ORC-2.3	Universal ID		Indifferent
ORC-2.4	Universal ID Type		Indifferent
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	31165	Presence-Content Indifferent
ORC-3.2	Namespace ID	NIST-AA-IZ-2	Presence-Content Indifferent
ORC-3.3	Universal ID		Indifferent
ORC-3.4	Universal ID Type		Indifferent
ORC-10	Entered By		
ORC-10.1	ID Number	7824	Presence-Content Indifferent
ORC-10.2	Family Name		
ORC-10.2.1	Surname	Jackson	Presence-Content Indifferent
ORC-10.3	Given Name	Lily	Presence-Content Indifferent
ORC-10.4	Second and Further Given Names or Initials Thereof	Suzanne	Presence-Content Indifferent
ORC-10.9	Assigning Authority		
ORC-10.9.1	Namespace ID	NIST-PI-1	Presence-Content Indifferent
ORC-10.9.2	Universal ID		Indifferent
ORC-10.9.3	Universal ID Type		Indifferent
ORC-10.10	Name Type Code	L	Value-Test Case Fixed
ORC-10.13	Identifier Type Code	PRN	Value-Test Case Fixed List
ORC-12	Ordering Provider		
ORC-12.1	ID Number		Indifferent
ORC-12.2	Family Name		
ORC-12.2.1	Surname		Indifferent
ORC-12.3	Given Name		Indifferent
ORC-12.4	Second and Further Given Names or Initials Thereof		Indifferent
ORC-12.9	Assigning Authority		
ORC-12.9.1	Namespace ID		Indifferent
ORC-12.9.2	Universal ID		Indifferent
ORC-12.9.3	Universal ID Type		Indifferent
ORC-12.10	Name Type Code		Indifferent
ORC-12.13	Identifier Type Code		Indifferent
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	Presence-Content Indifferent
ORC-17.2	Text	NISTEHRFacility	Presence-Content Indifferent
ORC-17.3	Name of Coding System	HL70362	Value-Profile Fixed

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	Value-Profile Fixed
RXA-2	Administration Sub-ID Counter	1	Value-Profile Fixed
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20141021	Presence-Content Indifferent
RXA-5	Administered Code		
RXA-5.1	Identifier	152	Value-Test Case Fixed
RXA-5.2	Text	Pneumococcal Conjugate, unspecified formulation	Presence-Test Case Proper
RXA-5.3	Name of Coding System	CVX	Value-Profile Fixed
RXA-6	Administered Amount	999	Presence-Test Case Proper
RXA-7	Administered Units		
RXA-7.1	Identifier		Indifferent
RXA-7.2	Text		Indifferent
RXA-7.3	Name of Coding System		Indifferent
RXA-9	Administration Notes		
RXA-9.1	Identifier	01	Value-Test Case Fixed
RXA-9.2	Text	Historical Administration	Presence-Test Case Proper
RXA-9.3	Name of Coding System	NIP001	Value-Profile Fixed
RXA-10	Administering Provider		
RXA-10.1	ID Number		Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname		Indifferent
RXA-10.3	Given Name		Indifferent
RXA-10.4	Second and Further Given Names or Initials Thereof		Indifferent
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID		Indifferent
RXA-10.9.2	Universal ID		Indifferent
RXA-10.9.3	Universal ID Type		Indifferent
RXA-10.10	Name Type Code		Indifferent
RXA-10.13	Identifier Type Code		Indifferent
RXA-11	Administered-at Location		Indirectit
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID		Indifferent
RXA-11.4.2	Universal ID		Indifferent
RXA-11.4.3	Universal ID Type		Indifferent
RXA-15	Substance Lot Number		Indifferent
RXA-16	Substance Expiration Date		- Indirection
RXA-16.1	Time		Indifferent
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier		Indifferent
RXA-17.2	Text		Indifferent
RXA-17.3	Name of Coding System		Indifferent
RXA-18	Substance/Treatment Refusal Reason		Indirection .
RXA-18.1	Identifier		NonPresence
RXA-18.2			NonPresence
RXA-18.2 RXA-18.3	Text Name of Coding System		NonPresence NonPresence
	Completion Status	CD	
RXA-20 RXA-21	Action Code - RXA	CP   A	Value-Test Case Fixed Value-Test Case Fixed

# **Test Data Specification**

Patient Information			
Element	Data		
Patient Name	Manuel Diego Vasquez		
Mother's Maiden Name			
ID Number	21142		
Date/Time of Birth	02/15/1947		
Administrative Sex	Male		
Patient Address	227 Park Ave Bozeman MT 59715 USA		
Local Number	(406)555-5815		
Email	Manuel. Vasquez@isp.com		
Race	White		
Ethnic Group	Hispanic or Latino		
Multiple Birth Indicator	No		

-Immunization	Dogietry	Information-
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	ixegisti y	IIIIUIIIIauui

Birth Order

Element	Data
Immunization Registry Status	Active
Immunization Registry Status Effective Date	06/25/2015
Publicity Code	No reminder/recall
Publicity Code Effective Date	06/25/2015
Protection Indicator	No
Protection Indicator Effective Date	06/25/2015

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v a		~~~		411011		1 1114111111

Element	Data
Administered Vaccine	Pneumococcal Conjugate, unspecified formulation
Date/Time Start of Administration	10/21/2014
Administered Amount	999
Administered Units	
Administration Notes	Historical Administration
Administering Provider	
Substance Lot Number	
Substance Expiration Date	
Substance Manufacturer Name	
Substance/Treatment Refusal Reason	
Completion Status	Complete
Action Code	Add
Route	
Administration Site	
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	

# 1.10.2. IZ-AD-10.2 Receive ACK Z23

Test Step Type: TA RESPONDER

Tests the ability to consume an ACK message containing a system error

# **Test Story**

## Description

Due to an error in the IIS software, the IIS is unable to recognize the HL7 version ID sent in MSH-12 even though it is valid. The acknowledgement message returned contains an error for an unsupported version ID.

### Comments

No Comments

### **Pre-condition**

A VXU message is generated by the EHR.

### **Post-Condition**

No PostCondition

## **Test Objectives**

Support for accepting an acknowledgement message with a fatal system error being returned by the IIS and to display some notification to an end user.

### **Evaluation Criteria**

The error returned in the acknowledgement message is visible in the system responsible for the content of the administration message.

## Notes

Important note regarding the MSH-10 and MSA-2: The NIST acknowledgment message is predefined and is based on the VXU message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the ACK message. The NIST ACK test message can be modified such that MSA-2 matches MSH-10 of the VXU message generated by the system-under test.

# **Message Contents**

		Message Header	
Location	Data Element	Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	^\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID		
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID		
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150625072816.602-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
MSH-9.3	Message Structure	ACK	
MSH-10	Message Control ID	NIST-IZ-AD-10.2_Receive_ACK_Z23	
MSH-11	Processing ID	THIST-ILL-THE-TO.Z_INCOIVE_TICK_EZS	
MSH-11.1	Processing ID	P	
MSH-12	Version ID	-	
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE NE	
MSH-21	Message Profile Identifier	INL	
MSH-21.1	Entity Identifier	Z23	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID	CDCI THINVS	
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority	NISTHSFAC	
MSH-22.6.1 MSH-22.6.2	Namespace ID Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code		
MSH-22.10	Organization Identifier		
MSH-23	Receiving Responsible Organization	NICTELIDEAC	
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID		
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code		
MSH-23 10	Organization Identifier		

## MSA: Message Acknowledgment

Organization Identifier

MSH-23.10

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AR	
MSA-2	Message Control ID	NIST-IZ-AD-10.1_Send_V04_Z22	

ERR : Error				
Location	Data Element	Data	Categorization	
ERR-2	Error Location			
ERR-2.1	Segment ID	MSH		
ERR-2.2	Segment Sequence	1		
ERR-2.3	Field Position	12		
ERR-2.4	Field Repetition	1		
ERR-2.5	Component Number	1		
ERR-2.6	Sub-Component Number			
ERR-3	HL7 Error Code			
ERR-3.1	Identifier	203		
ERR-3.2	Text	Unsupported Version ID		
ERR-3.3	Name of Coding System	HL70357		
ERR-4	Severity	E		
ERR-5	Application Error Code			
ERR-5.1	Identifier			
ERR-5.2	Text			
ERR-5.3	Name of Coding System			
ERR-8	User Message	Version ID not recognized - message rejected		

# **Test Data Specification**

Element Data				
This information will be automatically supplied by the System				
•				

## **Juror Document**

	Return an Acknowledgement	
Test Case ID	IZ-AD-10_Historical_IIS-SysError	
Juror ID		
Juror Name		
HIT System Tested		
Inspection Date/Time		
Inspection Settlement (Pass/Fail)	Pass	Fail
Reason Failed		
Juror Comments		

# DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the health information technology's ability to receive and process a Return an Acknowledgement Z23 message (in response to a "Send Unsolicited Immunization Update Using a VXU" Z22 message) in which an Error is returned in the message.

The exact wording and format of the display in the health information technology (HIT) is not in-scope for this test.

Return an Acknowledgement

The receiving HIT system being tested shall process the Z23 ACK error notification message correctly; the issue identified in the error notification must be made visible in the system.

# 2. Evaluated History and Forecast Group

Test the EHR-S capability to: (1) To create well-formed queries (2) Accept the response messages The possibilities include: (1) evaluated history and forecast (2) too many patients found, or (3) no patients found. A juror document (inspection check list) is provided that indicates the content that is expected to be displayed. (3) Display of evaluated history and forecast Test Cases consists of 2 steps: (1) create query messages based on Immunization Messaging Standard (Z44 Profile) and specific Test Data, and (2) receive (Z42 Profile) messages and display evaluated history and forecast OR receive (Z33 Profile) and display too many patients found or no patients found.

# **Test Story**

Description  null  Comments  null  Pre-condition  null  Post-Condition  null  Test Objectives  null  Evaluation Criteria  null	
Comments null  Pre-condition null  Post-Condition null  Test Objectives null  Evaluation Criteria	
Comments null  Pre-condition null  Post-Condition null  Test Objectives null  Evaluation Criteria	
Pre-condition null  Post-Condition null  Test Objectives null  Evaluation Criteria	
Pre-condition null  Post-Condition null  Test Objectives null  Evaluation Criteria	
Pre-condition mull  Post-Condition mull  Test Objectives mull  Evaluation Criteria	
Post-Condition null  Test Objectives null  Evaluation Criteria	
Post-Condition null  Test Objectives null  Evaluation Criteria	
Post-Condition  mull  Test Objectives  mull  Evaluation Criteria	
Test Objectives null  Evaluation Criteria	
Test Objectives null  Evaluation Criteria	
Test Objectives null  Evaluation Criteria	
Test Objectives null  Evaluation Criteria	
null  Evaluation Criteria	
null  Evaluation Criteria	
Evaluation Criteria	
null	
Notes	
null	
TUIL	

# 2.1. IZ-QR-1 Query Child

Query for a child with immunization history. A response message with evaluated history and forecast is returned.

## **Test Story**

## Description

A male child patient, Cameron A. Fairchild, is brought to the clinic for an annual visit. A staff person locates his medical record in the EHR-S. The staff person confirms demographic information, including address. The staff person triggers a request to the IIS for an evaluated history and forecast for the child. The IIS performs a search for Cameron A. Fairchild and finds one high-confidence match. The IIS generates an evaluated history and forecast for Cameron and returns this to the EHR-S. One dose of vaccine was not administrated at the correct age and is marked as not valid. The EHR-S displays the evaluated history and forecast, including the not valid dose.

### Comments

No Comments

### **Pre-condition**

Person exists in the querying system with the complete demographics as provided in the Test Data Specification.

Person has Medical Record Number (MR).

Person does not have existing immunization events in their EHR.

Person does have an immunization history in the IIS (simulated by the NIST Test Tool).

### Post-Condition

The clinician is able to view the evaluated history and forecast from the IIS. There is no obligation to incorporate the data into the EHR-S or maintain the displayed evaluated history and forecast.

## **Test Objectives**

Evaluates EHR-S ability to create a well formed query for a child. Evaluates EHR-S ability to accept and display a response with evaluated history and forecast for that person.

### **Evaluation Criteria**

Tester inspects patient record; confirms that the patients does not have existing immunization events.

Confirms valid query message using Message Validation Report.

Confirms valid receipt and display of response message using the Juror Document.

### Notes

The NIST tool is simulating a response from the IIS.

Important note regarding the Query Tag (QPD-2): The NIST response message is predefined and is based on the query message. Most systems will automatically create the query tag (Identifier) and will require it for importing, linking, and processing the response message. The NIST test message can be modified such that the query tag matches that query tag generated by the system-under test.

# 2.1.1. IZ-QR-1.1\_Query\_Q11\_Z44

Test Step Type: SUT INITIATOR

This query should return a response for a child where an evaluated history and forecast are found

## **Test Story**

## Description

A male child patient, Cameron A. Fairchild, is brought to the clinic for an annual visit. A staff person locates his medical record in the EHR-S. The staff person confirms demographic information, including address. The Staff person triggers a request to the IIS for an evaluated history and forecast for the child.

### Comments

Most of the test data is categorized as Test Case Fixed. It is important that the data is entered into the querying system as specified to enable linking the response message to the patient record.

### **Pre-condition**

Person exists in the system with the complete demographics as provided in the Test Data Specification.

Person has Medical Record Number (MR).

Person does not have existing immunization events in their EHR.

Person does have an immunization history in the IIS.

### **Post-Condition**

The IIS return an evaluated history and forecast for the person.

### **Test Objectives**

Test the ability of the system to successfully create a query message based on the given test data.

### **Evaluation Criteria**

Tester inspects patient record; confirms that the patients does not have existing immunization events.

Confirms valid query message using Message Validation Report.

### Notes

If the HIT Module being tested is unable to control the Patient ID Number value that it creates (1) QPD-3.1 in the Query message can be populated with a different value than the one provided in the test data; (2) the Tester can ignore the associated error notification generated by the Tool; and (3) the Response message also must be modified accordingly.

# **Message Contents**

MSH : Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed
MSH-3	Sending Application		Tunio 1 Torne 1 Trea
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID	THE IT	Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility		Indirection
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID	INSI LIIICAC	Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application	NAMES AND DESCRIPTION OF THE PROPERTY OF THE P	
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID		Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility	la warman a	
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID		Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20141031145233-0500	Presence-System Generated
MSH-9	Message Type		
MSH-9.1	Message Code	QBP	Value-Profile Fixed
MSH-9.2	Trigger Event	Q11	Value-Profile Fixed
MSH-9.3	Message Structure	QBP_Q11	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-QR-1.1_Query_Q11_Z44	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z44	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-1	Presence-Configuration
MSH-22.6.2	Universal ID		Indifferent
MSH-22.6.3	Universal ID Type		Indifferent
MSH-22.7	Identifier Type Code	XX	Value-Test Case Fixed
MSH-22.10	Organization Identifier	100-6482	Presence-Configuration
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-1	Presence-Configuration
MSH-23.6.2	Universal ID		Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
MSH-23.7	Identifier Type Code	XX	Value-Test Case Fixed

Location	Data Element	Data	Categorization
QPD-1	Message Query Name		
QPD-1.1	Identifier	Z44	Value-Profile Fixed
QPD-1.2	Text	Request Evaluated History and Forecast	Value-Profile Fixed
QPD-1.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
QPD-2	Query Tag	IZ-1.1-2015	Presence-System Generated
QPD-3	PatientList		
QPD-3.1	ID Number	171122	Value-Test Case Fixed
QPD-3.4	Assigning Authority		
QPD-3.4.1	Namespace ID	NIST-MPI-1	Value-Test Case Fixed
QPD-3.4.2	Universal ID		Indifferent
QPD-3.4.3	Universal ID Type		Indifferent
QPD-3.5	Identifier Type Code	MR	Value-Test Case Fixed
QPD-4	PatientName		
QPD-4.1	Family Name		
QPD-4.1.1	Surname	Fairchild	Value-Test Case Fixed
QPD-4.2	Given Name	Cameron	Value-Test Case Fixed
	Second and Further Given Names or	Carreton	
QPD-4.3	Initials Thereof	A	Value-Test Case Fixed
QPD-4.7	Name Type Code	L	Value-Test Case Fixed
QPD-5	Patient Mother Maiden Name		
QPD-5.1	Family Name		
QPD-5.1.1	Surname	Fairlady	Value-Test Case Fixed
QPD-5.7	Name Type Code	M	Value-Profile Fixed
QPD-6	Patient DateOfBirth		
QPD-6.1	Time	20090214	Value-Test Case Fixed
QPD-7	Patient Sex	M	Value-Test Case Fixed
QPD-8	Patient Address		
QPD-8.1	Street Address		
QPD-8.1.1	Street or Mailing Address	105 Laurel Run Rd	Value-Test Case Fixed
QPD-8.2	Other Designation		Indifferent
QPD-8.3	City	Bozeman	Value-Test Case Fixed
QPD-8.4	State or Province	MT	Value-Test Case Fixed
QPD-8.5	Zip or Postal Code		Indifferent
QPD-8.6	Country		Indifferent
QPD-8.7	Address Type	P	Value-Test Case Fixed List
QPD-9	Phone		
QPD-9.2	Telecommunication Use Code		Indifferent
QPD-9.3	Telecommunication Equipment Type		Indifferent
QPD-9.4	Email Address		
QPD-9.6	Area/City Code		Indifferent
QPD-9.7	Local Number		Indifferent
QPD-10	Multiple birth indicator		Indifferent
QPD-11	Birth order		Indifferent

	RCP : Response Control Parameter				
Location	Data Element	Data	Categorization		
RCP-1	Query Priority	I	Value-Test Case Fixed		
RCP-2	Quantity Limited Request				
RCP-2.1	Quantity	1	Value-Profile Fixed		
RCP-2.2	Units				
RCP-2.2.1	Identifier	RD	Value-Profile Fixed		
RCP-2.2.2	Text	Records	Presence-Test Case Proper		
RCP-2.2.3	Name of Coding System	HL70126	Value-Profile Fixed		

# **Test Data Specification**

# Patient Information-

1 utient inividuation			
Data			
Cameron A Fairchild			
Fairlady			
171122			
02/14/2009			
Male			
105 Laurel Run Rd Bozeman MT			
No			

# 2.1.2. IZ-QR-1.2\_Response\_K11\_Z42

Test Step Type: TA RESPONDER

Return response to query for a child with an evaluated history and forecast

## **Test Story**

## Description

The IIS performs a search for Cameron A. Fairchild and finds one high-confidence match. The IIS generates an evaluated history and forecast for Cameron and returns this to the EHR-S. One dose of vaccine was not administrated at the correct age and is marked as not valid. The EHR-S displays the evaluated history and forecast, including the not valid dose.

### Comments

No Comments

## **Pre-condition**

A query is performed by the sending system. The IIS (simulated by the NIST test tool) contains an immunization events for the person.

### **Post-Condition**

The response is made available to the EHR-S for processing. The clinician is able to view the evaluated history and forecast from the IIS. There is no obligation to incorporate the data into the EHR-S or maintain the displayed evaluated history and forecast.

### **Test Objectives**

Receive a response message containing the evaluated history and forecast; display evaluated history and forecast.

### **Evaluation Criteria**

Confirms valid receipt and display of response message using the Juror Document.

### Notes

Important note regarding the Query Tag (QPD-2): The NIST response message is predefined and is based on the query message. Most systems will automatically create the query tag (Identifier) and will require it for importing, linking, and processing the response message. The NIST test message can be modified such that the query tag matches that query tag generated by the system-under test.

Important note regarding the MSH-10 and MSA-2: The NIST response message is predefined and is based on the query message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the response message. The NIST response test message can be modified such that MSA-2 matches MSH-10 of the query message generated by the system-under test.

# **Message Contents**

Location	Data Element	Data	Categorization
MSH-1	Field Separator	Data	Categorization
MSH-2	Encoding Characters	^\&	
MSH-3	Sending Application	NGTWG L DD	
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID		
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID		
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20151031145233-0500	
MSH-9	Message Type	20131031143233-0300	
MSH-9.1	Message Code	RSP	
MSH-9.2	Trigger Event	K11	
MSH-9.3		RSP K11	
MSH-10	Message Structure		
	Message Control ID	NIST-IZ-QR-1.2_Response_K11_Z42	
MSH-11	Processing ID	n n	
MSH-11.1	Processing ID	P	
MSH-12	Version ID	la a s	
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE	
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z42	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID		
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-1	
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code	XX	
MSH-22.10	Organization Identifier	100-3322	
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-1	
MSH-23.6.2	Universal ID	1 1 1 1 1	
MSH-23.6.3	Universal ID Type		
14101 F43.0.3	Oniversal ID Type		

# MSA: Message Acknowledgment

XX

100-6482

Identifier Type Code

Organization Identifier

MSH-23.7

MSH-23.10

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AA	
MSA-2	Message Control ID	NIST-IZ-QR-1.1_Query_Q11_Z44	

## QAK: Query Acknowledgment

Data Element	Data	Categorization	
Query Tag	IZ-1.1-2015		
Query Response Status	OK		
Message Query Name			
Identifier	Z44		
Text	Request Evaluated History and Forecast		
Name of Coding System	CDCPHINVS		
	Query Tag Query Response Status Message Query Name Identifier Text	Data Element     Data       Query Tag     IZ-1.1-2015       Query Response Status     OK       Message Query Name     Identifier       Identifier     Z44       Text     Request Evaluated History and Forecast	

QPD : Query Parameter Definition =

Location	Data Element	Data	Categorization	
QPD-1	Message Query Name			
QPD-1.1	Identifier	Z44		
QPD-1.2	Text	Request Evaluated History and Forecast		
QPD-1.3	Name of Coding System	CDCPHINVS		
QPD-2	Query Tag	IZ-1.1-2015		
QPD-3	PatientList			
QPD-3.1	ID Number	171122		
QPD-3.4	Assigning Authority			
QPD-3.4.1	Namespace ID	NIST-MPI-1		
QPD-3.4.2	Universal ID			
QPD-3.4.3	Universal ID Type			
QPD-3.5	Identifier Type Code	MR		
QPD-4	Patient Name			
QPD-4.1	Family Name			
QPD-4.1.1	Surname	Fairchild		
QPD-4.2	Given Name	Cameron		
QPD-4.3	Second and Further Given Names or Initials Thereof	A		
QPD-4.7	Name Type Code	L		
QPD-5	Patient Mother Maiden Name			
QPD-5.1	Family Name			
QPD-5.1.1	Surname	Fairlady		
QPD-5.7	Name Type Code	M		
QPD-6	PatientDateOfBirth			
QPD-6.1	Time	20090214		
QPD-7	Patient Sex	M		
QPD-8	Patient Address			
QPD-8.1	Street Address			
QPD-8.1.1	Street or Mailing Address	105 Laurel Run Rd		
QPD-8.2	Other Designation			
QPD-8.3	City	Bozeman		
QPD-8.4	State or Province	МТ		
QPD-8.5	Zip or Postal Code			
QPD-8.6	Country			
QPD-8.7	Address Type	P		
QPD-9	Phone			
QPD-9.2	Telecommunication Use Code			
QPD-9.3	Telecommunication Equipment Type			
QPD-9.4	Email Address			
QPD-9.6	Area/City Code			
QPD-9.7	Local Number			
QPD-10	Multiple birth indicator			
QPD-11	Birth order			

— PID	· Pat	ient	Iden	tifics	tion '

Location	Data Element	Data	Categorization
PID-1	Set ID - PID	1	
PID-3[1]	Patient Identifier List		
PID-3[1].1	ID Number	171122	
PID-3[1].4	Assigning Authority		
PID-3[1].4.1	Namespace ID	NIST-MPI-1	
PID-3[1].4.2	Universal ID		
PID-3[1].4.3	Universal ID Type		
PID-3[1].5	Identifier Type Code	MR	
PID-3[2]	Patient Identifier List		
PID-3[2].1	ID Number	34500907	
PID-3[2].4	Assigning Authority		
PID-3[2].4.1	Namespace ID	NIST-IIS-MPI	
PID-3[2].4.2	Universal ID		
PID-3[2].4.3	Universal ID Type		
PID-3[2].5	Identifier Type Code	SR	
PID-5	Patient Name		
PID-5.1	Family Name		
PID-5.1.1	Surname	Fairchild	
PID-5.2	Given Name	Cameron	
PID-5.3	Second and Further Given Names or Initials Thereof	A	
PID-5.7	Name Type Code	L	
PID-7	Date/Time of Birth		
PID-7.1	Time	20090214	
PID-8	Administrative Sex	M	
PID-11	Patient Address		
PID-11.1	Street Address		
PID-11.1.1	Street or Mailing Address	105 Laurel Run Rd	
PID-11.2	Other Designation		
PID-11.3	City	Bozeman	
PID-11.4	State or Province	MT	
PID-11.5	Zip or Postal Code		
PID-11.6	Country		
PID-11.7	Address Type	P	
PID-30	Patient Death Indicator		

# ORC[\*]

## ORC : Common Order

		o i common oraci	ORe i common oraci					
Location	Data Element	Data	Categorization					
ORC-1	Order Control	RE						
ORC-2	Placer Order Number							
ORC-2.1	Entity Identifier							
ORC-2.2	Namespace ID							
ORC-2.3	Universal ID							
ORC-2.4	Universal ID Type							
ORC-3	Filler Order Number							
ORC-3.1	Entity Identifier	197023						
ORC-3.2	Namespace ID	NIST-AA-IZ-2						
ORC-3.3	Universal ID							
ORC-3.4	Universal ID Type							
ORC-17	Entering Organization							
ORC-17.1	Identifier	NISTEHRFAC						
ORC-17.2	Text	NISTEHRFacility						
ORC-17.3	Name of Coding System	HL70362						

ORC : Common Order			
Location	Data Hement	Data	Categorization
ORC-1	Order Control	RE	
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		
ORC-2.2	Namespace ID		
ORC-2.3	Universal ID		
ORC-2.4	Universal ID Type		
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	197027	
ORC-3.2	Namespace ID	NIST-AA-IZ-2	
ORC-3.3	Universal ID		
ORC-3.4	Universal ID Type		
ORC-17	Entering Organization		
ORC-17.1	Identifier		
ORC-17.2	Text		

Name of Coding System

ORC-17.3

ORC : Common Order			
Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		
ORC-2.2	Namespace ID		
ORC-2.3	Universal ID		
ORC-2.4	Universal ID Type		
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	197028	
ORC-3.2	Namespace ID	NIST-AA-IZ-2	
ORC-3.3	Universal ID		
ORC-3.4	Universal ID Type		
ORC-17	Entering Organization		
ORC-17.1	Identifier		
ORC-17.2	Text		
ORC-17.3	Name of Coding System		

ORC : Common Order				
Location	Data Element	Data	Categorization	
ORC-1	Order Control	RE		
ORC-2	Placer Order Number			
ORC-2.1	Entity Identifier			
ORC-2.2	Namespace ID			
ORC-2.3	Universal ID			
ORC-2.4	Universal ID Type			
ORC-3	Filler Order Number			
ORC-3.1	Entity Identifier	197028		
ORC-3.2	Namespace ID	NIST-AA-IZ-2		
ORC-3.3	Universal ID			
ORC-3.4	Universal ID Type			
ORC-17	Entering Organization			
ORC-17.1	Identifier			
ORC-17.2	Text			
ORC-17.3	Name of Coding System			

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		
ORC-2.2	Namespace ID		
ORC-2.3	Universal ID		
ORC-2.4	Universal ID Type		
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	197028	
ORC-3.2	Namespace ID	NIST-AA-IZ-2	
ORC-3.3	Universal ID		
ORC-3.4	Universal ID Type		
ORC-17	Entering Organization		
ORC-17.1	Identifier		
ORC-17.2	Text		
ORC-17.3	Name of Coding System		

ORC : Common Order			
Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		
ORC-2.2	Namespace ID		
ORC-2.3	Universal ID		
ORC-2.4	Universal ID Type		
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	9999	
ORC-3.2	Namespace ID	NIST-AA-IZ-2	
ORC-3.3	Universal ID		
ORC-3.4	Universal ID Type		
ORC-17	Entering Organization		
ORC-17.1	Identifier	NISTEHRFAC	
ORC-17.2	Text	NISTEHRFacility	
ORC-17.3	Name of Coding System	HL70362	

### - RXA[\*] -

### RXA: Pharmacy/Treatment Administration =

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	
RXA-2	Administration Sub-ID Counter	1	
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20090415	
RXA-5	Administered Code		
RXA-5.1	Identifier	45	
RXA-5.2	Text	Hep B Unspec	
RXA-5.3	Name of Coding System	CVX	
RXA-6	Administered Amount	999	
RXA-7	Administered Units		
RXA-7.1	Identifier		
RXA-7.2	Text		
RXA-7.3	Name of Coding System		
RXA-10	Administering Provider		
RXA-10.1	ID Number		
RXA-10.2	Family Name		
RXA-10.2.1	Surname		
RXA-10.3	Given Name		
RXA-10.4	Second and Further Given Names or Initials Thereof		
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID		
RXA-10.9.2	Universal ID		
RXA-10.9.3	Universal ID Type		
RXA-10.10	Name Type Code		
RXA-10.13	Identifier Type Code		
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID		
RXA-11.4.2	Universal ID		
RXA-11.4.3	Universal ID Type		
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier		
RXA-17.2	Text		
RXA-17.3	Name of Coding System		
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		
RXA-18.2	Text		
RXA-18.3	Name of Coding System		
RXA-20	Completion Status	СР	

-RXA : PI	harmacy/Treatment Administration	-
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RXA: Pharmacy/Treatment Administration				
Location	Data Element	Data	Categorization	
RXA-1	Give Sub-ID Counter	0		
RXA-2	Administration Sub-ID Counter	1		
RXA-3	Date/Time Start of Administration			
RXA-3.1	Time	20090314		
RXA-5	Administered Code			
RXA-5.1	Identifier	48		
RXA-5.2	Text	HIB PRP-T		
RXA-5.3	Name of Coding System	CVX		
RXA-6	Administered Amount	999		
RXA-7	Administered Units			
RXA-7.1	Identifier			
RXA-7.2	Text			
RXA-7.3	Name of Coding System			
RXA-10	Administering Provider			
RXA-10.1	ID Number	5111		
RXA-10.2	Family Name			
RXA-10.2.1	Surname	Sticker		
RXA-10.3	Given Name	Nurse		
RXA-10.4	Second and Further Given Names or Initials Thereof			
RXA-10.9	Assigning Authority			
RXA-10.9.1	Namespace ID	NIST-PI-1		
RXA-10.9.2	Universal ID			
RXA-10.9.3	Universal ID Type			
RXA-10.10	Name Type Code	L		
RXA-10.13	Identifier Type Code	PRN		
RXA-11	Administered-at Location			
RXA-11.4	Facility			
RXA-11.4.1	Namespace ID	NIST-Clinic-1		
RXA-11.4.2	Universal ID			
RXA-11.4.3	Universal ID Type			
RXA-17	Substance Manufacturer Name			
RXA-17.1	Identifier			
RXA-17.2	Text			
RXA-17.3	Name of Coding System			
RXA-18	Substance/Treatment Refusal Reason			
RXA-18.1	Identifier			
RXA-18.2	Text			
RXA-18.3	Name of Coding System			
RXA-20	Completion Status	СР		

-RXA : PI	harmacy/Treatment Administration	-
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RXA: Pharmacy/Treatment Administration				
Location	Data Hement	Data	Categorization	
RXA-1	Give Sub-ID Counter	0		
RXA-2	Administration Sub-ID Counter	1		
RXA-3	Date/Time Start of Administration			
RXA-3.1	Time	20091011		
RXA-5	Administered Code			
RXA-5.1	Identifier	110		
RXA-5.2	Text	DTAP-Hep B-IPV		
RXA-5.3	Name of Coding System	CVX		
RXA-6	Administered Amount	999		
RXA-7	Administered Units			
RXA-7.1	Identifier			
RXA-7.2	Text			
RXA-7.3	Name of Coding System			
RXA-10	Administering Provider			
RXA-10.1	ID Number			
RXA-10.2	Family Name			
RXA-10.2.1	Surname			
RXA-10.3	Given Name			
RXA-10.4	Second and Further Given Names or Initials Thereof			
RXA-10.9	Assigning Authority			
RXA-10.9.1	Namespace ID			
RXA-10.9.2	Universal ID			
RXA-10.9.3	Universal ID Type			
RXA-10.10	Name Type Code			
RXA-10.13	Identifier Type Code			
RXA-11	Administered-at Location			
RXA-11.4	Facility			
RXA-11.4.1	Namespace ID			
RXA-11.4.2	Universal ID			
RXA-11.4.3	Universal ID Type			
RXA-17	Substance Manufacturer Name			
RXA-17.1	Identifier			
RXA-17.2	Text			
RXA-17.3	Name of Coding System			
RXA-18	Substance/Treatment Refusal Reason			
RXA-18.1	Identifier			
RXA-18.2	Text			
RXA-18.3	Name of Coding System			
RXA-20	Completion Status	СР		

	RXA: Pharmacy/Treatment Administration				
Location	Data Element	Data	Categorization		
RXA-1	Give Sub-ID Counter	0			
RXA-2	Administration Sub-ID Counter	1			
RXA-3	Date/Time Start of Administration				
RXA-3.1	Time	20100411			
RXA-5	Administered Code				
RXA-5.1	Identifier	08			
RXA-5.2	Text	Hep BPEDS			
RXA-5.3	Name of Coding System	CVX			
RXA-6	Administered Amount	999			
RXA-7	Administered Units				
RXA-7.1	Identifier				
RXA-7.2	Text				
RXA-7.3	Name of Coding System				
RXA-10	Administering Provider				
RXA-10.1	ID Number	5111			
RXA-10.2	Family Name				
RXA-10.2.1	Surname	Sticker			
RXA-10.3	Given Name	Nurse			
RXA-10.4	Second and Further Given Names or Initials Thereof				
RXA-10.9	Assigning Authority				
RXA-10.9.1	Namespace ID	NIST-PI-1			
RXA-10.9.2	Universal ID				
RXA-10.9.3	Universal ID Type				
RXA-10.10	Name Type Code	L			
RXA-10.13	Identifier Type Code	PRN			
RXA-11	Administered-at Location				
RXA-11.4	Facility				
RXA-11.4.1	Namespace ID				
RXA-11.4.2	Universal ID				
RXA-11.4.3	Universal ID Type				
RXA-17	Substance Manufacturer Name				
RXA-17.1	Identifier				
RXA-17.2	Text				
RXA-17.3	Name of Coding System				
RXA-18	Substance/Treatment Refusal Reason				
RXA-18.1	Identifier				
RXA-18.2	Text				
RXA-18.3	Name of Coding System				
RXA-20	Completion Status	СР			

-RXA : PI	harmacy/Treatment Administration	-
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Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	
RXA-2	Administration Sub-ID Counter	1	
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20100415	
RXA-5	Administered Code		
RXA-5.1	Identifier	03	
RXA-5.2	Text	MMR	
RXA-5.3	Name of Coding System	CVX	
RXA-6	Administered Amount	999	
RXA-7	Administered Units		
RXA-7.1	Identifier		
RXA-7.2	Text		
RXA-7.3	Name of Coding System		
RXA-10	Administering Provider		
RXA-10.1	ID Number		
RXA-10.2	Family Name		
RXA-10.2.1	Surname		
RXA-10.3	Given Name		
RXA-10.4	Second and Further Given Names or Initials Thereof		
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID		
RXA-10.9.2	Universal ID		
RXA-10.9.3	Universal ID Type		
RXA-10.10	Name Type Code		
RXA-10.13	Identifier Type Code		
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID		
RXA-11.4.2	Universal ID		
RXA-11.4.3	Universal ID Type		
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier		
RXA-17.2	Text		
RXA-17.3	Name of Coding System		
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		
RXA-18.2	Text		
RXA-18.3	Name of Coding System		
RXA-20	Completion Status	СР	

		eatment Administration	
Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	
RXA-2	Administration Sub-ID Counter	1	
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20091031	
RXA-5	Administered Code		
RXA-5.1	Identifier	998	
RXA-5.2	Text	no vaccine admin	
RXA-5.3	Name of Coding System	CVX	
RXA-6	Administered Amount	999	
RXA-7	Administered Units		
RXA-7.1	Identifier		
RXA-7.2	Text		
RXA-7.3	Name of Coding System		
RXA-10	Administering Provider		
RXA-10.1	ID Number		
RXA-10.2	Family Name		
RXA-10.2.1	Surname		
RXA-10.3	Given Name		
RXA-10.4	Second and Further Given Names or Initials Thereof		
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID		
RXA-10.9.2	Universal ID		
RXA-10.9.3	Universal ID Type		
RXA-10.10	Name Type Code		
RXA-10.13	Identifier Type Code		
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID		
RXA-11.4.2	Universal ID		
RXA-11.4.3	Universal ID Type		
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier		
RXA-17.2	Text		
RXA-17.3	Name of Coding System		
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		
RXA-18.2	Text		
RXA-18.3	Name of Coding System		
RXA-20	Completion Status	NA	

 OBX	*

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	45	
OBX-5.2	Text	Hep B NOS	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	
OBX-2	Value Type	ID	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59781-5	
OBX-3.2	Text	dose validity	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	Y	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	17	
OBX-5.2	Text	HIB NOS	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	
OBX-2	Value Type	ID	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59781-5	
OBX-3.2	Text	dose validity	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	N	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	
OBX-2	Value Type	ST	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30982-3	
OBX-3.2	Text	Reason applied	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	Too Young	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	1	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	45	
OBX-5.2	Text	Hep B NOS	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	2	
OBX-2	Value Type	Œ	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	3	
OBX-2	Value Type	ID	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59781-5	
OBX-3.2	Text	dose validity	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	Y	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value		
OBX-5.1	Identifier	10	
OBX-5.2	Text	IPV	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	5	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	6	
OBX-2	Value Type	ID	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59781-5	
OBX-3.2	Text	dose validity	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value	Y	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	7	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	3	
OBX-5	Observation Value		
OBX-5.1	Identifier	20	
OBX-5.2	Text	DTAP	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	8	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	3	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	9	
OBX-2	Value Type	ID	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59781-5	
OBX-3.2	Text	dose validity	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	3	
OBX-5	Observation Value	Y	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	1	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	45	
OBX-5.2	Text	Hep B NOS	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	2	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	3	
OBX-2	Value Type	ID	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59781-5	
OBX-3.2	Text	dose validity	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	Y	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	03	
OBX-5.2	Text	MMR	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	2	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	3	
OBX-2	Value Type	ID	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59781-5	
OBX-3.2	Text	dose validity	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	Y	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

·		<b>.</b>	0
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	1	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	03	
OBX-5.2	Text	MMR	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30980-7	
OBX-3.2	Text	Date vaccination due	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	20150214	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30981-5	
OBX-3.2	Text	Earliest Date to give	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	20100614	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	5	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value		
OBX-5.1	Identifier	10	
OBX-5.2	Text	IPV	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	6	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	7	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30980-7	
OBX-3.2	Text	Date vaccination due	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value	20100214	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	8	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	3	
OBX-5	Observation Value		
OBX-5.1	Identifier	107	
OBX-5.2	Text	DTAP	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	9	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	3	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	10	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30980-7	
OBX-3.2	Text	Date vaccination due	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	3	
OBX-5	Observation Value	20100214	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151031	

### **Test Data Specification**

Patient Information————————————————————————————————————		
Element	Data	
This information will be automatically supplied by the	he System	
		-

### **Juror Document**

Evaluated Immunization History and Immunization Forecast				
Test Case ID	IZ-QR-1_Query_Child			
Juror ID				
Juror Name				
HIT System Tested				
Inspection Date/Time				
Inspection Settlement (Pass/Fail)	Pass Fail			
Reason Failed				
Juror Comments				

### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the EHR technology's ability to display required core data elements from the information received in the Evaluated Immunization History and Immunization Forecast Z42 response message. Additional data from the message or from the EHR are permitted to be displayed by the EHR. Grayed-out fields in the Juror Document indicate where no data for the data element indicated were included in the Z42 message for the given Test Case.

The format of this Juror Document is for ease-of-use by the Tester and does not indicate how the EHR display must be designed.

The Evaluated Immunization History and Immunization Forecast data shown in this Juror Document are derived from the Z42 message provided with the given Test Case; equivalent data are permitted to be displayed by the EHR. The column headings are meant to convey the kind of data to be displayed; equivalent labels/column headings are permitted to be displayed by the EHR.

		Patient Information		
Patient Identifier	Patient Name	DOB	Gender	Tester Comment
171122	Cameron A Fairchild	02/14/2009	Male	

When displayed in the EHR with the Evaluated Immunization History and Immunization Forecast, these patient demographics data may be derived from either the received immunization message or the EHR patient record. When displaying demographics from the patient record, the EHR must be able to demonstrate a linkage between the demographics in the message (primarily the patient ID in PID-3.1) and the patient record used for display to ensure that the message was associated with the appropriate patient.

Evaluated Immunization History and Immunization Forecast		
Immunization Schedule Used	Tester Comment	
ACIP		

	Evaluated Immunization History						
Vaccine Group	Vaccine Administered	Date Administered	Valid Dose	Validity Reason	Completion Status*	Tester Comment	
Hep B NOS	Hep B Unspec	04/15/2009	YES		Complete		
HIB NOS	HIB PRP-T	03/14/2009	NO	Too Young	Complete		
Hep B NOS	DTAP-Hep B-IPV	10/11/2009	YES		Complete		
IPV	DTAP-Hep B-IPV	10/11/2009	YES		Complete		
DTAP	DTAP-Hep B-IPV	10/11/2009	YES		Complete		
Hep B NOS	Hep BPEDS	04/11/2010	YES		Complete		
MMR	MMR	04/15/2010	YES		Complete		

<sup>\* &</sup>quot;Completion Status" refers to the status of the dose of vaccine administered on the indicated date and may be interpreted as "Dose Status". A status of "Complete" means that the vaccine dose was "completely administered" as opposed to "partially administered".

	Immunization Forecast				
Vaccine Group	Due Date	Earliest Date To Give	Latest Date to Give	Tester Comment	
MMR	02/14/2015	06/14/2010			
IPV	02/14/2010				
DTAP	02/14/2010				

# 2.2. IZ-QR-2 Query Adult

Query for an adult using the most significant query parameters. The patient is found in the IIS. A response message is returned with a signal immunization event and multiple immunization recomendations.

### **Test Story**

### Description

Query for an adult using the most significant query parameters. The patient is found in the IIS. A response message is returned with a single immunization event and multiple immunization recommendations.

An adult male patient, Clement S. Stanley presents to the clinic, seeking an immunization for influenza. A clinic staff member locates his medical record in the electronic health record system. The staff member sees that he has previously had an immunization against influenza. The staff member triggers a request to the IIS to request an evaluated history and forecast for the patient. The IIS performs a search for Stanley S. Clement and finds one high confidence match. The IIS generates an evaluated history and forecast for Mr. Clement and returns this to the EHR-S. The EHR-S displays the evaluated history and forecast to the staff member.

#### Comments

No Comments

#### Pre-condition

Person exists in the system with the complete demographics as provided in the Test Data Specification.

Person has Medical Record Number (MR).

Person does not have existing immunization events in their EHR.

Person does have an immunization history in the IIS,

#### Post-Condition

The clinician is able to view the evaluated history and forecast from the IIS. There is no obligation to incorporate the data into the EHR-S or maintain the displayed evaluated history and forecast.

### Test Objectives

Evaluates EHR-S ability to create a well formed query for an adult. Evaluates EHR-S ability to accept a response with evaluated history and forecast for that person.

#### **Evaluation Criteria**

- 1. Tester inspects patient record; confirms that the patients does not have existing immunization events.
- 2. Confirms valid query message using Message Validation Report.
- 3. Confirms valid receipt and display of response message using the Juror Document.

#### Notes

The NIST tool is simulating a response from the IIS.

Important note regarding the Query Tag (QPD-2): The NIST response message is predefined and is based on the query message. Most systems will automatically create the query tag (Identifier) and will require it for importing, linking, and processing the response message. The NIST test message can be modified such that the query tag matches that query tag generated by the system-under test.

# 2.2.1. IZ-QR-2.1\_Query\_Q11\_Z44

Test Step Type: SUT INITIATOR

This query should return a response for an adult where an evaluated history and forecast are found

### **Test Story**

### Description

An adult male patient, Clement S. Stanley presents to the clinic, seeking an immunization for influenza. A clinic staff member locates his medical record in the electronic health record system. The staff member sees that he has previously had an immunization against influenza. The staff member triggers a request to the IIS to request an evaluated history and forecast for the patient.

#### Comments

Most of the test data is categorized as Test Case Fixed. It is important that the data is entered into the querying system as specified to enable linking the response message to the patient record.

### **Pre-condition**

Person exists in the querying system with the complete demographics as provided in the Test Data Specification.

Person has Medical Record Number (MR).

Person does not have existing immunization events in their EHR.

Person does have an immunization history in the IIS (simulated by the NIST Test Tool).

#### **Post-Condition**

IIS returns a response message for the person containing a single immunization event and multiple recommendations.

### **Test Objectives**

Test the ability of the system to successfully create a query message based on the given test data.

### **Evaluation Criteria**

Tester inspects patient record; confirms that the patients does not have existing immunization events.

Confirms valid query message using Message Validation Report.

### Notes

If the HIT Module being tested is unable to control the Patient ID Number value that it creates (1) QPD-3.1 in the Query message can be populated with a different value than the one provided in the test data; (2) the Tester can ignore the associated error notification generated by the Tool; and (3) the Response message also must be modified accordingly.

### **Message Contents**

MSH : Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed
MSH-3	Sending Application		, value 1 forme 1 field
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID	THOI LANGET	Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility		indirecti
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID	Tuoi Eriterio	Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application	NECTHICADD	Parameter Conference in a
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID		Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility	NIGHT A C	D C C :
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID		Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20141031145233-0500	Presence-System Generated
MSH-9	Message Type		
MSH-9.1	Message Code	QBP	Value-Profile Fixed
MSH-9.2	Trigger Event	Q11	Value-Profile Fixed
MSH-9.3	Message Structure	QBP_Q11	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-QR-2.1_Query_Q11_Z44	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z44	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-1	Presence-Configuration
MSH-22.6.2	Universal ID		Indifferent
MSH-22.6.3	Universal ID Type		Indifferent
MSH-22.7	Identifier Type Code	XX	Value-Test Case Fixed
MSH-22.10	Organization Identifier	100-6482	Presence-Configuration
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-1	Presence-Configuration
MSH-23.6.2	Universal ID		Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
MSH-23.7	Identifier Type Code	XX	Value-Test Case Fixed
MSH-23.10	Organization Identifier	100-3322	Presence-Configuration

Location	Data Element	Data	Categorization
OPD-1	Message Query Name		
QPD-1.1	Identifier	Z44	Value-Profile Fixed
OPD-1.2	Text	Request Evaluated History and Forecast	Value-Profile Fixed
OPD-1.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
OPD-2	The state of the s	IZ-2.1-2015	Presence-System Generated
	Query Tag	12-2.1-2013	Fresence-system denerated
QPD-3	PatientList  ID Number	(4939)	Wilson Total Control
QPD-3.1		648286	Value-Test Case Fixed
QPD-3.4	Assigning Authority	NICE ADV. 1	WI T OF F
QPD-3.4.1	Namespace ID	NIST-MPI-1	Value-Test Case Fixed
QPD-3.4.2	Universal ID		Indifferent
QPD-3.4.3	Universal ID Type		Indifferent
QPD-3.5	Identifier Type Code	MR	Value-Test Case Fixed
QPD-4	Patient Name		
QPD-4.1	Family Name		
QPD-4.1.1	Surname	Stanley	Value-Test Case Fixed
QPD-4.2	Given Name	Clement	Value-Test Case Fixed
QPD-4.3	Second and Further Given Names or Initials Thereof	S	Value-Test Case Fixed
QPD-4.7	Name Type Code	L	Value-Test Case Fixed
QPD-5	Patient Mother Maiden Name		
QPD-5.1	Family Name		
QPD-5.1.1	Surname	Bell	Value-Test Case Fixed
QPD-5.7	Name Type Code	M	Value-Profile Fixed
QPD-6	Patient Date Of Birth		
QPD-6.1	Time	19500214	Value-Test Case Fixed
QPD-7	Patient Sex	M	Value-Test Case Fixed
QPD-8	Patient Address		
QPD-8.1	Street Address		
QPD-8.1.1	Street or Mailing Address	1642 Bear Run	Value-Test Case Fixed
QPD-8.2	Other Designation		Indifferent
QPD-8.3	City	Bozeman	Value-Test Case Fixed
QPD-8.4	State or Province	MT	Value-Test Case Fixed
QPD-8.5	Zip or Postal Code	59715	Value-Test Case Fixed
QPD-8.6	Country	USA	Value-Test Case Fixed
QPD-8.7	Address Type	P	Value-Test Case Fixed List
QPD-9	Phone	-	I so cast interest
OPD-9.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
QPD-9.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
OPD-9.4	Email Address	111	raide 1 cot Case 1 IACI
QPD-9.4 QPD-9.6	Area/City Code	406	Value-Test Case Fixed
QPD-9.7	Local Number	5552020	Value-Test Case Fixed  Value-Test Case Fixed
		3332020	
QPD-10	Multiple birth indicator		Indifferent
OPD-11	Birth order		Indifferent

Location	Data Element	Data	Categorization
RCP-1	Query Priority	I	Value-Test Case Fixed
RCP-2	Quantity Limited Request		
RCP-2.1	Quantity	1	Value-Profile Fixed
RCP-2.2	Units		
RCP-2.2.1	Identifier	RD	Value-Profile Fixed
RCP-2.2.2	Text	Records	Presence-Test Case Proper

Name of Coding System

HL70126

Value-Profile Fixed

RCP: Response Control Parameter

# **Test Data Specification**

RCP-2.2.3

### Patient Information-

1 titlent inivitation		
Data		
Clement S Stanley		
Bell		
648286		
02/14/1950		
Male		
1642 Bear Run Bozeman MT 59715 USA		
(406)555-2020		
No		

# 2.2.2. IZ-QR-2.2\_Response\_K11\_Z42

Test Step Type: TA RESPONDER

Return response to query for an adult with an evaluated history and forecast

### **Test Story**

### Description

The IIS performs a search for Clement S. Stanley and finds one high confidence match. The IIS generates an evaluated history and forecast for Mr. Clement and returns this to the EHR-S. The EHR-S displays the evaluated history and forecast to the staff member.

#### Comments

No Comments

#### Pre-condition

A query is performed by the sending system. The IIS (simulated by the NIST test tool) contains an immunization events for the person.

### **Post-Condition**

The response is made available to the EHR-S for processing. The clinician is able to view the evaluated history and forecast from the IIS (even if temporal).

### **Test Objectives**

Demonstrate the capability to receive a response message containing the evaluated history and forecast; display evaluated history and forecast

#### **Evaluation Criteria**

Confirms valid receipt and display of response message using the Juror Document.

### Notes

Important note regarding the Query Tag (QPD-2): The NIST response message is predefined and is based on the query message. Most systems will automatically create the query tag (Identifier) and will require it for importing, linking, and processing the response message. The NIST test message can be modified such that the query tag matches that query tag generated by the system-under test.

Important note regarding the MSH-10 and MSA-2: The NIST response message is predefined and is based on the query message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the response message. The NIST response test message can be modified such that MSA-2 matches MSH-10 of the query message generated by the system-under test

### **Message Contents**

Location	Data Element	Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	\~\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID	NIST HISTIT	
MSH-3.3	Universal ID Type		
MSH-4	Sending Facility		
	,	NIGERICEAC	
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID		
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20141031145233-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	RSP	
MSH-9.2	Trigger Event	K11	
MSH-9.3	Message Structure	RSP K11	
MSH-10	Message Control ID	NIST-IZ-QR-2.2 Response K11 Z42	
MSH-11	Processing ID	1401 12 (142.2_140)01100_1411_212	
MSH-11.1	Processing ID	P	
MSH-12	Version ID	1	
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE	
MSH-21	Message Profile Identifier	740	
MSH-21.1	Entity Identifier	Z42	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID		
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-1	
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code	XX	
MSH-22.10	Organization Identifier	100-3322	
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-1	
MSH-23.6.2	Universal ID		
MSH-23.6.3	Universal ID Type		
MSH-23.7	Identifier Type Code	XX	
MSH 23 10	Organization Identifier	100 6482	

# MSA: Message Acknowledgment

100-6482

Organization Identifier

MSH-23.10

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AA	
MSA-2	Message Control ID	NIST-IZ-QR-2.1_Query_Q11_Z44	

### QAK: Query Acknowledgment

Location	Data Element	Data	Categorization	
QAK-1	Query Tag	IZ-2.1-2015		
QAK-2	Query Response Status	OK		
QAK-3	Message Query Name			
QAK-3.1	Identifier	Z44		
QAK-3.2	Text	Request Evaluated History and Forecast		
QAK-3.3	Name of Coding System	CDCPHINVS		

QPD : Query Parameter Definition =

Location	Data Element	Data	Categorization
QPD-1	Message Query Name		
QPD-1.1	Identifier	Z44	
QPD-1.2	Text	Request Evaluated History and Forecast	
QPD-1.3	Name of Coding System	CDCPHINVS	
QPD-2	Query Tag	IZ-2.1-2015	
QPD-3	PatientList		
QPD-3.1	ID Number	648286	
QPD-3.4	Assigning Authority		
QPD-3.4.1	Namespace ID	NIST-MPI-1	
QPD-3.4.2	Universal ID		
QPD-3.4.3	Universal ID Type		
QPD-3.5	Identifier Type Code	MR	
QPD-4	Patient Name		
QPD-4.1	Family Name		
QPD-4.1.1	Surname	Stanley	
QPD-4.2	Given Name	Clement	
QPD-4.3	Second and Further Given Names or Initials Thereof	S	
QPD-4.7	Name Type Code	L	
QPD-5	Patient Mother Maiden Name		
QPD-5.1	Family Name		
QPD-5.1.1	Surname	Bell	
QPD-5.7	Name Type Code	M	
QPD-6	PatientDateOfBirth		
QPD-6.1	Time	19500214	
QPD-7	Patient Sex	M	
QPD-8	Patient Address		
QPD-8.1	Street Address		
QPD-8.1.1	Street or Mailing Address	1642 Bear Run	
QPD-8.2	Other Designation		
QPD-8.3	City	Bozeman	
QPD-8.4	State or Province	MT	
QPD-8.5	Zip or Postal Code	59715	
QPD-8.6	Country	USA	
QPD-8.7	Address Type	P	
QPD-9	Phone		
QPD-9.2	Telecommunication Use Code	PRN	
QPD-9.3	Telecommunication Equipment Type	PH	
QPD-9.4	Email Address		
QPD-9.6	Area/City Code	406	
QPD-9.7	Local Number	5552020	
QPD-10	Multiple birth indicator		
QPD-11	Birth order		

— PID	· Patient	t Identification

Location	Data Element	Data	Categorization
PID-1	Set ID - PID	1	
PID-3[1]	Patient Identifier List		
PID-3[1].1	ID Number	648286	
PID-3[1].4	Assigning Authority		
PID-3[1].4.1	Namespace ID	NIST-MPI-1	
PID-3[1].4.2	Universal ID		
PID-3[1].4.3	Universal ID Type		
PID-3[1].5	Identifier Type Code	MR	
PID-3[2]	Patient Identifier List		
PID-3[2].1	ID Number	34500907	
PID-3[2].4	Assigning Authority		
PID-3[2].4.1	Namespace ID	NIST-IIS-MPI	
PID-3[2].4.2	Universal ID		
PID-3[2].4.3	Universal ID Type		
PID-3[2].5	Identifier Type Code	SR	
PID-5	Patient Name		
PID-5.1	Family Name		
PID-5.1.1	Surname	Stanley	
PID-5.2	Given Name	Clement	
PID-5.3	Second and Further Given Names or Initials Thereof	S	
PID-5.7	Name Type Code	L	
PID-7	Date/Time of Birth		
PID-7.1	Time	19500214	
PID-8	Administrative Sex	M	
PID-11	Patient Address		
PID-11.1	Street Address		
PID-11.1.1	Street or Mailing Address	1642 Bear Run	
PID-11.2	Other Designation		
PID-11.3	City	Bozeman	
PID-11.4	State or Province	MT	
PID-11.5	Zip or Postal Code	59715	
PID-11.6	Country	USA	
PID-11.7	Address Type	P	
PID-30	Patient Death Indicator		

## ORC[\*]

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier		
ORC-2.2	Namespace ID		
ORC-2.3	Universal ID		
ORC-2.4	Universal ID Type		
ORC-3	Filler Order Number		
ORC-3.1	Entity Identifier	193337027	
ORC-3.2	Namespace ID	NIST-AA-IZ-2	
ORC-3.3	Universal ID		
ORC-3.4	Universal ID Type		
ORC-17	Entering Organization		
ORC-17.1	Identifier		
ORC-17.2	Text		
ORC-17.3	Name of Coding System		

	ORC : Common Order			
Location	Data Element	Data	Categorization	
ORC-1	Order Control	RE		
ORC-2	Placer Order Number			
ORC-2.1	Entity Identifier			
ORC-2.2	Namespace ID			
ORC-2.3	Universal ID			
ORC-2.4	Universal ID Type			
ORC-3	Filler Order Number			
ORC-3.1	Entity Identifier	9999		
ORC-3.2	Namespace ID	NIST-AA-IZ-2		
ORC-3.3	Universal ID			
ORC-3.4	Universal ID Type			
ORC-17	Entering Organization			
ORC-17.1	Identifier	NISTEHRFAC		
ORC-17.2	Text	NISTEHRFacility		
ORC-17.3	Name of Coding System	HL70362		

	RXA[*]
-RXA : I	Pharmacy/Treatment Administration

Location	Data Element	Data	Categorization
RXA-1	Give Sub-ID Counter	0	
RXA-2	Administration Sub-ID Counter	1	
RXA-3	Date/Time Start of Administration		
RXA-3.1	Time	20151029	
RXA-5	Administered Code		
RXA-5.1	Identifier	140	
RXA-5.2	Text	seasonal flu	
RXA-5.3	Name of Coding System	CVX	
RXA-6	Administered Amount	0.5	
RXA-7	Administered Units		
RXA-7.1	Identifier	mL	
RXA-7.2	Text		
RXA-7.3	Name of Coding System	UCUM	
RXA-10	Administering Provider		
RXA-10.1	ID Number	5111	
RXA-10.2	Family Name		
RXA-10.2.1	Surname	Sticker	
RXA-10.3	Given Name	Nurse	
RXA-10.4	Second and Further Given Names or Initials Thereof		
RXA-10.9	Assigning Authority		
RXA-10.9.1	Namespace ID	NIST-PI-1	
RXA-10.9.2	Universal ID		
RXA-10.9.3	Universal ID Type		
RXA-10.10	Name Type Code	L	
RXA-10.13	Identifier Type Code	PRN	
RXA-11	Administered-at Location		
RXA-11.4	Facility		
RXA-11.4.1	Namespace ID	NIST-Clinic-1	
RXA-11.4.2	Universal ID		
RXA-11.4.3	Universal ID Type		
RXA-17	Substance Manufacturer Name		
RXA-17.1	Identifier	CSL	
RXA-17.2	Text	bioCSL	
RXA-17.3	Name of Coding System	MVX	
RXA-18	Substance/Treatment Refusal Reason		
RXA-18.1	Identifier		
RXA-18.2	Text		
RXA-18.3	Name of Coding System		
RXA-20	Completion Status	СР	

	RXA : Pharmacy/Treatment Administration			
Location	Data Element	Data	Categorization	
RXA-1	Give Sub-ID Counter	0		
RXA-2	Administration Sub-ID Counter	1		
RXA-3	Date/Time Start of Administration			
RXA-3.1	Time	20151029		
RXA-5	Administered Code			
RXA-5.1	Identifier	998		
RXA-5.2	Text	no vaccine admin		
RXA-5.3	Name of Coding System	CVX		
RXA-6	Administered Amount	999		
RXA-7	Administered Units			
RXA-7.1	Identifier			
RXA-7.2	Text			
RXA-7.3	Name of Coding System			
RXA-10	Administering Provider			
RXA-10.1	ID Number			
RXA-10.2	Family Name			
RXA-10.2.1	Surname			
RXA-10.3	Given Name			
RXA-10.4	Second and Further Given Names or Initials Thereof			
RXA-10.9	Assigning Authority			
RXA-10.9.1	Namespace ID			
RXA-10.9.2	Universal ID			
RXA-10.9.3	Universal ID Type			
RXA-10.10	Name Type Code			
RXA-10.13	Identifier Type Code			
RXA-11	Administered-at Location			
RXA-11.4	Facility			
RXA-11.4.1	Namespace ID			
RXA-11.4.2	Universal ID			
RXA-11.4.3	Universal ID Type			
RXA-17	Substance Manufacturer Name			
RXA-17.1	Identifier			
RXA-17.2	Text			
RXA-17.3	Name of Coding System			
RXA-18	Substance/Treatment Refusal Reason			
RXA-18.1	Identifier			
RXA-18.2	Text			
RXA-18.3	Name of Coding System			
RXA-20	Completion Status	NA		
· <del>- •</del>				

RXR : Pharmacy/Treatment Route			
Location	Data Element	Data	Categorization
RXR-1	Route		
RXR-1.1	Identifier	C28161	
RXR-1.2	Text	IM	
RXR-1.3	Name of Coding System	NCIT	
RXR-2	Administration Site		
RXR-2.1	Identifier		
RXR-2.2	Text		
RXR-2.3	Name of Coding System		

### -OBX[\*]

### OBX: Observation/Result

T (*	ODA: OBSCINITION CONT.			
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	1		
OBX-2	Value Type	CE		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30956-7		
OBX-3.2	Text	vaccine type		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	1		
OBX-5	Observation Value			
OBX-5.1	Identifier	88		
OBX-5.2	Text	influenza NOS		
OBX-5.3	Name of Coding System	CVX		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

### OBX: Observation/Result

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	2	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151029	

## OBX: Observation/Result

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	3	
OBX-2	Value Type	ID	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59781-5	
OBX-3.2	Text	dose validity	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	Y	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time	20151029	

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	4	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	152	
OBX-5.2	Text	pcv NOS	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	5	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result				
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	6		
OBX-2	Value Type	DT		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30980-7		
OBX-3.2	Text	Date vaccination due		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	1		
OBX-5	Observation Value	20600101		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	7	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30981-5	
OBX-3.2	Text	Earliest Date to give	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	1	
OBX-5	Observation Value	20600101	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	8	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value		
OBX-5.1	Identifier	88	
OBX-5.2	Text	influenza NOS	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	9	
OBX-2	Value Type	Œ	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	10	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30980-7	
OBX-3.2	Text	Date vaccination due	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value	20160901	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	11	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30981-5	
OBX-3.2	Text	Earliest Date to give	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	2	
OBX-5	Observation Value	20160901	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	12	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	3	
OBX-5	Observation Value		
OBX-5.1	Identifier	03	
OBX-5.2	Text	MMR	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	13	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	3	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result				
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	14		
OBX-2	Value Type	DT		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30980-7		
OBX-3.2	Text	Date vaccination due		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	3		
OBX-5	Observation Value	19960101		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

OBX: Observation/Result				
Location	Data Hement	Data	Categorization	
OBX-1	Set ID - OBX	15		
OBX-2	Value Type	DT		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30981-5		
OBX-3.2	Text	Earliest Date to give		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	3		
OBX-5	Observation Value	19960101		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	16	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	4	
OBX-5	Observation Value		
OBX-5.1	Identifier	85	
OBX-5.2	Text	Нер А	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	17	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	4	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

	UBA: (	Observation/Result		
Location	Data Hement	Data	Categorization	
OBX-1	Set ID - OBX	18		
OBX-2	Value Type	DT		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30980-7		
OBX-3.2	Text	Date vaccination due		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	4		
OBX-5	Observation Value	19960101		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	19	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30981-5	
OBX-3.2	Text	Earliest Date to give	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	4	
OBX-5	Observation Value	19960101	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	20	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	5	
OBX-5	Observation Value		
OBX-5.1	Identifier	45	
OBX-5.2	Text	Нер В	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	21	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	5	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

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Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	22	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30980-7	
OBX-3.2	Text	Date vaccination due	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	5	
OBX-5	Observation Value	19950101	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	23	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30981-5	
OBX-3.2	Text	Earliest Date to give	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	5	
OBX-5	Observation Value	19950101	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Hement	Data	Categorization
OBX-1	Set ID - OBX	24	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	6	
OBX-5	Observation Value		
OBX-5.1	Identifier	108	
OBX-5.2	Text	MCV	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	25	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	6	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

	OBX: Observation/Result			
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	26		
OBX-2	Value Type	DT		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30980-7		
OBX-3.2	Text	Date vaccination due		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	6		
OBX-5	Observation Value	20110101		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	27	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30981-5	
OBX-3.2	Text	Earliest Date to give	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	6	
OBX-5	Observation Value	20110101	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

	OBX: (	Observation/Result	
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	28	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	7	
OBX-5	Observation Value		
OBX-5.1	Identifier	21	
OBX-5.2	Text	varicella	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	29	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	59779-9	
OBX-3.2	Text	Immunization Schedule used	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	7	
OBX-5	Observation Value		
OBX-5.1	Identifier	VXC16	
OBX-5.2	Text	ACIP	
OBX-5.3	Name of Coding System	CDCPHINVS	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result				
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	30		
OBX-2	Value Type	DT		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30980-7		
OBX-3.2	Text	Date vaccination due		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	7		
OBX-5	Observation Value	19960101		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	31	
OBX-2	Value Type	DT	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30981-5	
OBX-3.2	Text	Earliest Date to give	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	7	
OBX-5	Observation Value	19960101	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

OBX: Observation/Result			
Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	32	
OBX-2	Value Type	CE	
OBX-3	Observation Identifier		
OBX-3.1	Identifier	30956-7	
OBX-3.2	Text	vaccine type	
OBX-3.3	Name of Coding System	LN	
OBX-4	Observation Sub-ID	8	
OBX-5	Observation Value		
OBX-5.1	Identifier	115	
OBX-5.2	Text	TDAP	
OBX-5.3	Name of Coding System	CVX	
OBX-6	Units		
OBX-6.1	Identifier		
OBX-6.2	Text		
OBX-6.3	Name of Coding System		
OBX-11	Observation Result Status	F	
OBX-14	Date/Time of the Observation		
OBX-14.1	Time		

	OBX: Observation/Result			
Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	33		
OBX-2	Value Type	CE		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	59779-9		
OBX-3.2	Text	Immunization Schedule used		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	8		
OBX-5	Observation Value			
OBX-5.1	Identifier	VXC16		
OBX-5.2	Text	ACIP		
OBX-5.3	Name of Coding System	CDCPHINVS		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

Location	Data Element	Data	Categorization	
OBX-1	Set ID - OBX	34		
OBX-2	Value Type	DT		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30980-7		
OBX-3.2	Text	Date vaccination due		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	8		
OBX-5	Observation Value	20020101		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

OBX: Observation/Result				
Location	Data Hement	Data	Categorization	
OBX-1	Set ID - OBX	35		
OBX-2	Value Type	DT		
OBX-3	Observation Identifier			
OBX-3.1	Identifier	30981-5		
OBX-3.2	Text	Earliest Date to give		
OBX-3.3	Name of Coding System	LN		
OBX-4	Observation Sub-ID	8		
OBX-5	Observation Value	20020101		
OBX-6	Units			
OBX-6.1	Identifier			
OBX-6.2	Text			
OBX-6.3	Name of Coding System			
OBX-11	Observation Result Status	F		
OBX-14	Date/Time of the Observation			
OBX-14.1	Time			

Patient Information—			
Element Data			
This information will be automatically supplied by the System			

## **Juror Document**

Evaluated Immunization History and Immunization Forecast			
Test Case ID	IZ-QR-2_Query_Adult		
Juror ID			
Juror Name			
HIT System Tested			
Inspection Date/Time			
Inspection Settlement (Pass/Fail)	Pass Fail		
Reason Failed			
Juror Comments			

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the EHR technology's ability to display required core data elements from the information received in the Evaluated Immunization History and Immunization Forecast Z42 response message. Additional data from the message or from the EHR are permitted to be displayed by the EHR. Grayed-out fields in the Juror Document indicate where no data for the data element indicated were included in the Z42 message for the given Test Case.

The format of this Juror Document is for ease-of-use by the Tester and does not indicate how the EHR display must be designed.

The Evaluated Immunization History and Immunization Forecast data shown in this Juror Document are derived from the Z42 message provided with the given Test Case; equivalent data are permitted to be displayed by the EHR. The column headings are meant to convey the kind of data to be displayed; equivalent labels/column headings are permitted to be displayed by the EHR.

Patient Information				
Patient Identifier	Patient Name	DOB	Gender	Tester Comment
648286	Clement S Stanley	02/14/1950	Male	

When displayed in the EHR with the Evaluated Immunization History and Immunization Forecast, these patient demographics data may be derived from either the received immunization message or the EHR patient record. When displaying demographics from the patient record, the EHR must be able to demonstrate a linkage between the demographics in the message (primarily the patient ID in PID-3.1) and the patient record used for display to ensure that the message was associated with the appropriate patient.

Evaluated Immunization History and Immunization Forecast		
Immunization Schedule Used	Tester Comment	
ACIP		

Evaluated Immunization History						
Vaccine Group	Vaccine Administered	Date Administered	Valid Dose	Validity Reason	Completion Status*	Tester Comment
influenza NOS	seasonal flu	10/29/2015	YES		Complete	

\* "Completion Status" refers to the status of the dose of vaccine administered on the indicated date and may be interpreted as "Dose Status". A status of "Complete" means that the vaccine dose was "completely administered" as opposed to "partially administered".

Immunization Forecast				
Vaccine Group	Due Date	Earliest Date To Give	Latest Date to Give	Tester Comment
pcv NOS	01/01/2060	01/01/2060		
influenza NOS	09/01/2016	09/01/2016		
MMR	01/01/1996	01/01/1996		
Нер А	01/01/1996	01/01/1996		
Нер В	01/01/1995	01/01/1995		
MCV	01/01/2011	01/01/2011		
varicella	01/01/1996	01/01/1996		
TDAP	01/01/2002	01/01/2002		

## 2.3. IZ-QR-3\_Query\_No\_Patients

Tests ability to send a query and receive a response where no patients are found.

#### **Test Story**

#### Description

A female toddler, Donna Victoria Bee, is brought to the local clinic to determine what immunizations have been given and what immunizations are needed. A clinic staff member collects basic patient demographic information including name, date of birth, sex, and birth order (Donna was born 3rd in a triplet). A clinic provider uses this information to locate the patient's medical record. The staff member then uses the medical record and system capabilities to query the IIS to request an evaluated history and forecast for the patient.

The IIS performs a search for Donna Victoria Bee and does not find a high-confidence match. The IIS returns a response message indicating no person found to the querying system. It is expected that the requesting system (e.g., EHR-S) process the response message and display some indication to the end user that no matches were found.

#### Comments

No Comments

#### Pre-condition

Person exists in the system with the complete demographics as provided in the Test Data Specification. Person has Medical Record Number (MR).

Person does not have a record in the IIS, even though complete demographics are used in the query.

#### **Post-Condition**

The clinician is provided some indication that no matches were found.

#### **Test Objectives**

Tests for a maximally valued query message, including use of OIDs, mother's maiden name, fully valued address, birth indicator and birth order. Test the capability of the EHR-S to process a response message that returns no persons found and to provide an indication to the end user.

#### **Evaluation Criteria**

Query Message: Message Validation Report

Response Message: Juror Document. The EHR-S receives the response and alerts the clinician that no matches were found.

#### Notes

The NIST tool is simulating a response from the IIS.

Important note regarding the Query Tag (QPD-2): The NIST response message is predefined and is based on the query message. Most systems will automatically create the query tag (Identifier) and will require it for importing, linking, and processing the response message. The NIST test message can be modified such that the query tag matches that query tag generated by the system-under test.

## 2.3.1. IZ-QR-3.1\_Query\_Q11\_Z44

Test Step Type: SUT INITIATOR

This query should return a response where no matches are found.

#### **Test Story**

#### Description

A female toddler, Donna Victoria Bee, is brought to the local clinic to determine what immunizations have been given and what immunizations are needed. A clinic staff member collects basic patient demographic information including name, date of birth, sex, and birth order (Donna was born 3rd in a triplet). A clinic provider uses this information to locate the patient's medical record. The staff member then uses the medical record and system capabilities to query the IIS to request an evaluated history and forecast for the patient.

#### Comments

Most of the test data is categorized as Test Case Fixed. It is important that the data is entered into the querying system as specified to enable linking the response message to the patient record.

The sending (querying) system will need to accept a response indicating that no matches were found.

#### **Pre-condition**

Person exists in the system with the complete demographics as provided in the Test Data Specification.

Person has Medical Record Number (MR).

Person does not have a record in the IIS, even though complete demographics are used in the query.

#### **Post-Condition**

A response message is returned in which no person record is found.

#### **Test Objectives**

Tests for a maximally valued query message, including use of OIDs, mother's maiden name, fully valued address, birth indicator and birth order.

#### **Evaluation Criteria**

Message Validation Report

#### Notes

If the HIT Module being tested is unable to control the Patient ID Number value that it creates (1) QPD-3.1 in the Query message can be populated with a different value than the one provided in the test data; (2) the Tester can ignore the associated error notification generated by the Tool; and (3) the Response message also must be modified accordingly.

MSH : Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	\~\&	Value-Profile Fixed
MSH-3	Sending Application		Value 1 To the 1 Elect
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID	2.16.840.1.113883.3.72.5.40.1	Indifferent
MSH-3.3	Universal ID Type	ISO	Indifferent
MSH-4	Sending Facility	iso	Indirecti
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID	2.16.840.1.113883.3.72.5.40.2	Indifferent
MSH-4.3	Universal ID Type	ISO	Indifferent
MSH-5	Receiving Application	iso	Indirecti
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID	2.16.840.1.113883.3.72.5.40.3	Indifferent
MSH-5.3			Indifferent
	Universal ID Type	ISO	Indirerent
MSH-6	Receiving Facility	NICTHICEAC	D
MSH-6.1	Namespace ID	NISTIISFAC	Presence-Configuration
MSH-6.2	Universal ID	2.16.840.1.113883.3.72.5.40.4	Indifferent
MSH-6.3	Universal ID Type	ISO	Indifferent
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150531145156-0500	Presence-System Generated
MSH-9	Message Type		
MSH-9.1	Message Code	QBP	Value-Profile Fixed
MSH-9.2	Trigger Event	Q11	Value-Profile Fixed
MSH-9.3	Message Structure	QBP_Q11	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-QR-3.1_Query_Q11_Z44	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z44	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-IZ-1	Presence-Configuration
	*		
MSH-22.6.2	Universal ID	2.16.840.1.113883.3.72.5.40.9	Indifferent
MSH-22.6.3	Universal ID Type	ISO	Indifferent
MSH-22.7	Identifier Type Code	XX	Value-Test Case Fixed
MSH-22.10	Organization Identifier	100-6482	Presence-Configuration
MSH-23	Receiving Responsible Organization	la womay on the	
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-IZ-1	Presence-Configuration
MSH-23.6.2	Universal ID	2.16.840.1.113883.3.72.5.40.9	Indifferent
MSH-23.6.3	Universal ID Type	ISO	Indifferent
MSH-23.7	Identifier Type Code	XX	Value-Test Case Fixed
MSH-23.10	Organization Identifier	100-3322	Presence-Configuration

QPD : Query Parameter Definition			
Location	Data Element	Data	Categorization
QPD-1	Message Query Name		
QPD-1.1	Identifier	Z44	Value-Profile Fixed
QPD-1.2	Text	Request Evaluated History and Forecast	Value-Profile Fixed
QPD-1.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed
QPD-2	Query Tag	IZ-3.1-2015	Presence-System Generated
QPD-3	PatientList		
QPD-3.1	ID Number	177993	Value-Test Case Fixed
QPD-3.4	Assigning Authority		
QPD-3.4.1	Namespace ID	NIST-MPI-1	Value-Test Case Fixed
OPD-3.4.2	Universal ID	2.16.840.1.113883.3.72.5.40.5	Indifferent
OPD-3.4.3	Universal ID Type	ISO	Indifferent
QPD-3.5	Identifier Type Code	MR	Value-Test Case Fixed
OPD-4	PatientName		
OPD-4.1	Family Name		
OPD-4.1.1	Surname	Bee	Value-Test Case Fixed
OPD-4.2	Given Name	Donna	Value-Test Case Fixed
	Second and Further Given Names or		
QPD-4.3	Initials Thereof	Victoria	Value-Test Case Fixed
QPD-4.7	Name Type Code	L	Value-Test Case Fixed
QPD-5	Patient Mother Maiden Name		
QPD-5.1	Family Name		
QPD-5.1.1	Surname	Goluchio	Value-Test Case Fixed
QPD-5.7	Name Type Code	M	Value-Profile Fixed
QPD-6	PatientDateOfBirth		
QPD-6.1	Time	20120507	Value-Test Case Fixed
QPD-7	Patient Sex	F	Value-Test Case Fixed
QPD-8	Patient Address		
QPD-8.1	Street Address		
QPD-8.1.1	Street or Mailing Address	737 Everygreen Road	Value-Test Case Fixed
QPD-8.2	Other Designation	Suite 511	Indifferent
QPD-8.3	City	Livingston	Value-Test Case Fixed
QPD-8.4	State or Province	MT	Value-Test Case Fixed
QPD-8.5	Zip or Postal Code	59047	Value-Test Case Fixed
QPD-8.6	Country	USA	Value-Test Case Fixed
QPD-8.7	Address Type	P	Value-Test Case Fixed List
QPD-9	Phone		
QPD-9.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
QPD-9.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed
QPD-9.4	Email Address		
OPD-9.6	Area/City Code	406	Value-Test Case Fixed
OPD-9.7	Local Number	5553758	Value-Test Case Fixed
QPD-10	Multiple birth indicator	Y	Value-Test Case Fixed
QPD-11	Birth order	3	Value-Test Case Fixed

RCP : Response Control Parameter			
Location	Data Element	Data	Categorization
RCP-1	Query Priority	I	Value-Test Case Fixed
RCP-2	Quantity Limited Request		
RCP-2.1	Quantity	1	Value-Profile Fixed
RCP-2.2	Units		
RCP-2.2.1	Identifier	RD	Value-Profile Fixed
RCP-2.2.2	Text	Records	Presence-Test Case Proper
RCP-2.2.3	Name of Coding System	HL70126	Value-Profile Fixed

## -Patient Information-

Element	Data
Patient Name	Donna Victoria Bee
Mother's Maiden Name	Goluchio
ID Number	177993
Date/Time of Birth	05/07/2012
Sex	Female
Patient Address	737 Everygreen Road Livingston MT 59047 USA
Patient Phone	(406)555-3758
Birth Indicator	Yes
Birth Order	3

## 2.3.2. IZ-QR-3.2\_Response\_NF\_K11\_Z33

Test Step Type: TA\_RESPONDER Response with no matches found

### **Test Story**

#### Description

The IIS performs a search for Donna Victoria Bee and does not find a high-confidence match. The IIS returns a response message indicating no person found to the querying system.

#### Comments

No Comments

#### **Pre-condition**

The patient Donna Victoria Bee exists in the querying system (e.g., EHR-S) and a query was performed. The IIS (simulated by the NIST test tool) does not find a match for the person.

#### **Post-Condition**

The response message is processed and the clinician is alerted to fact of no matches.

#### **Test Objectives**

Test the capability of the EHR-S to process a response message that returns no persons found and to provide an indication to the end user.

#### **Evaluation Criteria**

Juror Document. Clinician is notified of no match.

#### Notes

Important note regarding the Query Tag (QPD-2): The NIST response message is predefined and is based on the query message. Most systems will automatically create the query tag (Identifier) and will require it for importing, linking, and processing the response message. The NIST test message can be modified such that the query tag matches that query tag generated by the system-under test.

Important note regarding the MSH-10 and MSA-2: The NIST response message is predefined and is based on the query message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the response message. The NIST response test message can be modified such that MSA-2 matches MSH-10 of the query message generated by the system-under test

	MSH : N	_	la
Location	Data Element	Data	Categorization
MSH-1	Field Separator		
MSH-2	Encoding Characters	^\&	
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTIISAPP	
MSH-3.2	Universal ID	2.16.840.1.113883.3.72.5.40.3	
MSH-3.3	Universal ID Type	ISO	
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTIISFAC	
MSH-4.2	Universal ID	2.16.840.1.113883.3.72.5.40.4	
MSH-4.3	Universal ID Type	ISO	
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID	2.16.840.1.113883.3.72.5.40.1	
MSH-5.3	Universal ID Type	ISO	
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID	2.16.840.1.113883.3.72.5.40.2	
MSH-6.3	Universal ID Type	ISO	
MSH-7	Date/Time Of Message		1
MSH-7.1	Time	20151031145233-0500	1
MSH-9	Message Type		
MSH-9.1	Message Code	RSP	
MSH-9.2	Trigger Event	K11	
MSH-9.3	Message Structure	RSP_K11	
MSH-10	Message Control ID	NIST-IZ-QR-3.2_Response_NF_K11_Z33	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE	
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z33	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID	CDCI III.VIS	
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority	NISTRAC	
		NICE AA IZ 1	
MSH-22.6.1	Namespace ID	NIST-AA-IZ-1	
MSH-22.6.2	Universal ID	2.16.840.1.113883.3.72.5.40.9	1
MSH-22.6.3	Universal ID Type	ISO	1
MSH-22.7	Identifier Type Code	XX	
MSH-22.10	Organization Identifier	100-3322	
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-IZ-1	
MSH-23.6.2	Universal ID	2.16.840.1.113883.3.72.5.40.9	
MSH-23.6.3	Universal ID Type	ISO	

#### MSA: Message Acknowledgment

XX

100-6482

Identifier Type Code

Organization Identifier

MSH-23.7

MSH-23.10

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AA	
MSA-2	Message Control ID	NIST-IZ-QR-3.1_Query_Q11_Z44	

QAK: Query Acknowledgment			
Location	Data Element	Data	Categorization
QAK-1	Query Tag	IZ-3.1-2015	
QAK-2	Query Response Status	NF	
QAK-3	Message Query Name		
QAK-3.1	Identifier	Z44	
QAK-3.2	Text	Request Evaluated History and Forecast	
QAK-3.3	Name of Coding System	CDCPHINVS	

Location		rameter Definition  Data	Cotogonization
	Data Element	Data	Categorization
QPD-1	Message Query Name		
QPD-1.1	Identifier	Z44	
QPD-1.2	Text	Request Evaluated History and Forecast	
QPD-1.3	Name of Coding System	CDCPHINVS	
QPD-2	Query Tag	IZ-3.1-2015	
QPD-3	PatientList		
QPD-3.1	ID Number	177993	
QPD-3.4	Assigning Authority		
QPD-3.4.1	Namespace ID	NIST-MPI-1	
QPD-3.4.2	Universal ID	2.16.840.1.113883.3.72.5.40.5	
QPD-3.4.3	Universal ID Type	ISO	
QPD-3.5	Identifier Type Code	MR	
QPD-4	Patient Name		
QPD-4.1	Family Name		
QPD-4.1.1	Surname	Bee	
QPD-4.2	Given Name	Donna	
QPD-4.3	Second and Further Given Names or Initials Thereof	Victoria	
QPD-4.7	Name Type Code	L	
QPD-5	Patient Mother Maiden Name		
QPD-5.1	Family Name		
QPD-5.1.1	Surname	Goluchio	
QPD-5.7	Name Type Code	M	
QPD-6	PatientDateOfBirth		
QPD-6.1	Time	20120507	
OPD-7	Patient Sex	F	
QPD-8	Patient Address		
QPD-8.1	Street Address		
QPD-8.1.1	Street or Mailing Address	737 Everygreen Road	
QPD-8.2	Other Designation	Suite 511	
QPD-8.3	City	Livingston	
QPD-8.4	State or Province	MΓ	
QPD-8.5	Zip or Postal Code	59047	
QPD-8.6	Country	USA	
QPD-8.7	Address Type	P	
QPD-9	Phone	1	
QPD-9.2	Telecommunication Use Code	PRN	
QPD-9.3	Telecommunication Equipment Type	PH	
QPD-9.4	Email Address	111	
		106	
QPD-9.6	Area/City Code	406	
QPD-9.7	Local Number	5553758	
QPD-10	Multiple birth indicator	Y	
QPD-11	Birth order	3	

Patient Information—		
ratient information		
Element	Data	
This information will be automatically supplied by the System		

## **Juror Document**

Evaluated Immunization History and Immunization Forecast		
Test Case ID	IZ-QR-3_Query_No_Patients	
Juror ID		
Juror Name		
HIT System Tested		
Inspection Date/Time		
Inspection Settlement (Pass/Fail)	Pass Fail	
Reason Failed		
Juror Comments		

#### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the EHR technology's ability to display information notifying the HIT user that a Return Acknowledgement with No Person Records Z33 message was received (in response to an Evaluated Immunization History and Immunization Forecast Z44 query message). Additional data from the message or from the EHR are petermitted to be displayed by the EHR.

The format of this Juror Document is for ease-of-use by the Tester and does not indicate how the EHR display must be designed.

The data shown in this Juror Document are derived from the test data provided with the given Test Case; equivalent data are permitted to be displayed by the EHR. The column headings are meant to convey the kind of data to be displayed; equivalent labels/column headings are permitted to be displayed by the EHR.

Patient Information				
Patient Identifier	Patient Name	DOB	Gender	Tester Comment
177993	Donna Victoria Bee	05/07/2012	Female	

When displayed in the EHR with the notification indicating that a Return Acknowledgement with No Person Records Z33 message was received, these patient demographics data are derived from the EHR patient record.

#### **Evaluated Immunization History and Immunization Forecas**

The EHR shall display a notification indicating that the query for an Evaluated Immunization History and Immunization Forecast is complete but no matching records were found for the person in the query.

## 2.4. IZ-QR-4\_Query\_Too\_Many

Query finds too many matches

### **Test Story**

#### Description

A child, James Smith, is brought to the local clinic to determine what immunizations have been given and what immunizations are needed. A clinic staff member collects basic patient demographic information including name, date of birth and sex. A clinic provider uses this information to locate the patient's medical record. The staff member then uses the medical record and system capabilities to query the IIS to request an evaluated history and forecast for the patient.

The IIS performs a search for James Smith and finds too many matches. The IIS returns a response message indicating no person found (too many matches) to the querying system. It is expected that the requesting system (e.g., EHR-S) process the response message and display some indication to the end user that the person was not found (too many matches).

#### Comments

#### Pre-condition

Person exists in the system with the complete demographics as provided in the Test Data Specification.

Person has Medical Record Number (MR).

Person may have a record in the IIS, however the IIS is unable narrow the search results to a single match (multiple matches exist).

#### **Post-Condition**

The clinician is provided some indication that too many matches were found.

#### **Test Objectives**

Tests for a typically valued query message. Test the capability of the EHR-S to process a response message that returns no persons found (too many matches) and to provide an indication to the end user.

### **Evaluation Criteria**

Query Message: Message Validation Report

Response Message: Juror Document. The EHR-S receives the response and alerts the clinician that too many matches were found.

#### Notes

The NIST tool is simulating a response from the IIS.

Important note regarding the Query Tag (QPD-2): The NIST response message is predefined and is based on the query message. Most systems will automatically create the query tag (Identifier) and will require it for importing, linking, and processing the response message. The NIST test message can be modified such that the query tag matches that query tag generated by the system-under test.

## 2.4.1. IZ-QR-4.1\_Query\_Q11\_Z44

Test Step Type: SUT\_INITIATOR

Query will find too many matches

### **Test Story**

#### Description

A child, James Smith, is brought to the local clinic to determine what immunizations have been given and what immunizations are needed. A clinic staff member collects basic patient demographic information including name, date of birth and sex. A clinic provider uses this information to locate the patient's medical record. The staff member then uses the medical record and system capabilities to query the IIS to request an evaluated history and forecast for the patient.

#### Comments

Most of the test data is categorized as Test Case Fixed. It is important that the data is entered into the querying system as specified to enable linking the response message to the patient record.

The sending (querying) system will need to accept a response indicating that too many matches were found.

#### Pre-condition

More than one person in the IIS matching the parameters in the query exists.

#### **Post-Condition**

Response indicates that there are more than one match (too many) and the clinician is informed.

#### **Test Objectives**

Tests for a typically valued query message.

#### **Evaluation Criteria**

Message Validation Report

#### Notes

If the HIT Module being tested is unable to control the Patient ID Number value that it creates (1) QPD-3.1 in the Query message can be populated with a different value than the one provided in the test data; (2) the Tester can ignore the associated error notification generated by the Tool; and (3) the Response message also must be modified accordingly.

MSH: Message Header

		Message Header	
Location	Data Element	Data	Categorization
MSH-1	Field Separator		Value-Profile Fixed
MSH-2	Encoding Characters	~\&	Value-Profile Fixed
MSH-3	Sending Application		
MSH-3.1	Namespace ID	NISTEHRAPP	Presence-Configuration
MSH-3.2	Universal ID		Indifferent
MSH-3.3	Universal ID Type		Indifferent
MSH-4	Sending Facility		
MSH-4.1	Namespace ID	NISTEHRFAC	Presence-Configuration
MSH-4.2	Universal ID		Indifferent
MSH-4.3	Universal ID Type		Indifferent
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTIISAPP	Presence-Configuration
MSH-5.2	Universal ID	Tuoi II du I	Indifferent
MSH-5.3	Universal ID Type		Indifferent
MSH-6	Receiving Facility		indirectit
MSH-6.1	Namespace ID	NISTIISFAC	Presence Configuration
MSH-6.1 MSH-6.2	Universal ID	INIST HSPAC	Presence-Configuration  Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message	20150521145154050	D 0 0 1
MSH-7.1	Time	20150531145156-0500	Presence-System Generated
MSH-9	Message Type	lann	land and an all
MSH-9.1	Message Code	QBP	Value-Profile Fixed
MSH-9.2	Trigger Event	Q11	Value-Profile Fixed
MSH-9.3	Message Structure	QBP_Q11	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-QR-4.1_Query_Q11_Z44	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	Value-Profile Fixed
MSH-15	Accept Acknowledgment Type	ER	Value-Profile Fixed
MSH-16	Application Acknowledgment Type	AL	Value-Profile Fixed
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z44	Value-Profile Fixed
MSH-21.2	Namespace ID	CDCPHINVS	Value-Profile Fixed
MSH-21.3	Universal ID		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-1	Presence-Configuration
MSH-22.6.2	Universal ID		Indifferent
MSH-22.6.3	Universal ID Type		Indifferent
MSH-22.7	Identifier Type Code	XX	Value-Test Case Fixed
MSH-22.10	Organization Identifier	100-6482	Presence-Configuration
MSH-23	Receiving Responsible Organization		- G
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-1	Presence-Configuration
MSH-23.6.2	Universal ID	1401-777-1	Indifferent
MSH-23.6.3	Universal ID Type		Indifferent
	**	XX	
MSH-23.7	Identifier Type Code		Value-Test Case Fixed
MSH-23.10	Organization Identifier	100-3322	Presence-Configuration

QPD : Query Parameter Definition				
Location	Data Element	Data	Categorization	
QPD-1	Message Query Name			
QPD-1.1	Identifier	Z44	Value-Profile Fixed	
QPD-1.2	Text	Request Evaluated History and Forecast	Value-Profile Fixed	
QPD-1.3	Name of Coding System	CDCPHINVS	Value-Profile Fixed	
QPD-2	Query Tag	IZ-4.1-2015	Presence-System Generated	
QPD-3	PatientList			
QPD-3.1	ID Number	412299	Value-Test Case Fixed	
QPD-3.4	Assigning Authority			
QPD-3.4.1	Namespace ID	NIST-MPI-1	Value-Test Case Fixed	
QPD-3.4.2	Universal ID		Indifferent	
OPD-3.4.3	Universal ID Type		Indifferent	
QPD-3.5	Identifier Type Code	MR	Value-Test Case Fixed	
OPD-4	Patient Name			
QPD-4.1	Family Name			
QPD-4.1.1	Surname	Smith	Value-Test Case Fixed	
OPD-4.2	Given Name	James	Value-Test Case Fixed	
QPD-4.3	Second and Further Given Names or Initials Thereof		Indifferent	
OPD-4.7	Name Type Code	L	Value-Test Case Fixed	
QPD-5	Patient Mother Maiden Name	L	value-1 est Case Fixed	
QPD-5.1	Family Name			
OPD-5.1.1	Surname		Indifferent	
OPD-5.7			Indifferent	
OPD-6	Name Type Code PatientDateOfBirth		Indifferent	
OPD-6.1	Time	20110905	Value-Test Case Fixed	
_	·			
QPD-7	Patient Sex	M	Value-Test Case Fixed	
QPD-8	Patient Address			
QPD-8.1	Street Address	22 F + D 1 W	VI T (C F I	
QPD-8.1.1	Street or Mailing Address	22 East Branch Way	Value-Test Case Fixed	
QPD-8.2	Other Designation		Indifferent	
QPD-8.3	City	Livingston	Value-Test Case Fixed	
QPD-8.4	State or Province	MT	Value-Test Case Fixed	
QPD-8.5	Zip or Postal Code	59047	Value-Test Case Fixed	
QPD-8.6	Country		Indifferent	
QPD-8.7	Address Type	P	Value-Test Case Fixed List	
QPD-9	Phone			
QPD-9.2	Telecommunication Use Code	PRN	Value-Test Case Fixed	
QPD-9.3	Telecommunication Equipment Type	PH	Value-Test Case Fixed	
QPD-9.4	Email Address			
QPD-9.6	Area/City Code	406	Value-Test Case Fixed	
QPD-9.7	Local Number	5556285	Value-Test Case Fixed	
QPD-10	Multiple birth indicator		Indifferent	
QPD-11	Birth order		Indifferent	

RCP: Response Control Parameter			
Location	Data Element	Data	Categorization
RCP-1	Query Priority	I	Value-Test Case Fixed
RCP-2	Quantity Limited Request		
RCP-2.1	Quantity	1	Value-Profile Fixed
RCP-2.2	Units		
RCP-2.2.1	Identifier	RD	Value-Profile Fixed
RCP-2.2.2	Text	Records	Presence-Test Case Proper
RCP-2.2.3	Name of Coding System	HL70126	Value-Profile Fixed

## -Patient Information-

1 WOW 1110 11110 11110 11110 11110 11110 11110 11110 11110 11110 11110 11110 11110 11110 11110 11110 11110 111			
Element	Data		
Patient Name	James Smith		
Mother's Maiden Name			
ID Number	412299		
Date/Time of Birth	09/05/2011		
Sex	Male		
Patient Address	22 East Branch Way Livingston MT 59047		
Patient Phone	(406)555-6285		
Birth Indicator	No		
Birth Order			

## 2.4.2. IZ-QR-4.2\_Response\_TM\_K11\_Z33

Test Step Type: TA RESPONDER

Response message indicating that too matches were found.

## **Test Story**

#### Description

The IIS performs a search for James Smith and finds too many matches based on the sending system's query (e.g., EHR-S). The IIS returns a response message indicating no person found (too many matches) to the querying system. It is expected that the requesting system (e.g., EHR-S) process the response message and display some indication to the end user that the person was not found (too many matches).

#### Comments

No Comments

#### **Pre-condition**

A query is made to the IIS. Person may have a record in the IIS, however the IIS is unable narrow the search results to a single match (multiple matches exist).

#### Post-Condition

The clinician is provided some indication that too many matches were found.

#### **Test Objectives**

Test the capability of the EHR-S to process a response message that returns no persons found (too many matches) and to provide an indication to the end user.

#### **Evaluation Criteria**

Juror Document. Clinician is notified that too many matches were found.

#### Notes

Important note regarding the Query Tag (QPD-2): The NIST response message is predefined and is based on the query message. Most systems will automatically create the query tag (Identifier) and will require it for importing, linking, and processing the response message. The NIST test message can be modified such that the query tag matches that query tag generated by the system-under test.

Important note regarding the MSH-10 and MSA-2: The NIST response message is predefined and is based on the query message. Most systems will automatically create the message control Identifier and may require it for importing, linking, and processing the response message. The NIST response test message can be modified such that MSA-2 matches MSH-10 of the query message generated by the system-under test

Location	Data Element	Message Header  Data	Categorization
		Data	Categorization
MSH-1	Field Separator	<u> </u>	1
MSH-2	Encoding Characters	/~\&	1
MSH-3	Sending Application	NICTUCADO	
MSH-3.1	Namespace ID Universal ID	NISTIISAPP	
MSH-3.2			1
MSH-3.3	Universal ID Type		1
MSH-4	Sending Facility	NISTIISFAC	
MSH-4.1	Namespace ID	NISTRISTAC	
MSH-4.2	Universal ID		
MSH-4.3	Universal ID Type		
MSH-5	Receiving Application		
MSH-5.1	Namespace ID	NISTEHRAPP	
MSH-5.2	Universal ID		
MSH-5.3	Universal ID Type		
MSH-6	Receiving Facility		
MSH-6.1	Namespace ID	NISTEHRFAC	
MSH-6.2	Universal ID		
MSH-6.3	Universal ID Type		
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20141031145233-0500	
MSH-9	Message Type		
MSH-9.1	Message Code	RSP	
MSH-9.2	Trigger Event	K11	
MSH-9.3	Message Structure	RSP_K11	
MSH-10	Message Control ID	NIST-IZ-QR-4.2_Response_TM_K11_Z33	
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	
MSH-12	Version ID		
MSH-12.1	Version ID	2.5.1	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE	
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z33	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID		
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority		
MSH-22.6.1	Namespace ID	NIST-AA-1	
MSH-22.6.2	Universal ID		
MSH-22.6.3	Universal ID Type		
MSH-22.7	Identifier Type Code	XX	
MSH-22.10	Organization Identifier	100-3322	
MSH-23	Receiving Responsible Organization		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-1	
MSH-23.6.2	Universal ID	1431-711-1	
MSH-23.6.3	Universal ID Type		
1V1CLT-4J.U.J	omversar in rype		

### MSA: Message Acknowledgment

XX 100-6482

Identifier Type Code

Organization Identifier

MSH-23.7

MSH-23.10

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AA	
MSA-2	Message Control ID	NIST-IZ-QR-4.1_Query_Q11_Z44	

QAK. Query Acknowledgment				
Location	Data Element	Data	Categorization	
QAK-1	Query Tag	IZ-4.1-2015		
QAK-2	Query Response Status	TM		
QAK-3	Message Query Name			
QAK-3.1	Identifier	Z44		
QAK-3.2	Text	Request Evaluated History and Forecast		
QAK-3.3	Name of Coding System	CDCPHINVS		

Message Query Name   Identifier   Text     Name of Coding System     Query Tag     PatientList     ID Number     Assigning Authority     Namespace ID     Universal ID     Universal ID     Universal ID     Universal ID     Surname     Family Name     Surname     Given Name     Second and Further Given Names or Initials Thereof     Name Type Code     PatientMotherMaidenName	Z44 Request Evaluated History and Forecast CDCPHINVS IZ-4.1-2015 412299 NIST-MPI-1 MR Smith James	Categorization
Identifier  Text  Name of Coding System  Query Tag  PatientList  ID Number  Assigning Authority  Namespace ID  Universal ID  Universal ID Type  Identifier Type Code  PatientName  Family Name  Surname  Given Name  Second and Further Given Names or Initials Thereof  Name Type Code	Request Evaluated History and Forecast CDCPHINVS IZ-4.1-2015 412299 NIST-MPI-1 MR Smith James	
Text Name of Coding System Query Tag PatientList ID Number Assigning Authority Namespace ID Universal ID Universal ID Type Identifier Type Code PatientName Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	Request Evaluated History and Forecast CDCPHINVS IZ-4.1-2015 412299 NIST-MPI-1 MR Smith James	
Name of Coding System  Query Tag  PatientList  ID Number  Assigning Authority  Namespace ID  Universal ID  Universal ID Type  Identifier Type Code  PatientName  Family Name  Surname  Given Name  Second and Further Given Names or Initials Thereof  Name Type Code	CDCPHINVS IZ-4.1-2015  412299  NIST-MPI-1  MR  Smith  James	
Query Tag  PatientList  ID Number  Assigning Authority  Namespace ID  Universal ID  Universal ID Type  Identifier Type Code  PatientName  Family Name  Surname  Given Name  Second and Further Given Names or Initials Thereof  Name Type Code	IZ-4.1-2015  412299  NISГ-MPI-1  MR  Smith  James	
PatientList  ID Number  Assigning Authority  Namespace ID  Universal ID  Universal ID Type  Identifier Type Code  PatientName  Family Name  Surname  Given Name  Second and Further Given Names or Initials Thereof  Name Type Code	A12299  NIST-MPI-1  MR  Snith  James	
ID Number Assigning Authority Namespace ID Universal ID Universal ID Type Identifier Type Code PatientName Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	NIST-MPI-1  MR  Snith  James	
Assigning Authority Namespace ID Universal ID Universal ID Type Identifier Type Code PatientName Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	NIST-MPI-1  MR  Snith  James	
Namespace ID Universal ID Universal ID Type Identifier Type Code PatientName Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	MR Smith James	
Universal ID Universal ID Type Identifier Type Code PatientName Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	MR Smith James	
Universal ID Type Identifier Type Code PatientName Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	Smith James	
Identifier Type Code PatientName Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	Smith James	
PatientName Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	Smith James	
Family Name Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	James	
Surname Given Name Second and Further Given Names or Initials Thereof Name Type Code	James	
Given Name Second and Further Given Names or Initials Thereof Name Type Code	James	
Second and Further Given Names or Initials Thereof Name Type Code		
Initials Thereof  Name Type Code		
	L	
Family Name		
Surname		
Name Type Code		
PatientDateOfBirth		
Time	20110905	
Patient Sex	M	
Patient Address		
Street Address		
+	22 Fast Branch Way	
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	3330283	
	Street Address Street or Mailing Address Other Designation City State or Province Zip or Postal Code Country Address Type Phone Telecommunication Use Code Telecommunication Equipment Type Email Address Area/City Code Local Number Multiple birth indicator	Street Address Street or Mailing Address 22 East Branch Way Other Designation City Livingston State or Province MT Zip or Postal Code 59047 Country Address Type Phone Telecommunication Use Code Telecommunication Equipment Type Email Address Area/City Code Local Number 5556285

	Patient Information————————————————————————————————————			
ı	1 attent finormation			
ı	Element Data			
ı	This information will be automatically supplied by the System			
1			-	

## **Juror Document**

Evaluated Immun	Evaluated Immunization History and Immunization Forecast			
Test Case ID	IZ-QR-4_Query_Too_Many			
Juror ID				
Juror Name				
HIT System Tested				
Inspection Date/Time				
Inspection Settlement (Pass/Fail)	Pass Fail			
Reason Failed				
Juror Comments				

#### DISPLAYVERIFICATION

This Test Case-specific Juror Document provides a checklist for the Tester to use during certification testing for assessing the EHR technology's ability to display information notifying the HIT user that a Return Acknowledgement with No Person Records Z33 message was received (in response to an Evaluated Immunization History and Immunization Forecast Z44 query message). Additional data from the message or from the EHR are permitted to be displayed by the EHR.

The format of this Juror Document is for ease-of-use by the Tester and does not indicate how the EHR display must be designed.

The data shown in this Juror Document are derived from the test data provided with the given Test Case; equivalent data are permitted to be displayed by the EHR. The column headings are meant to convey the kind of data to be displayed; equivalent labels/column headings are permitted to be displayed by the EHR.

Patient Information				
Patient Identifier	Patient Name	DOB	Gender	Tester Comment
412299	James Smith	09/05/2011	Male	

When displayed in the EHR with the notification indicating that a Return Acknowledgement with No Person Records Z33 message was received, these patient demographics data are derived from the EHR patient record.

#### Evaluated Immunization History and Immunization Forecast

The EHR shall display a notification indicating that the query for an Evaluated Immunization History and Immunization Forecast is complete but too many matching records were found for the person in the query.