# ONC 2015 Edition Certification Test Data

**Immunization** 

Version 1.2.0

2nd May 2018

# **Table of Contents**

Table of Contents	2
ONC 2015 Test Plan	5
1. Administration Group	6
1.1. IZ-AD-1 Admin Child	7
Test Story	7
1.1.1. IZ-AD-1.1_Send_V04_Z22	8
Test Story	8
Message Contents	9
Test Data Specification	32
1.1.2. IZ-AD-1.2_Receive_ACK_Z23	38
Test Story	38
Message Contents	38
Test Data Specification	40
1.2. IZ-AD-2_Admin_Adult Test Story	41
1.2.1. IZ-AD-2.1 Send V04 Z22	42
Test Story	42
Message Contents	43
Test Data Specification	55
1.2.2. IZ-AD-2.2 Receive ACK Z23	58
Test Story	58
Message Contents	58
Test Data Specification	60
1.3. IZ-AD-3_No_Consent	61
Test Story	61
1.3.1. IZ-AD-3.1_Send_V04_Z22	62
Test Story Message Contents	62 63
Test Data Specification	71
1.3.2. IZ-AD-3.2 Receive ACK Z23	73
Test Story	73
Message Contents	73
Test Data Specification	75
1.4. IZ-AD-4_Delete_Record	76
Test Story	76
1.4.1. IZ-AD-4.1_Send_V04_Z22	77
Test Story	77
Message Contents Test Data Specification	77 85
1.4.2. IZ-AD-4.2 Receive ACK Z23	87
Test Story	87
Message Contents	87
Test Data Specification	89
1.5. IZ-AD-5_Refusal	90
Test Story	90
1.5.1. IZ-AD-5.1_Send_V04_Z22	91
Test Story	91
Message Contents Test Data Specification	92
1.5.2. IZ-AD-5.2 Receive ACK Z23	115
Test Story	115
Message Contents	115
Test Data Specification	117
1.6. IZ-AD-6_Update_Record	118
Test Story	118
1.6.1. IZ-AD-6.1_Send_V04_Z22	119

Test Story	119
Message Contents	119
Test Data Specification	127
1.6.2. IZ-AD-6.2_Receive_ACK_Z23	129
Test Story	129
Message Contents	129
Test Data Specification	131
1.7. IZ-AD-7_Historical_IIS-Error	132
Test Story	132
1.7.1. IZ-AD-7.1_Send_V04_Z22	133
Test Story	133
Message Contents	133
Test Data Specification	138
1.7.2. IZ-AD-7.2_Receive_ACK_Z23	140
Test Story	140
Message Contents Test Data Specification	140
1.8. IZ-AD-8 Admin IIS-Warning	143
Test Story	143
1.8.1. IZ-AD-8.1_Send_V04_Z22	144
Test Story Message Contents	144 <sub>.</sub> 145
Test Data Specification	153
1.8.2. IZ-AD-8.2_Receive_ACK_Z23	155
Test Story	155
Message Contents	155
Test Data Specification	157
1.9. IZ-AD-9 Admin IIS-2Warnings	158
Test Story	158
1.9.1. IZ-AD-9.1_Send_V04_Z22	159
Test Story	159
Message Contents	160
Test Data Specification	173
1.9.2. IZ-AD-9.2 Receive ACK Z23	176
Test Story	176
Message Contents	176
Test Data Specification	178
1.10. IZ-AD-10_Historical_IIS-SysError	180
Test Story	180
1.10.1. IZ-AD-10.1_Send_V04_Z22	181
Test Story	181
Message Contents	181
Test Data Specification	186
1.10.2. IZ-AD-10.2_Receive_ACK_Z23	188
Test Story	188
Message Contents	188
Test Data Specification	190
Evaluated History and Forecast Group	191
2.1. IZ-QR-1_Query_Child	192
Test Story	192
2.1.1. IZ-QR-1.1_Query_Q11_Z44	193
Test Story	193
Message Contents	193
Test Data Specification	196
2.1.2. IZ-QR-1.2_Response_K11_Z42	197
Test Story	197
Message Contents Test Data Specification	197
Test Data Specification Juror Document	226 226
DISPLAY VERIFICATION	227
	<u> </u>

2.2. IZ-QR-2_Query_Adult	229
Test Story	229
2.2.1. IZ-QR-2.1_Query_Q11_Z44	231
Test Story	231
Message Contents	231
Test Data Specification	234
2.2.2. IZ-QR-2.2 Response K11 Z42	235
Test Story	235
Message Contents	235
Test Data Specification	260
Juror Document	260
DISPLAY VERIFICATION	260
2.3. IZ-QR-3_Query_No_Patients	262
Test Story	262
2.3.1. IZ-QR-3.1_Query_Q11_Z44	263
Test Story	263
Message Contents	263
Test Data Specification	266
2.3.2. IZ-QR-3.2_Response_NF_K11_Z33	267
Test Story	267
Message Contents	267
Test Data Specification	270
2.4. IZ-QR-4_Query_Too_Many	272
Test Story	272
2.4.1. IZ-QR-4.1_Query_Q11_Z44	274
Test Story	274
Message Contents	274
Test Data Specification	277
2.4.2. IZ-QR-4.2_Response_TM_K11_Z33	278
Test Story	278
Message Contents	278
Test Data Specification	281

# **ONC 2015 Test Plan**

This test plan is to be used for the ONC 2015 Edition Certification Testing of HealthIT 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).

# 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).

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

Maximally populated child administration

### **Test Story**



A child (infant) is seen at a clinic. Historical vaccinations are recorded and new vaccines are administered and documented.

### **Comments**

No Comments

### 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 child including next of kin, patient consent, VIS, funding source and VFC data.

### **Evaluation Criteria**

### **Notes for Testers**

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 Testers**

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		
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
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	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
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
			Indifferent
MSH-23.7	Identifier Type Code		Indincicit

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		
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		
PID-11.1	Street Address		
PID-11.1.1	Street or Mailing Address	543 Blount Drive	Presence-Content Indifferent
PID-11.2	Other Designation		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	РН	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	РН	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: Next of Kin / Associated Parties -

Location	Data Element	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[\*]-

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

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

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	7491	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	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	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
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	31528	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
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

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	49281-0560-05	Value-Test Case Fixed List
RXA-5.2	Text	Pentacel	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	526434	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20150722	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
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-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 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	00006-4047-20	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		
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	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

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		
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 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	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

Location	<b>Data Element</b>	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

# RXR[\*] 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	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

T	D ( DI	- In .	
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 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

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	253088698300017211160720	Value-Test Case Fixed
OBX-5.2	Text	Polio 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

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	253088698300006611150402	Value-Test Case Fixed
OBX-5.2	Text	Haemophilus Influenzae type b 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	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

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	253088698300003511070517	Value-Test Case Fixed
OBX-5.2	Text	Diphtheria/Tetanus/Pertussis (DTaP) 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	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

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

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	253088698300019611180223	Value-Test Case Fixed
OBX-5.2	Text	Rotavirus 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

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

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

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	253088698300015811151105	Value-Test Case Fixed
OBX-5.2	Text	Pneumococcal Conjugate (PCV13) 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	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

	ı v
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 VIS
Date Vis Presented	06/24/2015
Document Type	Haemophilus Influenzae type b VIS
Date Vis Presented	06/24/2015
Document Type	Diphtheria/Tetanus/Pertussis (DTaP) 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 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 (PCV13) 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	
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	

# 

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 for Testers**

**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	<b>Data Element</b>	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	20150624073734.034-0500	
MSH-9	Message Type	20130021073731.031 0300	
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	1.2_tccorve_ricit_223	
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 NE	
MSH-21	Message Profile Identifier		
MSH-21.1	Entity Identifier	Z23	
MSH-21.2	Namespace ID	CDCPHINVS	
MSH-21.3	Universal ID	CS CTIMI ( ) S	
MSH-21.4	Universal ID Type		
MSH-22	Sending Responsible Organization		
MSH-22.1	Organization Name	NISTIISFAC	
MSH-22.6	Assigning Authority	INSTITUTE	
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-1.1_Send_V04_Z22	

# **Test Data Specification**

## -Patient Information -

This information will be automatically supplied by the System			
This information will be automatically supplied by the System			

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

Adult administration

## **Test Story**

т.			
I)es	scri	ntı	on
	,,,,		<b>U</b> 11

An adult is seen at a clinic. Historical vaccinations are recorded and new vaccines are administered and documented.

### **Comments**

No Comments

### Pre Condition

No PreCondition

### **Post Condition**

No PostCondition

### **Test Objectives**

This test case assesses the ability of the EHR to create an administration message for an adult containing historical and new administrations including VIS and not eligible VFC.

### **Evaluation Criteria**

### **Notes for Testers**

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 Testers**

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.

Messa	ge 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		
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
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		Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization	1	
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 =

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	14151-14111-1	Indifferent
			Indifferent
PID-3.4.3	Universal ID Type	) AD	
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		Value Test Case Timed
PID-10.1	Identifier	2028-9	Value-Test Case Fixed
		Asian	
PID-10.2	Text		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	9200 Wellington Trail	Presence-Content Indifferent
PID-11.2	Other Designation		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[1]	Phone Number - Home		
PID-13[1].2	Telecommunication Use Code	PRN	Value-Test Case Fixed
PID-13[1].3	Telecommunication Equipment Type	РН	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	5557896	Presence-Content Indifferent
PID-13[1].7	Phone Number - Home		1 10501100-Content maniferent
		NET	Value-Test Case Fixed
PID-13[2].2	Telecommunication Use Code	NET	value-1 est 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

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	19830615	Presence-Content Indifferent
PD1-18	Publicity Code Effective Date	20150624	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	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	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

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	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 Order

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	Entity Identifier Indifferent	
ORC-2.2	Namespace ID		
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: 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	49281-0215-88	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		
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	315841	Presence-Content Indifferent
RXA-16	Substance Expiration Date		
RXA-16.1	Time	20151216	Presence-Content Indifferent
RXA-17	Substance Manufacturer Name		
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-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	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		value 110me 1 med
RXA-10.1	ID Number		Indifferent
RXA-10.1	Family Name		marrerent
RXA-10.2.1	Surname		Indifferent
	Given Name		Indifferent
RXA-10.3			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-18.2	Name of Coding System		NonPresence
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-20	Action Code - RXA	A	Value-Test Case Fixed  Value-Test Case Fixed
IAA-21	Action Code - KAA	/ L	v and-10st Case 1'Ixed

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		marrerent
RXA-10.2.1	Surname		Indifferent
RXA-10.2.1	Given Name		Indifferent
KAA-10.3			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		
DYA 191	Identifier		NonPresence
RXA-18.1			NonPresence
RXA-18.2	Text		NonPresence
RXA-18.3	Name of Coding System	GD.	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 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 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	253088698300028811170411	Value-Test Case Fixed
OBX-5.2	Text	Tetanus/Diphtheria (Td) 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

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	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
Birth Order	1

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	Tetanus/Diphtheria (Td) 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
Route	
Administration Site	
Entering Organization	NISTEHRFacility
Entered By	Lily Jackson
Ordered By	

# 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 for Testers**

**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	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	Z.Z_ROGGIVE_FIGHT_EZZ	
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	
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		
	Identifier Type Code		
MSH-23.7			
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-2.1_Send_V04_Z22	

# **Test Data Specification**

# -Patient Information -

Element	Data	
This information will be automatically supplied by 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 new 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**

This test case assesses the ability of the EHR to create an administration message for a child containing a new administration but an indication that the data should not be shared. Also test the ability of the EHR to support full first and middle names.

### **Evaluation Criteria**

### **Notes for Testers**

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 Testers**

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.

	I		
<u> </u>			
M	occago Contents		

**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		
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
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		
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	1	
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
	Organization Identifier		Indifferent

PID : Patient Identification =

Location	<b>Data Element</b>	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	IVIIC	value-Test Case Tixed
PID-5.1	Family Name		
PID-5.1.1	Surname	Benton	Presence-Content Indifferent
110-3.1.1	Suriane	Denton	Presence Length-Content
PID-5.2	Given Name	Katherine	Indifferent
PID-5.3	Second and Further Given Names or Initials Thereof	Mackenzie	Presence Length-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		, and from the
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		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
PID-11.7	Country Address Type	P	Value-Test Case Fixed List
		r	Value-Test Case Fixed List
PID-13	Phone Number - Home	DDM	VI TIONE
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
PID-13.3	Telecommunication Equipment Type	РН	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		
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	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	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	РН	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

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

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	1	
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		i
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
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 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 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	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 =

OBA : 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	253088698300029511161202	Value-Test Case Fixed
OBX-5.2	Text	HPV 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

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	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
Birth Order	1

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	

-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 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 for Testers**

**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	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	J.Z_ROCCIVE_FICIN_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 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		
	Identifier Type Code		
MSH-23.7			
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	

## **Test Data Specification**

## -Patient Information -

Element	Data	
This information will be automatically supplied by the System		

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

Child deleted administration

## **Test Story**



A child is seen at a clinic. A previously documented vaccination is deleted due to user error.

#### **Comments**

No Comments

#### Pre Condition

The IZ-AD-3\_No\_Consent test case has been successfully completed.

#### **Post Condition**

No PostCondition

#### **Test Objectives**

This test case assesses the ability of the EHR to create a delete message for a previously sent administration.

#### **Evaluation Criteria**

#### **Notes for Testers**

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 Testers**

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	<b>Data Element</b>	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		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-4.1 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	1	
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
	Organization Identifier		Indifferent

PID : Patient Identification =

Location	<b>Data Element</b>	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	1000	Indifferent
PID-3.4.3	Universal ID Type		Indifferent
PID-3.5	Identifier Type Code	MR	Value-Test Case Fixed
PID-5	Patient Name		variae Test Case Tinea
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		, and Test Case I IACC
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	IVI	varue-i rome i ixed
PID-7.1	Time	20031221	Presence-Content Indifferent
PID-8	Administrative Sex	F	Value-Test Case Fixed
PID-8	Race	Γ	value-Test Case Fixed
PID-10.1	Identifier	2106-3	Value-Test Case Fixed
PID-10.1	1	White	
	Text	-	Presence-Test Case Proper
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed
PID-11	Patient Address		
PID-11.1	Street Address	00.117 + 21 + 4	D G + 1 1'00
PID-11.1.1	Street or Mailing Address	89 West 21st Ave	Presence-Content Indifferent
PID-11.2	Other Designation	I_	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	РН	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		
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	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	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	РН	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

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	n	
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
RXA-20	Completion Status	СР	Value-Test Case Fixed
RXA-21	Action Code - RXA	D	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[\*] -

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

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	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

OBA: 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	253088698300029511161202	Value-Test Case Fixed		
OBX-5.2	Text	HPV Vaccine VIS	Presence-Test Case Proper		
OBX-5.3	Name of Coding System	cdcgs1vis	Value-Profile Fixed		
DBX-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	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
Birth Order	1

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			

-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.	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 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 for Testers**

**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	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	1.2_Receive_Reix_225	
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	CDCTIM(VS	
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		
	Identifier Type Code		
MSH-23.7			
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-4.1_Send_V04_Z22	

# **Test Data Specification**

$\mathbf{r}$			4	T	C	4 •
ľ	วก	ρn	1	ın	torr	nation

1 WOON 11101 MWOON					
Element	Data				
This information will be automatically supplied by the System					

## 1.5. IZ-AD-5\_Refusal

Child administration with refusal. Also test multiple birth indicator.

## **Test Story**



The second child of 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**

This test case assesses the ability of the EHR to create an administration message for child whose parents have refused an immunization and to support multiple birth indicator and order.

#### **Evaluation Criteria**

#### **Notes for Testers**

No Note

## 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 Testers**

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.

	I		
<u> </u>			
M	occago Contents		

**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		
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		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
			Indifferent
MSH-23.7	Identifier Type Code		mannerent

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		, various resist class raised
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		variae Frome Fraca
PID-11.1	Street Address		
PID-11.1.1	Street or Mailing Address	924 Sycamore Lane	Presence-Content Indifferent
PID-11.2	Other Designation	224 Sycamore Lane	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	r	value-Test Case Fixed List
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
F1D-13.2	Telecommunication Equipment		value-Test Case Fixed
PID-13.3	Туре	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-29	Patient Death Date and Time		
PID-29.1	Time		NonPresence
PID-30	Patient Death Indicator	N	Indifferent

PD1 : 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	20150624	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

#### 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	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	РН	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

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

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

Location	Data Element	Data	Categorization
ORC-1	Order Control	RE	Value-Profile Fixed
ORC-2	Placer Order Number		
ORC-2.1	Entity Identifier	7239	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	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

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
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	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		
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	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	20130723	Tresence content maniferent
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	HI VA	value Home Hace
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
1011 20	Completion Status	A	Value-Test Case 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	00006-4095-01	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

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		
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	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

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		
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

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

		BX[*]	
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

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
OBX-17.3	Name of Coding System	CDCPHINVS	Indifferent

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	253088698300026411151105	Value-Test Case Fixed
OBX-5.2	Text	Multi Pediatric Vaccines 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	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	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	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

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

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	253088698300004211160720	Value-Test Case Fixed
OBX-5.2	Text	Hepatitis A 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	

## 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 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	
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	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	253088698300012711180212	Value-Test Case Fixed
OBX-5.2	Text	Measles/Mumps/Rubella 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	
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 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	Measles/Mumps/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 for Testers**

**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

Field Separator		Categorization
Encoding Characters	\^~\&	
Sending Application		
Namespace ID	NISTIISAPP	
Universal ID		
Universal ID Type		
	NISTIISFAC	
Universal ID		
Universal ID Type		
	NISTEHRAPP	
	NISTEHRFAC	
-		
Time	20150624093847.822-0500	
	201000210700171022 0000	
	ACK	
	<u> </u>	
	1	
Message Control ID	NIST-IZ-AD-	
Processing ID		
	p	
	1	
	251	
	-	
Application Acknowledgment	NE	
	723	
-	e Berrini, y B	
<del>-</del>		
	1	
	1.1311151116	
<del>-</del>		
Receiving Responsible		
	NISTEHRFAC	
<del>-</del>		
	Universal ID Universal ID Type  Sending Facility Namespace ID Universal ID Type  Receiving Application Namespace ID Universal ID Universal ID Type  Receiving Facility Namespace ID Universal ID Type  Date/Time Of Message Time  Message Type Message Code Trigger Event Message Structure  Message Structure  Message Control ID  Processing ID Version ID Version ID Accept Acknowledgment Type Application Acknowledgment Type Message Profile Identifier Entity Identifier Namespace ID Universal ID Universal ID Type Sending Responsible Organization Organization Name Assigning Authority Namespace ID Universal ID	Universal ID Universal ID Type  Sending Facility Namespace ID Universal ID Date/Time Of Message Time 20150624093847.822-0500 Message Type Message Code ACK Trigger Event Vo4 Message Structure ACK MIST-IZ-AD- 5.2 Receive_ACK_Z23 Processing ID Processing ID Processing ID Processing ID Processing ID Version ID Version ID Version ID Version ID Cocphinve Application Acknowledgment Type Message Profile Identifier Entity Identifier Assigning Authority Namespace ID Universal ID Un

MSA: Message Acknowledgment

Location	Data Element	Data	Categorization
MSA-1	Acknowledgment Code	AA	
MSA-2	Message Control ID	NIST-IZ-AD-5.1_Send_V04_Z22	

# **Test Data Specification**

## -Patient Information -

Element	Data	
This information will be automatically supplied by 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

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 for Testers**

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 for Testers**

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.

MSH : Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator	İ	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		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		Indifferent
MSH-7.1	Time	20150624093847.808-0500	Presence-System Generated
MSH-9	Message Type	20130021093017.000 0300	Tesence System Generated
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		
MSH-11		NIST-IZ-AD-6.1_Send_V04_Z22	Presence-System Generated
	Processing ID	P	Presence-Content Indifferent
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID	0.51	77 1 D C1 D' 1
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
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
	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		
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		, unu 1937 cust 1 med
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		. IIII 100 Cust I mou
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	IVI	value-Test Case Fixed
PID-10.1	Identifier	2106-3	Value-Test Case Fixed
PID-10.2	Text	White	Presence-Test Case Proper
PID-10.2		CDCREC	Value-Profile Fixed
	Name of Coding System  Patient Address	CDCKEC	value-Florile Fixed
PID-11			
PID-11.1	Street Address	0245	Danasa Cantant I. d'Cant
PID-11.1.1	Street or Mailing Address	924 Sycamore Lane	Presence-Content Indifferent
PID-11.2	Other Designation	D.	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	1	
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
PID-13.3	Telecommunication Equipment Type	РН	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

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

## NK1 : Next of Kin / Associated Parties

TIKI : Next of Kill / 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	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	РН	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

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

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	1	
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	208490	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	U	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	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

## 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	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 =

OBA: 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	253088698300004211160720	Value-Test Case Fixed	
OBX-5.2	Text	Hepatitis A 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	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 -

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 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 for Testers**

**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	<b>Data Element</b>	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	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	O.2_Receive_Reix_225	
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	CDCFTIII ( V S	
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		
	Identifier Type Code		
MSH-23.7			
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-6.1_Send_V04_Z22	

# **Test Data Specification**

## -Patient Information -

Element	Data
This information will be automatically supplied by 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 for Testers**

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 for Testers**

## **Message Contents**

-MSH : Message Header -

Location	<b>Data Element</b>	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		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	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	
		vv	Value-Test Case Fixed	
MSH-23.7	Identifier Type Code	XX	value-rest Case rixen	

PID : Patient Identification =

Location	Data Element	Data	Categorization	
PID-1	Set ID - PID	1	Value-Profile Fixed	
PID-3	Patient Identifier List		D C : 17 1100	
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	
		<b>F</b>	Value-Test Case Fixed	
PID-10	Race	lator a		
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	763 Main St	Presence-Content Indifferent	
PID-11.2	Other Designation		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[1]	Phone Number - Home			
PID-13[1].2	Telecommunication Use Code	PRN	Value-Test Case Fixed	
PID-13[1].3	Telecommunication Equipment Type	РН	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	
	Area/City Code	Troisin.Darrettagisp.com	NonPresence	
PID-13[2].6	Local Number		NonPresence	
PID-13[2].7			Nonriesence	
PID-22	Ethnic Group	2106.5	17.1 m : 0 =: 1	
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	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		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	<b>Data Element</b>	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	
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		T (OIII 1 S S OII S )
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		y didd 1101110 1 11100
RXA-10.1	ID Number		Indifferent
RXA-10.2	Family Name		
RXA-10.2.1	Surname		Indifferent
RXA-10.3	Given Name		Indifferent
	Second and Further Given		
RXA-10.4	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
1021/1-20	Completion Status	CI	varue-Test Case Fixeu

n	4 •		4	•	c		4 •		
r	atı	en	)Ť	ın	)TO	rm	nati	on	1

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

# -Immunization 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

## -Vaccine Administration Information -

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 for Testers**

**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	THO I BITTUIT		
MSH-5.3	Universal ID Type			
MSH-6	Receiving Facility			
MSH-6.1	Namespace ID	NISTEHRFAC		
MSH-6.2	Universal ID	THO TEING AC		
MSH-6.3	Universal ID Type			
MSH-7	Date/Time Of Message			
MSH-7.1	Time	20150625121047.853-0500		
		20130023121047.833-0300		
MSH-9	Message Type	ACK		
MSH-9.1	Message Code			
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			
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	1		
MSH-23.6.3	Universal ID Type			
MSH-23.7	Identifier Type Code	XX		
MSH-23.10	Organization Identifier	100-6482		
<u>мыл-25.10</u>	Organization Identifier	100-0402		

## 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	

	$\mathbf{n}$			
• н.,	кк	:	нr	ror

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	E	
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		

## 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 for Testers**

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 Testers**

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	i e	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		
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		
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		I TOMO I MOU
MSH-7.1	Time	20150625103328.757-0500	Presence-System Generated
MSH-9	Message Type	20130023103320.737 0300	resence System Generated
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		1
MSH-11		NIST-IZ-AD-8.1_Send_V04_Z22	Presence-System Generated
	Processing ID	P	Presence-Content Indifferent
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID	0.5.1	V 1 D C1 E' 1
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	1	
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
1.1U11 WU.1	1 Identified Type Code		, and took Cube I incu

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		- I I I I I I I I I I I I I I I I I I I
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	***	, and I follo I fact
PID-7.1	Time	20150516	Presence-Content Indifferent
PID-8	Administrative Sex	F	Value-Test Case Fixed
PID-10	Race	r	Value-Test Case Fixed
PID-10.1	Identifier	2054-5	Value-Test Case Fixed
PID-10.1	Text	African American	Presence-Test Case Proper
PID-10.2		1	Value-Profile Fixed
PID-10.3	Name of Coding System  Patient Address	CDCREC	value-Proffie Fixed
PID-11.1	Street Address	001 N. d. 10d. Gr	D C + 1 1'CC +
PID-11.1.1	Street or Mailing Address	901 North 12th St	Presence-Content Indifferent
PID-11.2	Other Designation	D.	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	РН	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 : 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	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	РН	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

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	1	
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 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/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

### OBX : Observation/Result -

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	253088698300005911160720	Value-Test Case Fixed
OBX-5.2	Text	Hepatitis B 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

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**

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 VIS
Date Vis Presented	06/25/2015

# 1.8.2. IZ-AD-8.2 Receive ACK Z23

Test Step Type: TA INITIATOR

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 for Testers**

**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	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	100	
MSH-7.1	Time	20150625103328.758-0500	
MSH-9	Message Type	20130023103328.738-0300	
MSH-9.1	Message Code	ACK	
MSH-9.2	Trigger Event	V04	
	Message Structure	ACK	
MSH-9.3		NIST-IZ-AD-	
MSH-10	Message Control ID	8.2_Receive_ACK_Z23	
MSH-11	Processing ID	1	
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		
MSH-23.1	Organization Name	NISTEHRFAC	
MSH-23.6	Assigning Authority		
MSH-23.6.1	Namespace ID	NIST-AA-IZ-1	
	1 mileopuee 1D	1	
	Universal ID	12 16 840 1 113883 3 77 5 40 9	
MSH-23.6.2	Universal ID Type	2.16.840.1.113883.3.72.5.40.9	
	Universal ID Universal ID Type Identifier Type Code	ISO	

# 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

Element	Data
This information will be automatically supplied by 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 for Testers**

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 Testers

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		
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		Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		
MSH-7.1	Time	20150625115038.030-0500	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-9.1 Send V04 Z22	Presence-System Generated
MSH-11	Processing ID		
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID	1	Tesence 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		
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
	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		
PID-3.1	ID Number	22533	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	I I I I I I I I I I I I I I I I I I I	vario Test Case Fraca
PID-5.1	Family Name		
PID-5.1.1	Surname	Wells	Presence-Content Indifferent
PID-5.2	Given Name	Lacy	Presence-Content Indifferent
PID-5.3	Second and Further Given Names or Initials Thereof	Lacy	Indifferent
PID-5.7	Name Type Code	L	Value-Test Case Fixed
PID-6	Mother's Maiden Name		, and Test Case I IACU
PID-6.1	Family Name		
PID-6.1.1	Surname		Indifferent
PID-6.7	Name Type Code		Indifferent
PID-7	Date/Time of Birth		Indifferent
PID-7.1	Time	20110430	Presence-Content Indifferent
PID-8	Administrative Sex	F	Value-Test Case Fixed
PID-8	Race	Γ	Value-Test Case Fixed
PID-10.1	Identifier	2106-3	Value-Test Case Fixed
PID-10.1 PID-10.2		White	
	Text	-	Presence-Test Case Proper
PID-10.3	Name of Coding System	CDCREC	Value-Profile Fixed
PID-11	Patient Address		
PID-11.1	Street Address	1031 1 0 1 0	D G + 1 1100
PID-11.1.1	Street or Mailing Address	12 North Oak St	Presence-Content Indifferent
PID-11.2	Other Designation	la la	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	1	
PID-13.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
PID-13.3	Telecommunication Equipment Type	РН	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	5552914	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	Indifferent
PID-25	Birth Order	1	Indifferent
PID-29	Patient Death Date and Time		
PID-29.1	Time		NonPresence
PID-30	Patient Death Indicator	N	Indifferent

PD1 : 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	РН	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: 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 Order

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	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

# 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	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	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		, 11100 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
RXA-10.1	ID Number	7824	Presence-Content Indifferent
RXA-10.2	Family Name		1000000 000000 00000
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	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	СР	Value-Test Case Fixed
KAA-20			I USU CUSU I IAUG

RXR[*]				
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

# -OBX[\*] -

# OBX : Observation/Result —

Location	Data Element	Data	Categorization
		Data	
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 =

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	253088698300013411180212	Value-Test Case Fixed
OBX-5.2	Text	Measles/Mumps/Rubella/Varice   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	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	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
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	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 -

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	253088698300017211160720	Value-Test Case Fixed
OBX-5.2	Text	Polio 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

# OBX : Observation/Result -

Location	<b>Data Element</b>	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	253088698300003511070517	Value-Test Case Fixed
OBX-5.2	Text	Diphtheria/Tetanus/Pertussis (DTaP) 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

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**

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		
Protection Indicator Effective Date	06/25/2015		

# —Guardian or Responsible Party —

Element	Data
Name	Janelle Trudeau
Relationship	Guardian
Address	12 North Oak St Bozeman MT 59715 USA
Phone Number	(406)555-2914

# $-{f V}$ accine 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	Measles/Mumps/Rubella/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 VIS
Date Vis Presented	06/25/2015
Document Type	Diphtheria/Tetanus/Pertussis (DTaP) 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 for Testers**

**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	
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		
	Identifier Type Code		
MSH-23.7			
MSH-23.10	Organization Identifier		

# MSA: Message Acknowledgment

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

# ERR[\*] -

# ERR : Error

Location	<b>Data Element</b>	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	

# ERR : Error -

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	

# ———Patient Information————

Element	Data
This information will be automatically supplied by 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 for Testers**

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 information including name, date of birth and sex. He declines further recall and reminder notifications. The patient reports that he received a pneumococcal vaccination at a local pharmacy on October 21, 2014. 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.

# 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 No PostCondition Test Objectives Evaluation Criteria Message Validation Report. Notes for Testers No Note

### **Message Contents**

MSH : Message Header

Location	Data Element	Data	Categorization
MSH-1	Field Separator	i e	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	THE THE T	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	No Filo Filo	Indifferent
MSH-6.3	Universal ID Type		Indifferent
MSH-7	Date/Time Of Message		And it vient
MSH-7.1	Time	20150625072816.601-0500	Presence-System Generated
MSH-9	Message Type	20130023072810.001-0300	Tresence-System Generated
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	10.1_Schu_v0+_E22	
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		resence-content manterent
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	CDCTIMITYS	Indifferent
MSH-21.4	Universal ID Type		Indifferent
MSH-22	Sending Responsible Organization		Indifferent
MSH-22.1	Organization Name	NISTEHRFAC	Presence-Configuration
MSH-22.6	Assigning Authority	NISTERIKFAC	riesence-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
	Receiving Responsible		maniciont
MSH-23	Organization	NICTUCEAC	Decree Confirmation
MSH-23.1	Organization Name	NISTIISFAC	Presence-Configuration
MSH-23.6	Assigning Authority		I. 1:00
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

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		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	Vasquez	Presence-Content Indifferent
PID-5.2	Given Name	Manuel	Presence-Content Indifferent
PID-5.3	Second and Further Given Names or 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		varue-rest case rixed
PID-10.1	Identifier	2106-3	Value-Test Case Fixed
PID-10.1	Text	White	Presence-Test Case Proper
PID-10.2		CDCREC	Value-Profile Fixed
PID-10.3	Name of Coding System  Patient Address	CDCREC	value-Florine Fixed
PID-11.1	Street Address	205 P. 1. 4	D G I 1'00
PID-11.1.1	Street or Mailing Address	227 Park Ave	Presence-Content Indifferent
PID-11.2	Other Designation	I_	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[1]	Phone Number - Home		
PID-13[1].2	Telecommunication Use Code	PRN	Value-Test Case Fixed
PID-13[1].3	Telecommunication Equipment Type	РН	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	5555815	Presence-Content Indifferent
PID-13[2]	Phone Number - Home		
PID-13[2].2	Telecommunication Use Code	NET	Value-Test Case Fixed
	Telecommunication Use Code Telecommunication Equipment Type	NET	Value-Test Case Fixed Indifferent
PID-13[2].2	Telecommunication Equipment	NET	
PID-13[2].2 PID-13[2].3	Telecommunication Equipment Type		Indifferent
PID-13[2].2 PID-13[2].3 PID-13[2].4	Telecommunication Equipment Type Email Address		Indifferent  Presence-Content Indifferent
PID-13[2].2 PID-13[2].3 PID-13[2].4 PID-13[2].6 PID-13[2].7	Telecommunication Equipment Type Email Address Area/City Code		Indifferent  Presence-Content Indifferent NonPresence
PID-13[2].2 PID-13[2].3 PID-13[2].4 PID-13[2].6	Telecommunication Equipment Type Email Address Area/City Code Local Number		Indifferent  Presence-Content Indifferent NonPresence
PID-13[2].2 PID-13[2].3 PID-13[2].4 PID-13[2].6 PID-13[2].7 PID-22	Telecommunication Equipment Type Email Address Area/City Code Local Number Ethnic Group	Manuel.Vasquez@isp.com	Indifferent  Presence-Content Indifferent  NonPresence  NonPresence

PID-24 PID-25	Multiple Birth Indicator Birth Order	N 1	Value-Test Case Fixed 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	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	ı	
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		
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

# -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
Birth Order	1

# -Immunization Registry Information -

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

# -Vaccine Administration Information -

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 for Testers**

**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	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	10.2_Receive_Renc_E25	
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 Acknowledgment

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	<b>Data Element</b>	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	Е	
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**

# -Patient Information

Element	Data
This information will be automatically supplied by 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.

# 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 for Testers**

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

Query requests an evaluated history and forecast for a young adult

### **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 for Testers**

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

Field Separator Encoding Characters		Value-Profile Fixed
	A \ 0	
	^~\&	Value-Profile Fixed
Sending Application		
Namespace ID	NISTEHRAPP	Presence-Configuration
Universal ID		Indifferent
Universal ID Type		Indifferent
	NISTEHRFAC	Presence-Configuration
-		Indifferent
-		Indifferent
	NISTIISAPP	Presence-Configuration
	1.00	Indifferent
		Indifferent
	NISTIISFAC	Presence-Configuration
•		Indifferent
		Indifferent
		Indifferent
	20141031145233 0500	Presence-System Generated
	20141031143233-0300	Treschee-System Generated
	ODD	Value-Profile Fixed
	1	Value-Profile Fixed
	1	1
		Value-Profile Fixed
-	NIST-IZ-QR-1.1_Query_Q11_Z44	Presence-System Generated
		D C I 1100
	P	Presence-Content Indifferent
	la s s	
		Value-Profile Fixed
	ER	Value-Profile Fixed
Туре	AL	Value-Profile Fixed
Message Profile Identifier		
Entity Identifier	Z44	Value-Profile Fixed
Namespace ID	CDCPHINVS	Value-Profile Fixed
Universal ID		Indifferent
Universal ID Type		Indifferent
Sending Responsible Organization	1	
Organization Name	NISTEHRFAC	Presence-Configuration
Assigning Authority		
Namespace ID	NIST-AA-1	Presence-Configuration
Universal ID		Indifferent
Universal ID Type		Indifferent
Identifier Type Code	XX	Value-Test Case Fixed
Organization Identifier	100-6482	Presence-Configuration
Receiving Responsible Organization		
Organization Name	NISTIISFAC	Presence-Configuration
Assigning Authority		
Namespace ID	NIST-AA-1	Presence-Configuration
Universal ID		Indifferent
-		Indifferent
	XX	Value-Test Case Fixed
	-	Presence-Configuration
	Sending Facility  Namespace ID  Universal ID  Universal ID Type  Receiving Application  Namespace ID  Universal ID  Universal ID  Universal ID Type  Receiving Facility  Namespace ID  Universal ID  Universal ID Type  Date/Time Of Message  Time  Message Type  Message Code  Trigger Event  Message Structure  Message Structure  Message Control ID  Processing ID  Version ID  Version ID  Accept Acknowledgment Type  Application Acknowledgment Type  Message Profile Identifier  Entity Identifier  Namespace ID  Universal ID Type  Sending Responsible Organization  Organization Name  Assigning Authority  Namespace ID  Universal ID Type  Identifier Type Code  Organization Identifier  Receiving Responsible  Organization  Organization Name  Assigning Authority  Namespace ID  Universal ID Type  Identifier Type Code  Organization Identifier	Sending Facility  Namespace ID  Universal ID  Universal ID Type  Receiving Application  Namespace ID  Universal ID  Outer Ime  Date/Time Of Message  Time  20141031145233-0500  Message Type  Message Code  QBP  Trigger Event  Q11  Message Structure  QBP Q11  Message Structure  QBP Q11  Message Control ID  NIST-IZ-QR-1.1_Query_Q11_Z44  Processing ID  Processing ID  Processing ID  Processing ID  Accept Acknowledgment Type  Application Acknowledgment Type  Message Profile Identifier  Entity Identifier  Entity Identifier  Entity Identifier  Z44  Namespace ID  Universal ID  NIST-AA-1  Universal ID  Universal ID  Universal ID  Universal ID  NIST-AA-1  Universal ID  Universal ID  Universal ID  NIST-AA-1

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-1.1-2015	Presence-System Generated
QPD-3	PatientList	12.1.1.2013	Tresence Bystem Generated
QPD-3.1	ID Number	171122	Value-Test Case Fixed
QPD-3.4	Assigning Authority	1,1122	, value 16st cust 1 inte
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	MIC	variet Test Case Fixed
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  Value-Test Case Fixed
QFD-4.2	Second and Further Given	Cameron	value-Test Case Fixed
QPD-4.3	Names or Initials Thereof	A	Value-Test Case Fixed
QPD-4.7	Name Type Code	L	Value-Test Case Fixed
QPD-5	PatientMotherMaidenName		
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	PatientDateOfBirth		
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**

Element	Data
Patient Name	Cameron A Fairchild
Mother's Maiden Name	Fairlady
ID Number	171122
Date/Time of Birth	02/14/2009
Sex	Male
Patient Address	105 Laurel Run Rd Bozeman MT
Patient Phone	
Birth Indicator	No
Birth Order	

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

Test Step Type: TA RESPONDER

No Description

### **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 for Testers**

**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**

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	20151031145233-0500	
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- 1.2 Response K11 Z42	
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	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		NIST-AA-1	
WISI1-23.0.1	Namespace ID		
MSH-23.6.2	Namespace ID Universal ID		
MSH-23.6.2	Universal ID		
		XX	

### MSA : Message Acknowledgment -

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 =

Location	Data Element	Data	Categorization
QAK-1	Query Tag	IZ-1.1-2015	
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-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	PatientName		
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	PatientMotherMaidenName		
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	MT	
QPD-8.5	Zip or Postal Code	1111	
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		
ζ-2	Sim order		

### PID: Patient Identification

Location	<b>Data Element</b>	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

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 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	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		
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		

### 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		

ODG	~	
-ORC:	Commo	n 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-9	Administration Notes		
RXA-9.1	Identifier	01	
RXA-9.2	Text	historical record	
RXA-9.3	Name of Coding System	NIP001	
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	

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-9	Administration Notes		
RXA-9.1	Identifier	01	
RXA-9.2	Text	historic immunization record	
RXA-9.3	Name of Coding System	NIP001	
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	

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	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-9	Administration Notes		
RXA-9.1	Identifier	01	
RXA-9.2	Text	historic immunization record	
RXA-9.3	Name of Coding System	NIP001	
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	

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-9	Administration Notes		
RXA-9.1	Identifier	01	
RXA-9.2	Text	historic immunization record	
RXA-9.3	Name of Coding System	NIP001	
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	

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-9	Administration Notes		
RXA-9.1	Identifier	01	
RXA-9.2	Text	historic immunization record	
RXA-9.3	Name of Coding System	NIP001	
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	

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-9	Administration Notes		
RXA-9.1	Identifier		
RXA-9.2	Text		
RXA-9.3	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	<b>Data Element</b>	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	

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	

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	

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 Element	Doto	Catagorization
	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		

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	

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	

Location	Data Element	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	

Location	Data Element	Data	Catagorization
	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		

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	

Location	Data Element	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	

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	

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	

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	

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	

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	

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	

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	

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	

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	

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	

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	

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	

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	

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	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	

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	
DBX-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—————		
1 aucht inioi mation		
Element	Data	
This information will be automatically supplied by the System		

# **Juror Document**

Evaluated Immunization H	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			

#### DISPLAY VERIFICATION

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, Stanley S. Clement 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 for Testers**

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.

ı	1-			

# 2.2.1. IZ-QR-2.1 Query Q11 Z44

Test Step Type: SUT INITIATOR

No Description

## **Test Story**

## **Description**

An adult male patient, Stanley S. Clement 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 for Testers**

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		
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
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	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		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	1	
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
	Identifier Type Code	XX	Value-Test Case Fixed
MSH-23.7	I Identifier I vibe Code	$ \Lambda\Lambda$	value-rest Case rixed

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-2.1-2015	Presence-System Generated
QPD-3	PatientList	12.1.2013	Tresence System Generated
QPD-3.1	ID Number	648286	Value-Test Case Fixed
QPD-3.4	Assigning Authority	010200	variate Test Case Fixed
QPD-3.4.1	Namespace ID	NIST-MPI-1	Value-Test Case Fixed
QPD-3.4.2	Universal ID	NIST WITT	Indifferent
QPD-3.4.3	Universal ID Type		Indifferent
QPD-3.5	Identifier Type Code	MR	Value-Test Case Fixed
	PatientName	IVIK	value-Test Case Fixed
QPD-4			<u> </u>
QPD-4.1	Family Name	la. 1	TV 1 m · G · D' · 1
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	PatientMotherMaidenName		
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	PatientDateOfBirth		
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
OPD-8.6	Country	USA	Value-Test Case Fixed
OPD-8.7	Address Type	P	Value-Test Case Fixed List
QPD-9	Phone	-	varde Test Case I med Elst
QPD-9.2	Telecommunication Use Code	PRN	Value-Test Case Fixed
	Telecommunication Equipment		
QPD-9.3	Туре	РН	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	5552020	Value-Test Case Fixed
QPD-10	Multiple birth indicator		Indifferent
QPD-11	Birth order		Indifferent

RCP : Response Control Parameter				
Location	<b>Data Element</b>	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**

Element	Data
Patient Name	Clement S Stanley
Mother's Maiden Name	Bell
D Number	648286
Date/Time of Birth	02/14/1950
Sex	Male
Patient Address	1642 Bear Run Bozeman MT 59715 USA
Patient Phone	(406)555-2020
Birth Indicator	No
irth Order	

# 2.2.2. IZ-QR-2.2 Response K11 Z42

Test Step Type: TA\_RESPONDER

return response to query for an adult with historical smallpox vaccination

## **Test Story**

#### **Description**

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**

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 for Testers**

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**

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	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	Z.Z_response_rerr_Z/Z	
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	
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	1-1-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2	
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	
	Organization Identifier	100-6482	
MSH-23.10	Organization identifier	100-0462	

## MSA : Message Acknowledgment -

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	PatientName		
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	PatientMotherMaidenName		
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	РН	
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 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[\*]-

## -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	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 : 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-9	Administration Notes		
RXA-9.1	Identifier	00	
RXA-9.2	Text	new immunization record	
RXA-9.3	Name of Coding System	NIP001	
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-9	Administration Notes		
RXA-9.1	Identifier		
RXA-9.2	Text		
RXA-9.3	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	

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 =

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		

ODA: 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 :	Obser	vation/	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	

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		

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		

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		

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		

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		

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	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		

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	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		

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		

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		

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		

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		

Location	Data Element	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		

Location	Data Element	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	Hep A	
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		

Location	Data Element	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		

Location	Data Element	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		

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		

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		

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		

# OBX : Observation/Result -

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		

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 Element	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		

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		

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		

Location	Data Element	Data	Categorization
OBX-1	Set ID - OBX	29	
OBX-2	Value Type	СЕ	
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		

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		

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		

# OBX : Observation/Result =

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		

Location	Data Element	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		

# **Test Data Specification**

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					

#### DISPLAY VERIFICATION

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	<b>Completion Status*</b>	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 for Testers**

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 for Testers**

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		
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		
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		
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	Universal ID Type	ISO	Indifferent
MSH-6	Receiving Facility	1	
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		manterent
MSH-7.1	Time	20150531145156-0500	Presence-System Generated
MSH-9	Message Type	20130331143130-0300	r resence-system Generated
MSH-9.1	Message Code	QBP	Value-Profile Fixed
			Value-Profile Fixed
MSH-9.2	Trigger Event	Q11	
MSH-9.3	Message Structure	QBP_Q11	Value-Profile Fixed
MSH-10	Message Control ID	NIST-IZ-QR-3.1_Query_Q11_Z4	4 Presence-System Generated
MSH-11	Processing ID	n	D C + 1 1'00 +
MSH-11.1	Processing ID	P	Presence-Content Indifferent
MSH-12	Version ID		Train Digital Inc.
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		
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
	omitoioni in Type	1	
MSH-23.7	Identifier Type Code	XX	Value-Test Case Fixed

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	Text Request Evaluated History and Forecast		
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	
QPD-3.4.2	Universal ID	2.16.840.1.113883.3.72.5.40.5	Indifferent	
QPD-3.4.3	Universal ID Type	ISO	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	Bee	Value-Test Case Fixed	
QPD-4.2	Given Name	Donna	Value-Test Case Fixed	
QPD-4.3	Second and Further Given Names or Initials Thereof	Victoria	Value-Test Case Fixed	
QPD-4.7	Name Type Code	L	Value-Test Case Fixed	
QPD-5	PatientMotherMaidenName			
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	РН	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	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	

# **Test Data Specification**

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 for Testers**

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**

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	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		
MSH-7.1	Time	20151031145233-0500	
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- 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		
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		
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	
MSH-23.7	Identifier Type Code	XX	
	Organization Identifier	100-6482	
MSH-23.10	Organization identifier	100-0402	

# MSA : Message Acknowledgment -

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	<b>Data Element</b>	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	PatientName		
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	PatientMotherMaidenName		
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	
QPD-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	MT	
QPD-8.5	Zip or Postal Code	59047	
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	РН	
QPD-9.4	Email Address		
QPD-9.6	Area/City Code	406	
QPD-9.7	Local Number	5553758	
QPD-10	Multiple birth indicator	Y	
QPD-11	Birth order	3	
Q1 D-11	Diffii Oluci	3	

# **Test Data Specification**

# Patient Information

Element	Data
This information will be automatically supplied by th	e System

# 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 for Testers**

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 for Testers**

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		
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
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	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-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	1	
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
4.44	. Jr	I .	1

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	12 1.1 2013	Tresence Bystem Generated
QPD-3.1	ID Number	412299	Value-Test Case Fixed
QPD-3.4	Assigning Authority	1122))	variet Test Case Fixed
QPD-3.4.1	Namespace ID	NIST-MPI-1	Value-Test Case Fixed
QPD-3.4.2	Universal ID	NIST WITT	Indifferent
QPD-3.4.3	Universal ID Type		Indifferent
QPD-3.5	Identifier Type Code	MR	Value-Test Case Fixed
QPD-4	PatientName	IVIX	value-Test Case Fixed
QPD-4.1			
	Family Name Surname	Smith	Value-Test Case Fixed
QPD-4.1.1		1	-
QPD-4.2	Given Name	James	Value-Test Case Fixed
QPD-4.3	Second and Further Given Names or Initials Thereof		Indifferent
QPD-4.7	Name Type Code	L	Value-Test Case Fixed
QPD-5	PatientMotherMaidenName		
QPD-5.1	Family Name		
QPD-5.1.1	Surname		Indifferent
QPD-5.7	Name Type Code		Indifferent
QPD-6	PatientDateOfBirth		
QPD-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		
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	РН	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
Λιη <u>-</u> 11	Ditti oruci		mannerent

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**

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 for Testers**

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**

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	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	
	1 talliespace 1B	I.	
MSH-23.6.2	Universal ID		
	Universal ID		
MSH-23.6.2 MSH-23.6.3 MSH-23.7	-	  XX	

# MSA : Message Acknowledgment

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	

Location	Data Element	Data	Categorization
OPD-1	Message Query Name		
QPD-1.1	Identifier	7.44	
QPD-1.2	Text	Request Evaluated History and Forecast	
QPD-1.3	Name of Coding System	CDCPHINVS	
QPD-2	Query Tag	IZ-4.1-2015	
QPD-3	PatientList		
QPD-3.1	ID Number	412299	
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	PatientName		
QPD-4.1	Family Name		
QPD-4.1.1	Surname	Smith	
QPD-4.2	Given Name	James	
QPD-4.3	Second and Further Given Names or Initials Thereof		
QPD-4.7	Name Type Code	L	
QPD-5	PatientMotherMaidenName		
QPD-5.1	Family Name		
QPD-5.1.1	Surname		
QPD-5.7	Name Type Code		
QPD-6	PatientDateOfBirth		
QPD-6.1	Time	20110905	
QPD-7	Patient Sex	M	
QPD-8	Patient Address		
QPD-8.1	Street Address		
QPD-8.1.1	Street or Mailing Address	22 East Branch Way	
QPD-8.2	Other Designation		
QPD-8.3	City	Livingston	
QPD-8.4	State or Province	MT	
QPD-8.5	Zip or Postal Code	59047	
QPD-8.6	Country		
QPD-8.7	Address Type	P	
QPD-9	Phone		
QPD-9.2	Telecommunication Use Code	PRN	
QPD-9.3	Telecommunication Equipment Type	РН	
QPD-9.4	Email Address		
QPD-9.6	Area/City Code	406	
QPD-9.7	Local Number	5556285	
QPD-10	Multiple birth indicator		
QPD-11	Birth order		

# **Test Data Specification**

# Patient Information

Element	Data	
This information will be automatically supplied by the System		