Description-

Ms. Janet Anderson is a 26 year old white female who presented with fever of unknown origin and generalized joint pain. In order to rule out infection and autoimmune disease, Dr. Nicholas Radon ordered an erythrocyte sedimentation rate (ESR or Sed Rate) blood test to be performed. A blood specimen for the ESR test was collected from the patient and sent to the clinical lab for processing. The analysis could not be performed because the specimen arrived clotted. No result value could be obtained. A Specimen Rejection message for this lab test was generated by the LIS and transmitted to the patient's record in the ambulatory EHR used in Dr. Radon's office practice.

Comments -

This test case tests handling of specimen rejection.

-PreCondition-

Patient information is pre-loaded in the EHR-S.

No other Pre-Condition.

PostCondition-

The test message information received by the EHR-S has been incorporated with the patient's record.

-TestObjectives

• Demonstrate the capability of the EHR-S to import and incorporate a valid Rejected Specimen message.

Notes to Testers

Since the specimen was rejected there is no lab result in the Juror Document; there is however specimen reject information that needs to be displayed.

This test case requires display verification only.

Concentrate on the following areas:

Result Report Status (OBR-25) is X

Information about the specimen condition (SPM-24) and reject reason (SPM-21)

A result value (OBX-5) showing that the test could not be performed with attached comment (NTE after OBX) as explanation.

- Test Case Information-

LRI_1.2_1.1-NG - Rejected SED Rate Message (No OBX segment; OBR.25 = X)

Test Case ID LRI_1.2_1.1-NG

		•
N/I	ш	

Location	Data Element	Data	Categorization
MSH.1	Field Separator	I	IG Fixed Data
MSH.2	Encoding Characters	^~\&	IG Fixed Data
MSH.3	Sending Application		
MSH.3.1	Namespace ID	NIST Test Lab APP	Configurable Data
MSH.4	Sending Facility		
MSH.4.1	Namespace ID	NIST Lab Facility	Configurable Data
MSH.6	Receiving Facility		
MSH.6.1	Namespace ID	NIST EHR Facility	Configurable Data
MSH.7	Date/Time Of Message		
MSH.7.1	Time	20150926140551	System Generated
MSH.9	Message Type		
MSH.9.1	Message Code	ORU	IG Fixed Data
MSH.9.2	Event Type	R01	IG Fixed Data
MSH.9.3	Message Structure	ORU_R01	IG Fixed Data
MSH.10	Message Control ID	LRI_1.2_1.1-NG	System Generated
MSH.11	Processing ID		
MSH.11.1	Processing ID	D	Changeable Data
MSH.12	VersionID		
MSH.12.1	Version ID	2.5.1	IG Fixed Data
MSH.15	Accept Acknowledgment Type	AL	IG Fixed Data
MSH.16	Application Acknowledgment Type	AL	IG Fixed Data
MSH.21	Message Profile Identifier		
MSH.21.1	Entity Identifier	LRI_Common_Component	IG Fixed Data
MSH.21.3	Universal ID	2.16.840.1.113883.9.16	IG Fixed Data
MSH.21.4	Universal ID Type	ISO	IG Fixed Data
MSH.21[2]	Message Profile Identifier		
MSH.21[2].1	Entity Identifier	LRI_NG_Component	IG Fixed Data
MSH.21[2].3	Universal ID	2.16.840.1.113883.9.13	IG Fixed Data
MSH.21[2].4	Universal ID Type	ISO	IG Fixed Data
MSH.21[3]	Message Profile Identifier		
MSH.21[3].1	Entity Identifier	LRI FRU Component	IG Fixed Data
MSH.21[3].3	Universal ID	2.16.840.1.113883.9.83	IG Fixed Data
MSH.21[3].4	Universal ID Type	ISO	IG Fixed Data

-PID-

Location	Data Element	Data	Categorization
PID.1	Set ID - PID	1	IG Fixed Data
PID.3	Patient Identifier List		
PID.3.1	ID Number	PATID1236	Configurable Data
PID.3.4	Assigning Authority		
PID.3.4.1	Namespace ID	NIST MPI	Changeable Data
PID.3.5	Identifier Type Code	MR	Configurable Data
PID.5	Patient Name		
PID.5.1	Family Name		
PID.5.1.1	Surname	Anderson	Changeable Data
PID.5.2	Given Name	Janet	Changeable Data
PID.5.7	Name Type Code	L	Changeable Data
PID.7	Date/Time of Birth		
PID.7.1	Time	19860930	Changeable Data

PID.\Location	Administrati yy a§a Element	F Data	Changeahegortzation
PID.10	Race		
PID.10.1	Identifier	2106-3	Changeable Data
PID.10.2	Text	White	Changeable Data
PID.10.3	Name of the Coding System	HL70005	Changeable Data
PID.18	Patient Account Number		
PID.18.1	ID Number	PATID1236	Configurable Data
PID.18.4	Assigning Authority		
PID.18.4.1	Namespace ID	NIST MPI	Changeable Data
PID.18.5	Identifier Type Code	AN	Configurable Data

-ORC-

Location	Data Element	Data	Categorization
ORC.1	Order Control	RE	Test Case Fixed Data
ORC.2	Placer Order Number		
ORC.2.1	Entity Identifier	ORD723222-1	Changeable Data
ORC.2.2	Namespace ID	NIST EHR	Changeable Data
ORC.3	Filler Order Number		
ORC.3.1	Entity Identifier	R-783274-1	Changeable Data
ORC.3.2	Namespace ID	NIST Lab Filler	Changeable Data
ORC.4	Placer Group Number		
ORC.4.1	Entity Identifier	GORD874222	Changeable Data
ORC.4.2	Namespace ID	NIST EHR	Changeable Data
ORC.12	Ordering Provider		
ORC.12.1	ID Number	5742200012	Changeable Data
ORC.12.2	Family Name		
ORC.12.2.1	Surname	Radon	Changeable Data
ORC.12.3	Given Name	Nicholas	Changeable Data
ORC.12.9	Assigning Authority		
ORC.12.9.1	Namespace ID	NPI	Changeable Data
ORC.12.10	Name Type Code	L	Changeable Data
ORC.12.13	Identifier Type Code	NPI	Changeable Data

-OBR-

Location	Data Element	Data	Categorization
OBR.1	Set ID - OBR	1	IG Fixed Data
OBR.2	Placer Order Number		
OBR.2.1	Entity Identifier	ORD723222-1	Changeable Data
OBR.2.2	Namespace ID	NIST EHR	Changeable Data
OBR.3	Filler Order Number		
OBR.3.1	Entity Identifier	R-783274-1	Changeable Data
OBR.3.2	Namespace ID	NIST Lab Filler	Changeable Data
OBR.4	Universal Service Identifier		
OBR.4.1	Identifier	30341-2	Test Case Fixed Data
OBR.4.2	Text	Erythrocyte sedimentation rate	Test Case Fixed Data
OBR.4.3	Name of Coding System	LN	Test Case Fixed Data
OBR.4.4	Alternate Identifier	500	Changeable Data
OBR.4.5	Alternate Text	Erythrocyte sedimentation rate	Changeable Data
OBR.4.6	Name of Alternate Coding System	99USL	Changeable Data
OBR.4.7	Coding System Version	2.52	Changeable Data
OBR.4.9	Original Text	Erythrocyte sedimentation rate	Changeable Data
OBR.7	Observation Date/Time		
OBR.7.1	Time	201509251400	Changeable Data
OBR.16	Ordering Provider		
OBR.16.1	ID Number	5742200012	Changeable Data
OBR.16.2	Family Name		
OBR.16.2.1	Surname	Radon	Changeable Data

OBRocation	Given Nam Data Element	Nicholas Data	Changealle gorization
OBR.16.9	Assigning Authority		
OBR.16.9.1	Namespace ID	NPI	Changeable Data
OBR.16.10	Name Type Code	L	Changeable Data
OBR.16.13	Identifier Type Code	NPI	Changeable Data
OBR.22	Results Rpt/Status Chng - Date/Time		
OBR.22.1	Time	20150926140551	Changeable Data
OBR.25	Result Status	X	Test Case Fixed Data

-OBX-

Location	Data Element	Data	Categorization
OBX.1	Set ID - OBX	1	IG Fixed Data
OBX.2	Value Type	ST	Test Case Fixed Data
OBX.3	Observation Identifier		
OBX.3.1	Identifier	30341-2	Test Case Fixed Data
OBX.3.2	Text	Erythrocyte sedimentation rate	Test Case Fixed Data
OBX.3.3	Name of the Coding System	LN	Test Case Fixed Data
OBX.3.4	Alternate Identifier	815117	Changeable Data
OBX.3.5	Alternate Text	ESR	Changeable Data
OBX.3.6	Name of Alternate Coding System	99USL	Changeable Data
OBX.3.7	Coding System Version	2.52	Changeable Data
OBX.3.9	Original Text	Erythrocyte sedimentation rate	Changeable Data
OBX.4	Observation Sub-ID		
OBX.4.2	Group	1	Test Case Fixed Data
OBX.4.3	Sequence	1	Test Case Fixed Data
OBX.4.4	Identifier	1	Test Case Fixed Data
OBX.5	Observation Value	Test could not be performed, see Note for details	Changeable data
OBX.11	Observation Result Status	X	Test Case Fixed Data
OBX.14	Date/Time of the Observation		
OBX.14.1	Time	201509251400	Changeable Data
OBX.19	Date/Time of the Analysis		
OBX.19.1	Time	20150926130550	Changeable Data
OBX.23	Performing Organization Name		
OBX.23.1	Organization Name	Century Hospital	Changeable Data
OBX.23.6	Assigning Authority	3 1	
OBX.23.6.1	Namespace ID	CLIA	Changeable Data
OBX.23.7	Identifier Type Code	XX	Changeable Data
OBX.23.10	Organization Identifier	24D9871327	Changeable Data
OBX.24	Performing Organization Address	1.533.332,	Transferred Land
OBX.24.1	Street Address		
OBX.24.1.1	Street or Mailing Address	2070 Test Park	Changeable Data
OBX.24.3	City	Los Angeles	Changeable Data
OBX.24.4	State or Province	CA	Changeable Data
OBX.24.5	Zip or Postal Code	90067	Changeable Data
OBX.24.6	Country	USA	Changeable Data
OBX.24.7	Address Type	В	Changeable Data
OBX.24.9	County/Parish Code	06037	Changeable Data
OBX.25	Performing Organization Medical Director		
OBX.25.1	ID Number	5432178916	Changeable Data
OBX.25.2	Family Name		
OBX.25.2.1	Surname	Knowsalot	Changeable Data
OBX.25.3	Given Name	Phil	Changeable Data
OBX.25.4	Second and Further Given Names or Initials Thereof	J.	Changeable Data
OBX.25.5	Suffix (e.g., JR or III)	III	Changeable Data

OB Location	Prefix (e.g., Data Element	Dr.	Data	Changeallego rization
OBX.25.9	Assigning Authority			
OBX.25.9.1	Namespace ID	NPI		Changeable Data
OBX.25.10	Name Type Code	L		Changeable Data
OBX.25.13	Identifier Type Code	NPI		Changeable Data
OBX.29	Observation Type	RSLT		Test Case Fixed Data
OBX.30	Observation SubType	UNSP		Test Case Fixed Data

-NTE-

Location	Data Element	Data	Categorization
NTE.1	Set ID - NTE	1	IG Fixed Data
NTE.3	Comment	Blood in tube was clotted, resulting in a rejection of the specimen and leaving the lab unable to perform this test. Please resubmit a new specimen, if test is still desired.	Changeable Data

-SPM-

Location	Data Element	Data	Categorization
SPM.1	Set ID - SPM	1	IG Fixed Data
SPM.2	Spe cime n ID		
SPM.2.1			
SPM.2.1.1		S-2015-66	Configurable Data
SPM.2.1.2		GoodHealthC_EHR	Configurable Data
SPM.2.2			
SPM.2.2.1		S-9911-33	Changeable Data
SPM.2.2.2		NIST Lab Filler	Changeable Data
SPM.4	Specimen Type		
SPM.4.1	Identifier	119297000	Changeable Data
SPM.4.2	Text	BLD	Changeable Data
SPM.4.3	Name of the Coding System	SCT	Changeable Data
SPM.4.4	Alternate Identifier	BldSpc	Changeable Data
SPM.4.5	Alternate Text	Blood	Changeable Data
SPM.4.6	Name of Alternate Coding System	99USL	Changeable Data
SPM.4.7	Coding System Version	201509USEd	Changeable Data
SPM.4.9	Original Text	Blood Specimen	Changeable Data
SPM.17	Specimen Collection Date/Time		
SPM.17.1	Range Start Date/Time		
SPM.17.1.1	Time	201509251400	Changeable Data
SPM.21	Specimen Reject Reason		
SPM.21.1	Identifier	RC	Changeable Data
SPM.21.2	Text	Clotting	Changeable Data
SPM.21.3	Name of the Coding System	HL70490	Changeable Data
SPM.21.4	Alternate Identifier	C	Changeable Data
SPM.21.5	Alternate Text	Clotting	Changeable Data
SPM.21.6	Name of Alternate Coding System	99USL	Changeable Data
SPM.21.9	Original Text	Blood specimen clotted	Changeable Data
SPM.24	Specimen Condition		
SPM.24.1	Identifier	CLOT	Changeable Data
SPM.24.2	Text	Clotted	Changeable Data
SPM.24.3	Name of the Coding System	HL70493	Changeable Data
SPM.24.4	Alternate Identifier	C	Changeable Data
SPM.24.5	Alternate Text	Clotted	Changeable Data
SPM.24.6	Name of Alternate Coding System	99USL	Changeable Data
SPM.24.9	Original Text	blood specimen clotted	Changeable Data

-Patient Information-

Ele me nt	Data
Name	Janet Anderson
Date/Time of Birth	09/30/1986
Administrative Sex	Female
Race	White
Alt Race	

Order Observation

Ordering Provider-

Element	Data
Name	Nicholas Radon
Identifier number	5742200012

Observation Details

Observation Details————————————————————————————————————						
Element	Data					
Observation General Information						
Placer Order Number	ORD723222-1					
Filler Order Number	R-783274-1					
Placer Group Number	GORD874222					
Parent Universal Service Identifier						
Identifier						
Text						
Alt Identifier						
Alt Text						
Original Text						
Observation Details						
Universal Service Identifier	Erythrocyte sedimentation rate					
Observation Date/Time	09/25/2015 2:00 PM					
Observation end Date/Time						
Specimen Action Code						
Relevant Clinical Information						
Relevant Clinical Information Original Text						
Observation Result Information						
Result Status	X					
Results Report/Status Change - Date/Time	09/26/2015 2:05 PM					
Results Handling						
Standard						
Observation Notes						

-Timing/Quantity Information-

Element	Data
Priority	
Start Date/time	
End Date/time	

_							
_	Results Performing Laboratory————————————————————————————————————						
	Element	Data					
	Laboratory Name	Century Hospital					
Organization identifier		24D9871327					
	Address 2070 Test Park Los Angeles CA 90067 USA						
Director Name		Dr. Phil J. Knowsalot III					
	Director identifier	5432178916					

Element	Data
Specimen Type	BLD
Alt Specimen Type	Blood
Specimen Original Text	Blood Specimen
Start date/time	201509251400
Specimen Reject Reason	Clotting
Alt Specimen Reject Reason	Clotting
Reject Reason Original Text	Blood specimen clotted
Specimen Condition	Clotted
Alt Specimen Condition	Clotted
Condition Original Text	blood specimen clotted

				—Lab resul	ts			
Ele me nt				Data				
Test performe	ed			Erythrocyte	sedimentatio	n rate		
Test Report d	ate			09/26/2015	14:05			
Result Observation Name	Result	UOM	Range	Abnormal Flag	Status	Date/Time of Observation	Date/Time of Analysis	Notes
Erythrocyte sedimentation rate	Test could not be performed, see Note for details				X	09/25/2015 14:00	09/26/2015 13:05	Blood in tub was clotted, resulting in a rejection of the specime and leaving the lab unab to perform this test. Please resubmit a new specimen, if test is still desired.

HL7 v2.5 ORU^R01^ORU_R01 Message: Incorporation of Laboratory Results					
Test Case ID	LRI_1.2_1.1-NG				
Juror ID					
Juror Name					
HIT System Tested					
Inspection Date/Time					
Inspection Settlement (Pass/Fail)	Pass	Fail			
Inspection Settlement (Fass/Fan)					
Reason Failed					
Juror Comments					

This Test Case-specific Juror Document provides a checklist for the Tester to use during testing for assessing the Health IT Module's ability to display and incorporate required data elements from the information received in the LRI message. Additional data from the message or from the Health IT Module are permitted to be displayed and incorporated by the Module. Grayed-out fields in the Juror Document indicate where no data for that data element were included in the LRI message for the given Test Case.

The format of the Display Verification section of this Juror Document is for ease-of-use by the Tester and does not indicate how the Health IT Module display must be designed.

Display Verification

Legend for Display Requirement

Data in **bold red** text: HIT Module must display exact version of stored data

Data in bold black italics text: HIT Module must display exact version of data received in the LRI message

Data in regular text: HIT Module may display equivalent version of stored data

Patient Information - Display Verification							
Patient Identifier Patient Name DOB Sex Race							
PATID1236	Janet Anderson		F	White			
	When a given patient has more than one Patient ID Number, the HIT module may display the ID Number that is most appropriate for the context (e.g., inpatient ID Number versus ambulatory ID Number.)						

	Lab Results - Display Verification								
Test Performed:	est Performed: Erythrocyte sedimentation rate								
Test Report Date:	09/26/2015	09/26/2015 14:05:51							
Result Report Status	X	X							
Result Observation Name	Result Value						Tester Comment		
Erythrocyte sedimentation rate	Test could not be performed, see Note for details				X	09/25/2015 14:00:		09/26/2015 13:05:50	
Note	Blood in tube was clotted, resulting in a rejection of the specimen and leaving the lab unable to perform this test. Please resubmit a new specimen, if test is still desired.								

Performing Organization Information - Display Verification					
Data Element Name	Data	Tester Comment			
Organization Name	Century Hospital				
Organization Address					
Street address	2070 Test Park				
Other designation					
City	Los Angeles				
State	CA				
Zip code	90067				

Performing Organization Medical Director Information - Display Verification						
Data Element Name	Data	Tester Comment				
Medical Director Name						
Family Name						
Surname	Knowsalot					
Given Name	Phil					
Second and Further Given Names or Initials Thereof	J.					
Suffix (e.g., JR or III)	III					
Prefix (e.g., DR)	Dr.					

Specimen Information - Display Verification						
Data Element Name	Data	Tester Comment				
Specimen Type(Specimen Source)	Blood Specimen					
Specimen Collection Date/Time - Start	09/25/2015 14:00:					
Specimen Collection Date/Time - End						
Specimen Reject Reason	Blood specimen clotted					
Specimen Condition	blood specimen clotted					

Order Information - Display Verification					
Data Element Name	Tester Comment				
Relevant Clinical Information					
Placer Order Number Entity ID	ORD723222-1				
Ordering Provider					
Family Name					
Surname	Radon				
Given Name	Nicholas				
Second and Further Given Names or Initials Thereof					
Suffix (e.g., JR or III)					
Prefix (e.g., DR)					

Incorporate Verification

Legend for Store Requirement

S-EX: Store exact

 $S-TR-R: Translate \ and \ store \ translation \ (exact \ value \ can \ be \ re-created \ from \ translation \ any \ time)$

S-EX-A: Store exact by association

S-RC: Process and re-create

S-EQ : Store equivalent

(See "Instructions to Testers for Verification of Store Requirements" at the end of this Juror Document for additional details.)

	Patient Information Details- Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment	
PID-3	Patient Identifier List				
PID-3.1	ID Number	S-EX-A	PATID1236		
PID-3.4	Assigning Property				
PID-3.4.1	Namespace ID	S-EX-A	NIST MPI		
PID-3.4.2	Universal ID	S-EX-A			
PID-3.4.3	Universal ID Type	S-EX-A			
PID-3.5	Identifier Type Code	S-RC	MR		
PID-5	Patient Name				
PID-5.1	Family Name				
PID-5.1.1	Surname	S-EX-A	Anderson		
PID-5.2	Given Name	S-EX-A	Janet		
PID-5.3	Second and Further Given Names or Initials Thereof	S-EX-A			
PID-5.4	Suffix (e.g., JR or III)	S-EX-A			
PID-5.7	Name Type Code	S-RC	L		
PID-7	Date/Time of Birth				
PID-7.1	Time	S-EQ	09/30/1986		
PID-8	Administrative Sex	S-TR-R	F		
PID-10	Race				
PID-10.1	Identifier	S-RC	2106-3		
PID-10.2	Text	S-RC	White		
PID-10.3	Name of Coding System	S-RC	HL70005		

	Order Information - Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment	
ORC-2/OBR-2	Placer Order Number				
ORC-2.1/OBR- 2.1	Entity Identifier	S-EX-A	ORD723222-1		
ORC-2.2/OBR- 2.2	Namespace ID	S-EX-A	NIST EHR		
ORC-2.3/OBR- 2.3	Universal ID	S-EX-A			
ORC-2.4/OBR- 2.4	Universal ID Type	S-EX-A			
ORC-3/OBR-3	Filler Order Number				
ORC-3.1/OBR- 3.1	Entity Identifier	S-EX	R-783274-1		
ORC-3.2/OBR- 3.2	Namespace ID	S-EX-A	NIST Lab Filler		
ORC-3.3/OBR- 3.3	Universal ID	S-EX-A			
ORC-3.4/OBR- 3.4	Universal ID Type	S-EX-A			
ORC-12/OBR-16	Ordering Provider				
ORC-12.1/OBR- 16.1	ID Number	S-RC	5742200012		
ORC- 12.2/OBR-16.2	Family Name				
ORC- 12.2.1/OBR-16.2.1	Surname	S-RC	Radon		
ORC-12.3/OBR- 16.3	Given Name	S-RC	Nicholas		
ORC-12.4/OBR- 16.4	Second and Further Given Names or Initials Thereof	S-RC			
16.5	Sumx (e.g., JR or m)	S-RC			
ORC-12.6/OBR- 16.6	Prefix (e.g., DR)	S-RC			
ORC- 12.9/OBR-16.9	Assigning Authority				
ORC- 12.9.1/OBR-16.9.1	Namespace ID	S-EX-A	NPI		
ORC- 12.9.2/OBR-16.9.2	Universal ID	S-EX-A			
ORC- 12.9.3/OBR-16.9.3	Universal ID Type	S-EX-A			
ORC- 12.10/OBR-16.10	Name Type Code	S-RC	L		
ORC- 12.13/OBR-16.13	Identifier Type Code	S-RC	NPI		

Performing Organization Information - Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment
OBX-23	Performing Organization Name			
OBX-23.1	Organization Name (Note 1)	S-TR-R	Century Hospital	
OBX-23.6	Assigning Authority (Note 2)			
OBX-23.6.1	Namespace ID	S-EX-A	CLIA	
OBX-23.6.2	Universal ID	S-EX-A		
OBX-23.6.3	Universal ID Type	S-EX-A		
OBX-23.7	Identifier Type Code	S-RC	XX	
OBX-23.10	Organization Identifier	S-TR-R	24D9871327	
OBX-24	Performing Organization Address			
OBX-24.1	Street Address			
OBX-24.1.1	Street or Mailing Address	S-EX-A	2070 Test Park	
OBX-24.2	Other Designation	S-EX-A		
OBX.24.3	City	S-EX-A	Los Angeles	
OBX-24.4	State or Province	S-EX-A	CA	
OBX-24.5	Zip or Postal Code	S-EX-A	90067	
OBX-24.6	Country	S-TR-R	USA	
OBX-25	Performing Organization Medical Director			
OBX-25.1	ID Number	S-RC	5432178916	
OBX-25.2	Family Name			
OBX-25.2.1	Surname	S-TR-R	Knowsalot	
OBX-25.3	Given Name	S-TR-R	Phil	
OBX-25.4	Second and Further Given Names or Initials Thereof	S-TR-R	J.	
OBX-25.5	Suffix (e.g., JR or III)	S-TR-R	III	
OBX-25.6	Prefix (e.g., DR)	S-TR-R		
OBX-25.9	Assigning Authority (Note 2)			
OBX-25.9.1	Namespace ID	S-EX-A	NPI	
OBX-25.9.2	Universal ID	S-EX-A		
OBX-25.9.3	Universal ID Type	S-EX-A		
OBX-25.10	Name Type Code	S-RC	L	
OBX-25.13	Identifier Type Code	S-RC	NPI	

Note 1 - The HIT Module must store the Organization Name or be able to recreate it. If the HIT Module is able to demonstrate Organization Name: ID is always 1:1, then the HIT Module is permitted to store and recreate (S-TR-R).

Note 2 - Determine requirement for support of 2nd component or 3rd and 4th component based on the EI or HD Profile

Order Information (cont'd) - Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment
OBR-4	Universal Service Identifier (Note 1)			
OBR-4.1	Identifier	S-TR-R	30341-2	
OBR-4.2	Text	S-EX-A	Erythrocyte sedimentation rate	
OBR-4.3	Name of the Coding System	S-RC	LN	
OBR-4.4	Alternate Identifier	S-TR-R	500	
OBR-4.5	Alternate Text	S-EX-A	Erythrocyte sedimentation rate	
OBR-4.6	Name of Alternate Coding System	S-RC	99USL	
OBR-4.9	Original Text	S-EX	Erythrocyte sedimentation rate	
OBR-7/SPM-17.1	Observation Date/Time			
OBR-7.1/SPM- 17.1.1	Time	S-EQ	09/25/2015 14:00:	
OBR-8/SPM-17.2	Observation End Date/Time			
OBR-8.1/SPM- 17.2.1	Time	S-EQ		
OBR-13	Relevant Clinical Information			
OBR-13.1	Identifier	S-TR-R		
OBR-13.2	Text	S-EX-A		
OBR-13.3	Name of the Coding System	S-RC		
OBR-13.9	Original Text	S-EX		
OBR-22	Results Rpt/Status Chng - Date/Time			
OBR-22.1	Time	S-EQ	09/26/2015 14:05:51	
OBR-25	Result Status	S-TR-R	X	

Note 1 -Store the <u>Identifier</u> and the <u>Text</u> for each populated triplet using the S-EX-A, S-TR-R, or S-EX store requirement as indicated. If <u>Original Text</u> field is populated, MUST store the exact data received.

Result Information - Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment
OBX-3	Observation Identifier (Note 1)			
OBX-3.1	Identifier	S-TR-R	30341-2	
OBX-3.2	Text	S-EX-A	Erythrocyte sedimentation rate	
OBX-3.3	Name of the Coding System	S-RC	LN	
OBX-3.4	Alternate Identifier	S-TR-R	815117	
OBX-3.5	Alternate Text	S-EX-A	ESR	
OBX-3.6	Name of Alternate Coding System	S-RC	99USL	
OBX-3.9	Original Text	S-EX	Erythrocyte sedimentation rate	
OBX-5	Observation Value	S-EX	Test could not be performed, see Note for details	
OBX-6	Units (Note 2)			
OBX-6.1	Identifier	S-TR-R		
OBX-6.2	Text	S-TR-R		
OBX-6.3	Name of the Coding System	S-RC		
OBX-6.4	Alternate Identifier	S-TR-R		
OBX-6.5	Alternate Text	S-TR-R		
OBX-6.6	Name of Alternate Coding System	S-RC		
OBX-6.9	Original Text	S-EX		
OBX-7	Reference Range	S-EX		
OBX-8	Abnormal Flags	S-TR-R		
OBX-11	Observation Result Status	S-TR-R	Х	
OBX-14	Date/Time of the Observation			
OBX-14.1	Time	S-EQ	09/25/2015 14:00:	
OBX-19	Date/Time of the Analysis			
OBX-19.1	Time	S-EQ	09/26/2015 13:05:50	

Note 1 - Store the <u>Identifier</u> and the <u>Text</u> for each populated triplet using the S-EX-A, S-TR-R, or S-EX store requirement as indicated. If <u>Original Text</u> field is populated, MUST store the exact data received.

Note 2 - If both UOM triplets are populated, receiver may choose to store the data received in either triplet; translations must result in equivalent UOM that do not require a change in the numeric result.

Note - Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment
NTE-3	Note	S-EX	Blood in tube was clotted, resulting in a rejection of the specimen and leaving the lab unable to perform this test. Please resubmit a new specimen, if test is still desired.	

Specimen Information - Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment
SPM-4	Specimen Type (Note 1)			
SPM-4.1	Identifier	S-TR-R	119297000	
SPM-4.2	Text	S-EX-A	BLD	
	Name of the Coding System	S-RC	SCT	
SPM-4.4	Alternate Identifier	S-TR-R	BldSpc	
SPM-4.5	Alternate Text	S-EX-A	Blood	
	Name of Alternate Coding System	S-RC	99USL	
SPM-4.9	Original Text	S-EX	Blood Specimen	
	Specimen Reject Reason (Note 1)			
SPM-21.1	Identifier	S-TR-R	RC	
SPM-21.2	Text	S-EX-A	Clotting	
	Name of the Coding System	S-RC	HL70490	
SPM-21.4	Alternate Identifier	S-TR-R	С	
SPM-21.5	Alternate Text	S-EX-A	Clotting	
	Name of Alternate Coding System	S-RC	99USL	
SPM-21.9	Original Text	S-EX	Blood specimen clotted	
	Specimen Condition (Note 1)			
SPM-24.1	Identifier	S-TR-R	CLOT	
SPM-24.2	Text	S-EX-A	Clotted	
	Name of the Coding System	S-RC	HL70493	
SPM-24.4	Alternate Identifier	S-TR-R	С	
SPM-24.5	Alternate Text	S-EX-A	Clotted	
	Name of Alternate Coding System	S-RC	99USL	
SPM-24.9	Original Text	S-EX	blood specimen clotted	

Note 1 - The HIT must store the <u>Identifier</u> and the <u>Text</u> for each populated triplet using the S-EX-A, S-TR-R, or S-EX store requirement as indicated. If <u>Original Text</u> field is populated, MUST store the exact data received.

Instructions to Testers for Verification of Store Requirements

Note: The HIT Module being tested is always allowed to incorporate/store the exact data received in the LRI message even if a given Store Requirement does not explicitly state that the HIT Module is permitted to do so.

Store Requirement	Definition	Instructions for Verification of Requirement During Conformance Testing
S-EX	Store Exact	The HIT Module being tested must be designed to incorporate/store only the exact data received in the LRI message. • Tester must verify that the HIT Module being tested incorporates/stores in the patient's laboratory result record only the exact data received in the LRI message, and that the HIT Module does not just store an equivalent of that exact data or just a pointer to the exact data.
S-EX-A	Store exact by association	The HIT Module being tested must be designed (1) to incorporate/store the exact data received in the LRI message OR (2) to use a pointer to a location (e.g., file/table in or accessible to the HIT Module) where the exact data can be obtained. • Tester must verify that the HIT Module being tested incorporates/stores in the patient's laboratory result record the exact data received in the LRI message OR that the HIT Module incorporates/stores in the patient's laboratory result record a pointer to the exact data received in the LRI message. Example: Placer Number; the HIT-originated Placer Number received in the LRI message may be incorporated/stored using a pointer rather than being stored redundantly in the patient's lab result record.
S-EQ	Store equivalent	The HIT Module being tested must be designed to transform the exact data received in the LRI message to an equivalent format and then incorporate/store the equivalent format. • Tester must verify that the HIT Module being tested transforms the exact data received in the LRI message to an equivalent format and incorporates/stores the equivalent format in the patient's laboratory result record.
S-TR-R	Translate and store translation (exact value can be re-created from translation any time)	The HIT Module being tested must be designed to transform the exact data received in the LRI message to an equivalent value and then incorporate/store the equivalent value. • Tester must verify that the HIT Module being tested incorporates/stores in the patient's laboratory result record the equivalent value. • Tester must also verify that the HIT Module is able to re-create from this equivalent value the exact data received in the LRI message.
S-RC	Process and re-create	The HIT Module being tested must be designed to process and incorporate/store in an "abstract-able manner" (e.g., using the HIT Module's data model) the exact data received in the LRI message and to re-create the exact data (e.g., from the HIT Module's data model). • Tester must verify that the HIT Module being tested processes and abstractly incorporates/stores in the patient's laboratory result record the exact data received in the LRI message. • Tester also must verify that the HIT Module is able to re-create the exact data received in the LRI message by abstracting the data (e.g., from the HIT Module's data model). Example: Identifier Type Code; the HIT Module uses a separate file/table to store Social Security Numbers versus internal Medical Record Numbers, and does not need to retain the Identifier Type Code

 $MSH|^{\sim}\&|NIST\ Test\ Lab\ APP|NIST\ Lab\ Facility||NIST\ EHR\ Facility|20150926140551||ORU^{R}01^{O}RU_{R}01|LRI_{L}2_{.}1.1-NG|D|2.5.1|\\ ||AL|AL||||LRI_Common_Component^{\sim}2.16.840.1.113883.9.16^{I}SO\sim LRI_NG_Component^{\sim}2.16.840.1.113883.9.13^{I}SO\sim LRI_FRU_Component^{\sim}2.16.840.1.113883.9.83^{I}SO$

PID|1||PATID1236^^^NIST MPI^MR||Anderson^Janet^^^^L||19860930|F||2106-3^White^HL70005||||||||PATID1236^^^NIST MPI^AN

ORC|RE|ORD723222-1^NIST EHR|R-783274-1^NIST Lab Filler|GORD874222^NIST EHR||||||||5742200012^Radon^Nicholas^^^^^NPI^L^^NPI

 $OBX|1|ST|30341-2^{Erythrocyte}\ sedimentation\ rate^{LN^815117^{ESR^99USL^2.52^{Erythrocyte}}\ sedimentation\ rate}|1^1^1|Test\ co\ uld\ not\ be\ performed,\ see\ Note\ for\ details|||||X|||201509251400|||||20150926130550||||Century\ Hospital^^^^CLIA^XX^^24\ D9871327|2070\ Test\ Park^^Los\ Angeles^CA^90067^USA^B^06037|5432178916^Knowsalot^Phil^J.^III^Dr.^^NPI^L^^NPI|||RSLT|UN\ SP$

NTE[1||Blood in tube was clotted, resulting in a rejection of the specimen and leaving the lab unable to perform this t est. Please resubmit a new specimen, if test is still desired.

 $SPM[1|S-2015-66\&GoodHealthC_EHR^S-9911-33\&NIST\ Lab\ Filler\\ \|119297000^*BLD^*SCT^*BldSpc^*Blood^99USL^201509USEd^*Blood\\ Speci$

 $men \cite{Millimit} 201509251400 \cite{Millimit} RC^Clotting^HL70490^C^Clotting^99USL^{^*}Blood specimen clotted \cite{Millimit} CLOT^Clotted^HL70493^C^C \cite{Millimit} blood specimen clotted$