

Description

Based on LRI_1.0_Sed_Rate and LRI_1.1_Sed_Rate:

Mr. William A. Jones is a 51 year old white male who presented with pain, swelling, and redness in several joints including his elbows, wrists, knees, and hips. In order to rule out rheumatoid arthritis, Dr. Nicholas Radon ordered an erythrocyte sedimentation rate (ESR or Sed Rate) blood test to be performed, specifying that the laboratory was to draw the blood specimen from the patient the same day. The final result of this test was 10 mm/hr, a normal value with the normal reference range being 0-17 mm/hr. The final result report 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 later that same day.

The ESR test instrument was recalibrated and the ESR specimen was re-analyzed. After the recalibration and re-analysis, the result value for Mr. Jones' ESR test changed from 10 mm/hr to 20 mm/hr. A Corrected result report with a result value of 20 mm/hr and an abnormal flag of "H" 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 is evaluating the proper use of OBR-22 to establish chronological order of reports and correct use of the status codes in OBR-25 and OBX-11 for a corrected result.

PreCondition

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

and LRI_1.0_1.1-NG has been previously received by the EHR-S and incorporated with the patient's record.

PostCondition

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

TestObjectives

- Demonstrate the ability to update the patient record based on corrected results.

Notes to Testers

Run LRI_1.0-GU_Sed_Rate Final test case prior to this test case. This test case requires display verification only.

Concentrate on the following areas:

Result Report Status – now C instead of F (OBR-25)

Result date/time is later than before (OBR-22)

Result for Sed Rate changed from 10 to 20 (OBX-5), which changed the interpretation (OBX-8) from N to H and result status (OBX-11) is C

An additional comment (NTE after OBX) is displayed at the result level, indicating: "Specimen re-analyzed per request of ordering provider."

Test Case Information

LRI_1.0_2.1-NG - Maximally Populated SED Rate message - Corrected Results

Test Case ID

LRI_1.0_2.1-NG

MSH

Location	Data Element	Data	Categorization
MSH.1	Field Separator		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.3.2	Universal ID	372520	Configurable Data
MSH.3.3	Universal ID Type	L	Configurable Data
MSH.4	Sending Facility		
MSH.4.1	Namespace ID	NIST Lab Facility	Configurable Data
MSH.4.2	Universal ID	372521	Configurable Data
MSH.4.3	Universal ID Type	L	Configurable Data
MSH.6	Receiving Facility		
MSH.6.1	Namespace ID	NIST EHR Facility	Configurable Data
MSH.6.2	Universal ID	372523	Configurable Data
MSH.6.3	Universal ID Type	L	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_1.0_2.1-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.21.2	Namespace ID	LRI Base Profile	Changeable 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].2	Namespace ID	LRI Base Profile	Changeable 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].2	Namespace ID	LRI NG Profile	Changeable 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	PATID1234	Configurable Data
PID.3.4	Assigning Authority		

PID.3.4.1	Namespace ID	NIST MPI	Changeable Data
Location	Data Element	Data	Categorization
PID.3.5	Identifier Type Code	MR	Configurable Data
PID.5	Patient Name		
PID.5.1	Family Name		
PID.5.1.1	Surname	Jones	Changeable Data
PID.5.2	Given Name	William	Changeable Data
PID.5.3	Second and Further Given Names or Initials Thereof	A	Changeable Data
PID.5.7	Name Type Code	L	Changeable Data
PID.7	Date/Time of Birth		
PID.7.1	Time	19610615	Changeable Data
PID.8	Administrative Sex	M	Changeable Data
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.10.9	Original Text	White	Changeable Data
PID.10[2]	Race		
PID.10[2].1	Identifier	1002-5	Changeable Data
PID.10[2].2	Text	American Indian or Alaska Native	Changeable Data
PID.10[2].3	Name of the Coding System	HL70005	Changeable Data
PID.10[2].9	Original Text	American Indian	Changeable Data
PID.18	Patient Account Number		
PID.18.1	ID Number	PATID1234	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	Changeable Data
ORC.2.2	Namespace ID	NIST EHR	Changeable Data
ORC.3	Filler Order Number		
ORC.3.1	Entity Identifier	R-783274	Changeable Data
ORC.3.2	Namespace ID	NIST Lab Filler	
ORC.4	Placer Group Number		
ORC.4.1	Entity Identifier	GORD874211	Changeable Data
ORC.4.2	Namespace ID	NIST EHR	
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.12.4	Second and Further Given Names or Initials Thereof	M	Changeable Data
ORC.12.5	Suffix (e.g., JR or III)	JR	Changeable Data
ORC.12.6	Prefix (e.g., DR)	DR	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	Location	Placer Order Number	Data Element	Data	Categorization
OBR.2.1			Entity Identifier	ORD723222	Changeable Data
OBR.2.2			Namespace ID	NIST EHR	Changeable Data
OBR.3			Filler Order Number		
OBR.3.1			Entity Identifier	R-783274	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.11			Specimen Action Code	L	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
OBR.16.3			Given Name	Nicholas	Changeable Data
OBR.16.4			Second and Further Given Names or Initials Thereof	M	Changeable Data
OBR.16.5			Suffix (e.g., JR or III)	JR	Changeable Data
OBR.16.6			Prefix (e.g., DR)	DR	Changeable Data
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	C	Test Case Fixed Data
OBR.28			Result Copies To		
OBR.28.1			ID Number	10092000194	Changeable Data
OBR.28.2			Family Name		
OBR.28.2.1			Surname	Hamlin	Changeable Data
OBR.28.3			Given Name	Pafford	Changeable Data
OBR.28.4			Second and Further Given Names or Initials Thereof	M	Changeable Data
OBR.28.5			Suffix (e.g., JR or III)	Sr.	Changeable Data
OBR.28.6			Prefix (e.g., DR)	Dr.	Changeable Data
OBR.28.9			Assigning Authority		
OBR.28.9.1			Namespace ID	NPI	Changeable Data
OBR.28.10			Name Type Code	L	Changeable Data
OBR.28.13			Identifier Type Code	NPI	Changeable Data
OBR.49			Results Handling		
OBR.49.1			Identifier	CC	Test Case Fixed Data
OBR.49.2			Text	Copies Requested	Test Case Fixed Data
OBR.49.3			Name of the Coding System	HL70507	IG Fixed Data

NTE

Location	Data Element	Data	Categorization
NTE.1	Set ID - NTE	1	IG Fixed Data
NTE.3	Comment	Patient is extremely anxious about needles used for drawing blood.\.brIf patient is overly frightened, nervous, or anxious	Changeable Data

Location	Data Element	Data	Categorization
		please reschedule blood draw.	

NTE

Location	Data Element	Data	Categorization
NTE.1	Set ID - NTE	2	IG Fixed Data
NTE.3	Comment	Patient is allergic to latex	Changeable Data

TQ1

Location	Data Element	Data	Categorization
TQ1.1	Set ID - TQ1	1	IG Fixed Data
TQ1.7	Start date/time		
TQ1.7.1	Time	201509251400	Changeable Data
TQ1.8	End date/time		
TQ1.8.1	Time	201509261400	Changeable Data
TQ1.9	Priority		
TQ1.9.1	Identifier	R	Changeable Data
TQ1.9.2	Text	Routine	Changeable Data
TQ1.9.3	Name of the Coding System	HL70485	Changeable Data
TQ1.9.9	Original Text	Routine	Changeable Data

OBX

Location	Data Element	Data	Categorization
OBX.1	Set ID - OBX	1	IG Fixed Data
OBX.2	Value Type	NM	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	20	Test Case Fixed Data
OBX.6	Units		
OBX.6.1	Identifier	mm/h	Changeable Data
OBX.6.2	Text	millimeter per hour	Changeable Data
OBX.6.3	Name of the Coding System	UCUM	Changeable Data
OBX.6.7	Coding System Version	1.9	Changeable Data
OBX.7	Reference Range	0 to 17	Changeable Data
OBX.8	Abnormal Flags	H	Test Case Fixed Data
OBX.11	Observation Result Status	C	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		
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		

Location	Data Element	Data	Categorization
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	B	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
OBX.25.6	Prefix (e.g., DR)	Dr.	Changeable Data
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	Specimen re-analyzed per request of ordering provider.	Changeable Data

SPM

Location	Data Element	Data	Categorization
SPM.1	Set ID - SPM	1	IG Fixed Data
SPM.2	Specimen 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.24	Specimen Condition		
SPM.24.1	Identifier	COOL	Changeable Data
SPM.24.2	Text	Cool	Changeable Data
SPM.24.3	Name of the Coding System	HL70493	Changeable Data
SPM.24.4	Alternate Identifier	CL	Changeable Data

SPM.24.5	Location	Alternate Text	Data Element	Cool	Data	Changeable	Category
SPM.24.6			Name of Alternate Coding System	99USL			Changeable Data
SPM.24.9			Original Text	Cool			Changeable Data

Patient Information

Element	Data
Name	William A Jones
Date/Time of Birth	06/15/1961
Administrative Sex	Male
Race	White
Alt Race	
Race[2]	American Indian or Alaska Native
Alt Race[2]	

Order Observation**Ordering Provider**

Element	Data
Name	DR Nicholas M Radon JR
Identifier number	5742200012

Observation Details

Element	Data
Observation General Information	
Placer Order Number	ORD723222
Filler Order Number	R-783274
Placer Group Number	GORD874211
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	L
Relevant Clinical Information	
Relevant Clinical Information Original Text	
Observation Result Information	
Result Status	C
Results Report/Status Change - Date/Time	09/26/2015 2:05 PM
Results Copy To	
Name	Dr. Pafford M Sr.
Identifier	10092000194
Results Handling	
Standard	
Observation Notes	

Notes and comments	Patient is extremely anxious about needles used for drawing blood.\.br\If patient is overly frightened, nervous, or anxious please reschedule blood draw.
Notes and comments	Patient is allergic to latex

Timing/Quantity Information

Element	Data
Priority	Routine
Start Date/time	09/25/2015 2:00 PM
End Date/time	09/26/2015 2:00 PM

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

Specimen Information

Element	Data
Specimen Type	BLD
Alt Specimen Type	Blood
Specimen Original Text	Blood Specimen
Start date/time	201509251400
Specimen Condition	Cool
Alt Specimen Condition	Cool
Condition Original Text	Cool

Lab results

Element		Data						
Test performed		Erythrocyte sedimentation rate						
Test Report date		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	20	millimeter per hour	0 to 17	H	C	09/25/2015 14:00	09/26/2015 13:05	Specimen re-analyzed per request of ordering provider.

HL7 v2.5 ORU^R01^ORU_R01 Message: Incorporation of Laboratory Results	
Test Case ID	LRI_1.0_2.1-NG
Juror ID	
Juror Name	
HIT System Tested	
Inspection Date/Time	
Inspection Settlement (Pass/Fail)	Pass
	Fail
Reason Failed	
Juror Comments	

This Test Case-specific Juror Document provides a checklist for the Tester to use during 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	Tester Comment
<i>PATID1234</i>	<i>William A Jones</i>	06/15/1961	M	White; American Indian or Alaska Native	
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:	Erythrocyte sedimentation rate								
Test Report Date:	09/26/2015 14:05:51								
Result Report Status	C								
Note:	Patient is extremely anxious about needles used for drawing blood. If patient is overly frightened, nervous, or anxious please reschedule blood draw.								
Note:	Patient is allergic to latex								
Result Observation Name	Result Value	UOM	Reference Range	Abnormal Flag	Status	Date/Time of Observation	End Date/Time of Observation	Date/Time of Analysis	Tester Comment
Erythrocyte sedimentation rate	20	millimeter per hour	0 to 17	H	C	09/25/2015 14:00:		09/26/2015 13:05:50	
Note	Specimen re-analyzed per request of ordering provider.								

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		
Specimen Condition	Cool	

Order Information - Display Verification		
Data Element Name	Data	Tester Comment
Relevant Clinical Information		
Placer Order Number Entity ID	ORD723222	
Ordering Provider		
Family Name		
Surname	Radon	
Given Name	Nicholas	
Second and Further Given Names or Initials Thereof	M	
Suffix (e.g., JR or III)	JR	
Prefix (e.g., DR)	DR	
Results Copies To		
Family Name		
Surname	Hamlin	
Given Name	Pafford	
Second and Further Given Names or Initials Thereof	M	
Suffix (e.g., JR or III)	Sr.	
Prefix (e.g., DR)	Dr.	
Timing/Quantity Information		
Start Date/Time	09/25/2015 14:00:	
End Date/Time	09/26/2015 14:00:	
Priority	Routine	

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	PATID1234	
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	Jones	
PID-5.2	Given Name	S-EX-A	William	
PID-5.3	Second and Further Given Names or Initials Thereof	S-EX-A	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	06/15/1961	
PID-8	Administrative Sex	S-TR-R	M	
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	
PID-10	Race			
PID-10.1	Identifier	S-RC	1002-5	
PID-10.2	Text	S-RC	American Indian or Alaska Native	
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	
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	
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	M	
ORC-12.5/OBR-16.5	Suffix (e.g., JR or III)	S-RC	JR	
ORC-12.6/OBR-16.6	Prefix (e.g., DR)	S-RC	DR	
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	

Note- Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment
NTE-3	Note	S-EX	Patient is extremely anxious about needles used for drawing blood. If patient is overly frightened, nervous, or anxious please reschedule blood draw.	
NTE-3	Note	S-EX	Patient is allergic to latex	

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	C	
OBR-28	Result Copies To			
OBR-28.1	ID Number	S-RC	10092000194	
OBR-28.2	Family Name			
OBR-28.2.1	Surname	S-EX-A	Hamlin	
OBR-28.3	Given Name	S-EX-A	Pafford	
OBR-28.4	Second and Further Given Names or Initials Thereof	S-EX-A	M	
OBR-28.5	Suffix (e.g., JR or III)	S-EX-A	Sr.	
OBR-28.6	Prefix (e.g., DR)	S-EX-A	Dr.	
OBR-28.9	Assigning Authority			
OBR-28.9.1	Namespace ID	S-EX-A	NPI	
OBR-28.9.2	Universal ID	S-EX-A		
OBR-28.9.3	Universal ID Type	S-EX-A		
OBR-28.10	Name Type Code	S-TR-R	L	
OBR-28.13	Identifier Type Code	S-RC	NPI	
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-EQ	20	
OBX-6	Units (Note 2)			
OBX-6.1	Identifier	S-TR-R	mm/h	
OBX-6.2	Text	S-TR-R	millimeter per hour	
OBX-6.3	Name of the Coding System	S-RC	UCUM	
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	0 to 17	
OBX-8	Abnormal Flags	S-TR-R	H	
OBX-11	Observation Result Status	S-TR-R	C	
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	Specimen re-analyzed per request of ordering provider.	

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	
SPM-4.3	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	
SPM-4.6	Name of Alternate Coding System	S-RC	99USL	
SPM-4.9	Original Text	S-EX	Blood Specimen	
SPM-24	Specimen Condition (Note 1)			
SPM-24.1	Identifier	S-TR-R	COOL	
SPM-24.2	Text	S-EX-A	Cool	
SPM-24.3	Name of the Coding System	S-RC	HL70493	
SPM-24.4	Alternate Identifier	S-TR-R	CL	
SPM-24.5	Alternate Text	S-EX-A	Cool	
SPM-24.6	Name of Alternate Coding System	S-RC	99USL	
SPM-24.9	Original Text	S-EX	Cool	
Note 1 - The HIT must store the Identifier and the Text for each populated triplet using the S-EX-A, S-TR-R, or S-EX store requirement as indicated. If Original Text field is populated, MUST store the exact data received.				

Timing/Quantity Information- Incorporate Verification				
Location	Data Element Name	Store Requirement	Data	Tester Comment
TQ1-7	Start Date/Time			
TQ1-7.1	Time	S-EQ	09/25/2015 14:00:	
TQ1-8	End Date/Time			
TQ1-8.1	Time	S-EQ	09/26/2015 14:00:	
TQ1-9	Priority			
TQ1-9.1	Identifier	S-TR-R	R	
TQ1-9.2	Text	S-EX-A	Routine	
TQ1-9.3	Name of Coding System	S-RC	HL70485	
TQ1-9.9	Original Text	S-EX	Routine	

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	<p>The HIT Module being tested must be designed to incorporate/store only the exact data received in the LRI message.</p> <ul style="list-style-type: none"> 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	<p>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.</p> <ul style="list-style-type: none"> 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. <p>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.</p>
S-EQ	Store equivalent	<p>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.</p> <ul style="list-style-type: none"> 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)	<p>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.</p> <ul style="list-style-type: none"> 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	<p>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).</p> <ul style="list-style-type: none"> 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). <p>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</p>

MSH|^~&#|NIST Test Lab APP^372520^L|NIST Lab Facility^372521^L||NIST EHR
Facility^372523^L|20150926140551||ORU^R01^ORU
_R01|LRI_1.0_2.1-NG|D|2.5.1||AL|AL||||LRI_Common_Component^LRI Base Profile^2.16.840.1.113883.9.16^ISO~LRI_NG_Componen
t^LRI Base Profile^2.16.840.1.113883.9.13^ISO~LRI_FRU_Component^LRI NG Profile^2.16.840.1.113883.9.83^ISO

PID|1||PATID1234^^^NIST MPI^MR||Jones^William^A^^^^L||19610615|M||2106-3^White^HL70005^^^^^White~1002-5^American
India
n or Alaska Native^HL70005^^^^^American Indian|||||PATID1234^^^NIST MPI^AN

ORC|RE|ORD723222^NIST EHR|R-783274^NIST Lab Filler|GORD874211^NIST
EHR|||||5742200012^Radon^Nicholas^M^JR^DR^^^NPI^L
^^^NPI

OBR|1|ORD723222^NIST EHR|R-783274^NIST Lab Filler|30341-2^Erythrocyte sedimentation rate^LN^500^Erythrocyte sedimentati
on rate^99USL^2.52^^Erythrocyte sedimentation rate||201509251400||||L||||5742200012^Radon^Nicholas^M^JR^DR^^^NPI^L^^^N
PI|||||20150926140551||C||10092000194^Hamlin^Pafford^M^Sr.^Dr.^^^NPI^L^^^NPI|||||||||CC^Copies Requested^
HL70507

NTE|1||Patient is extremely anxious about needles used for drawing blood.\.br\If patient is overly frightened, nervous,
or anxious please reschedule blood draw.

NTE|2||Patient is allergic to latex

TQ1|1|||||201509251400|201509261400|R^Routine^HL70485^^^^^Routine

OBX|1|NM|30341-2^Erythrocyte sedimentation rate^LN^815117^ESR^99USL^2.52^^Erythrocyte sedimentation rate|^1^1^1|20|mm/h
^millimeter per hour^UCUM^^^^1.9|0 to 17|H||C||201509251400||||20150926130550|||Century Hospital^^^^CLIA^XX^^24D98
71327|2070 Test Park^^Los
Angeles^CA^90067^USA^B^^06037|5432178916^Knowsallot^Phil^J.^III^Dr.^^^NPI^L^^^NPI||||RSLT|UNSP

NTE|1||Specimen re-analyzed per request of ordering provider.

SPM|1|S-2015-66&GoodHealthC_EHR^S-9911-33&NIST Lab
Filler||119297000^BLD^SCT^BldSpC^Blood^99USL^201509USED^^Blood Speci
men|||||||||201509251400|||||COOL^Cool^HL70493^CL^Cool^99USL^^^Cool