Comments due: September 30, 2021

Submit Comments: https://www.healthit.gov/isa/about-isa - scroll down to "Log in or register to post comments"

The following comments are submitted by the American Clinical Laboratory Association (ACLA)

Thank you for the opportunity to comment on the ISA.

General comment:

For any reference to 'lab' we suggest changing to 'laboratory' to promote usability of the guide.

Section I: Vocabulary/Code Set/Terminology Standards and Implementation Specifications

Representing Laboratory Tests

https://www.healthit.gov/isa/representing-laboratory-tests

Туре	Standard / Implementation Specification	Standards Process Maturity	Implementation Maturity	Adoption Level	Federally required	Cost	Test Tool Availability
Standard for observations	LOINC®	Final	Production Feedback Yes Free Requested		N/A		
Limitations, Depen	dencies, and Preconditions for Consideration	1	Applicable Value Se	et(s) and Starter Se	t(s)		
observation is terminology. A single labora and the result was method le LOINC® code at LOINC code av LOINC code av For more infor Representing h See LOINC pro	nerically or categorically. If the value/result/answ categorical that answer should be represented to tory test with a single result will have the same or will have a more specific code in the result (for so or did not declare the system property). A parand multiple result LOINC® terms for each result ailable for using SNOMED CT® and LOINC® tog vailability is contingent on assignment by Regens mation about representing laboratory tests as a Medical Procedures page. jects in the Interoperability Proving Ground. mation about observations and observation valing resource developed by the Health IT Standards of the standards of the same	with the SNOMED CT® LOINC® code for the core example if the order nel order will have an it in the panel. ether. trief. procedure, see the ues, see Appendix III for the see Appendix III for the see the ues, see Appendix III for the see the ues t	order r code order				

2021 ISA for 2022 publication

ACLA Comment:

- In the Limitations, Dependencies, and Preconditions for Consideration, second bullet, please change 'will' to 'may'. In Conformance language¹ 'may' is equivalent to 'optional' and 'will' is not defined as a conformance verb in RFC 2119. A LOINC code may not be immediately available from or published by Regenstrief, therefore a laboratory may have to use a local code until an appropriate LOINC code is available and deployed to applicable LIS and EHR systems.
 - Extract from <u>RFC 2119</u>: The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

¹ https://tools.ietf.org/html/rfc2119

Topic: Representing Patient Sex (At Birth)

2021 00 12 -----

https://www.healthit.gov/isa/representing-patient-sex-birth

For more information about observations and observation values, see Appendix III for an
informational resource developed by the Health IT Standards Committee.

Туре	Standard / Implementation Specification	Standards Process Maturity			Adoption Level	Federally required	Cost	Test Tool Availability
Standard for observations	LOINC®	Final			No		Free	N/A
Standard for observation values	For Male and Female, HL7® Version 3 Value Set; for Administrative Gender Unknown, HL7 ® Version 3 Null Flavor	Final			Yes	Yes	Free	N/A
Limitations, Dependenc	ies, and Preconditions for Consideration	1		Applicable Value Se	et(s) and Starter Se	rt(s)		
most often based or	, or Assigned Sex, is the sex (male or femal the child's external anatomy. need to be harmonized.	e) given to a child at b	oirth,	 Administrative 	76689-9 Sex assigne Gender (HL7 V3) 2.	16.840.1.113883.		
 See LOINC projects i 	n the Interoperability Proving Ground.					•		ing value set for birth r Administrative Gen

and NullFlavor:

(1) M ("Male") (2) F ("Female")

(1) OTH ("Other")

(2) ASKU ("Asked, but Unknown")(3) NASK ("Not asked")

(3) UNK ("Unknown") (HL7 V3 NullFlavor code)

Other HL7 V3 NullFlavor codes, while not specifically required, may also be useful

ACLA Comment:

This continues to be an ongoing challenge to laboratories and potentially impacts patient safety. Laboratories need the patient's biological / chromosomal sex data to be distinct and separate from a patient's "gender identity^[1]" as certain reference ranges are dependent on the patient's biological or chromosomal sex information. We recommend ONC evaluate the various state laws as some states are permitting residents to legally change their birth sex and/or enter a value other than Male or Female. With these changes being allowed on birth certificates, we recommend ONC consider changing this section from Representing Patient's Sex (at birth) to something like Patient's Biological / Chromosomal Sex. We are aware that HL7's Gender Harmony project has published an Informative document^[2] defining "Sex for Clinical Use" (SFCU) but we do not believe this concept is semantically equivalent to the patient's biological or chromosomal sex.

Additionally, the representation of the patient's biological or chromosomal sex should be similar across all various industries including Laboratory, Clinician, Pharmacy, etc.

This may require additional LOINC codes.

While the adoption level may be accurate for capturing this data since it is an EHR certification requirement, as a large commercial laboratory, we can assert we are not seeing this data reported from EHR systems, and laboratories may not be ready to accept Sex assigned at Birth as a patient demographic data element because they are currently supporting only HL7 V2 "Administrative Sex".

^[1] From USCDI V2 published July 2021 Gender Identity defined as "A person's internal sense of being a man, woman, both, or neither.

^[2] HL7 Standards Product Brief - HL7 Informative Document: Gender Harmony - Modeling Sex and Gender Representation, Release 1 | HL7 International

Section II: Content/Structure Standards and Implementation Specifications

Support the Transmission of a Laboratory's Directory of Services to Provider's Health IT or EHR System

https://www.healthit.gov/isa/support-transmission-a-laboratorys-directory-services-providers-health-it-or-ehr-system

Туре	Standard / Implementation Specification	Standards Process Maturity	Implementation Maturity	Adoption Level	Federally required	Cost	Test Tool Availability
Implementation Specification	HL7 Version 2.5.1 Implementation Guide: S&I Framework Laboratory Test Compen dium Framework, Release 2, DSTU Releas e 2 (also referred to as eDOS (Electronic Directory of Service)		Production	•0000	No	Free	No
Emerging Implementation Specification	HL7 Version 2.5.1 Implementation Guide: S&I Framework Laboratory Test Compen dium Framework (eDOS) Release 2, STU R elease 3 (US Realm)		Feedback requested	Feedback Requested	No	Free	No
Emerging Implementation Specification	HL7 FHIR Order Catalog Implementation Guide/Laboratory Services 0.1.0 - STU Bal lot 1 Hyperlink to ballot	Balloted Draft	Pilot	•0000	No	Free	No

Limitations, Dependencies, and Preconditions for Consideration	Applicable Security Patterns for Consideration
 HL7 Version 2 Implementation Guide: Laboratory Value Set Companion Guide Release 1, STU Release 3 - US Realm, June 2018, provides cross-implementation guide value set definitions and harmonized requirements. 	Secure Communication – create a secure channel for client-to- serve and server-to-server communication.
 Note that the Emerging Implementation Specification has been harmonized with the most current suite of Lab US Realm Implementation Guides, published by HL7 in June 2018 	 Secure Message Router – securely route and enforce policy on inbound and outbound messages without interruption of delivery.
See HL7 V2 projects in the Interoperability Proving Ground.	Authentication Enforcer – centralized authentication processes.
See nt. / vz projects in the interoperability Proving Ground.	Authorization Enforcer – specifies access control policies.
	 Credential Tokenizer – encapsulate credentials as a security token for reuse (e.g., – SAML, Kerberos).
	 Assertion Builder – define processing logic for identity, authorization and attribute statements.
	User Role – identifies the role asserted by the individual initiating the transaction.
	Purpose of Use - Identifies the purpose for the transaction.

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ACLA Comment:

We support these comments submitted by HL7:



ISA eDOS comments for 2022 ;

Additionally, we suggest that when you add Release 3.1 that you delete the older Release 3. Release 3.1 supports COVID-19 reporting requirements for DHHS and CDC.

Add:

- HL7 Version 2.5.1 Implementation Guide: Standards & Interoperability (S&I) Framework Laboratory Test Compendium Framework (eDOS) Release 2, STU Release 3.1 (US Realm)
- HL7 Version 2.5.1 Implementation Guide: Standards & Interoperability (S&I) Framework Laboratory Test Compendium Framework (eDOS) Ask at Order Entry (AOE) Release 2, STU Release 3.1 (US Realm)

Delete:

 HL7 Version 2.5.1 Implementation Guide: S&I Framework Laboratory Test Compendium Framework (eDOS) Release 2, STU Release 3 (US Realm)

Identify Linkages Between Vendor IVD Test Results and Standard Codes

https://www.healthit.gov/isa/identify-linkages-between-vendor-ivd-test-results-and-standard-codes

уре	Standard / Implementation Specification	Standards Process Maturity	Implemen	ntation Maturity	Adoption Level	Federally required	Cost	Test Tool Availab
mplementation Specification	LAW - Laboratory Analytical Workflow Profile	Final	Production	1	•••00	No	Free	Yes
itandard	CLSI AUTO 16 - Next-Generation in Vitro Diagnostic Interface, 1s t Edition	Final	Pilot		•0000	No	\$	Yes
mplementation Specification	LIVD – Digital Format for Publication of LOINC to Vendor IVD Te st Results	Final	Production	1	•0000	No	\$	No
tandard	HL7® FHIR® Implementation Guide - LOINC/IVD Mapping (LIV D) R1 (STU)	Balloted Draft	Pilot		•0000	No	\$	No
imitations, Dependencies, and F	trannelitions for Consideration			Applicable Security Patterns	for Consideration	1		
or LAW:	reconditions for Consideration			For LAW:	Tor Consideration			
with the IHE Pathology and La ar LIVO: The LIVD - Digital format for F tests associated with a set of t tests used by their laboroty, LOINC code. LIVD was develop SHIELD (Systemic Harmonical	and workflow definitions between instruments, middleware, and LIS sy boratory Medicine (PaLM) domain to develop the LAW Froffie, See: hi "ublication of LOINC to Vendor IVD Test results defines the digital pub pre-defined LOINC codes. LIVD helps assure that laboratory personne LIVD also allows LIS systems to automatically map the correct in vitre ed by the IVD Industry Connectivity Consortium in collaboration with sion and interoperability Enhancement for Laboratory Data) is a multi- dietra across government (FDA, CDC, NIH, ONC, CNS), Industry, EHR v.	tp://wdconnectivity.org/law-pro- ilication of LOINC using vendor of select the appropriate LOINC of diagnostic (WD) vendor test re ISHIELD.	felined IVD odes for IVE suit to a	Support for IA, CC, hemal Unique identification of e improved query for order Selection of query as the Simplified order downlose	STMJ: tology, microbiology, and mi each order request at the te: rs default mode		eans. Ser prone	are ronwing capacities
data Interoperability.	d academia, focused on the development/adoption and implementat refer to the Guidance for Industry and Food and Drug Administration In Vitro Diagnostics."			Ability for an analyzer to Improved device identific Contributing substance identifications	ation for test logging			
	ation Specification (LIVD – Digital Format for Publication of LOINC to Insensus Standards Body (VCSB) as defined in OMB Circular A-1195.	Vendor IVD Test Results) has not	been	Basic and enhanced mess	sage interface to support IV st requests and observation uns images, graphs, and plots of raw values			

ACLA Comment

The 2nd column 'header' is "Applicable Security Patterns for Consideration" but the comments are not related to security; Suggest you retitle; these seem like general comments

It is our understanding HL7 FHIR Implementation Guides are licensed, but there is not fee. Please confirm with HL7 and, if appropriate, remove the \$ and replace with free in Cost column for the HL7® FHIR® Implementation Guide - LOINC/IVD Mapping (LIVD) R1 (STU).

Ordering Labs for a Patient

https://www.healthit.gov/isa/ordering-labs-a-patient

2021-09-13 screer	nprint						
Туре	Standard / Implementation Specification	Standards Process Maturity	Implementation Maturity		Federally required		Test Tool Availability
Specification	HL7 Version 2.5.1 Implementation Guide: Laboratory Orders from EHR (LOI) Releas e 1, STU Release 3 - US Realm		Pilot	•0000	No	Free	No

Limitations, Dependencies, and Preconditions for Consideration	Applicable Security Patterns for Consideration
The HL7 Version 2 Implementation Guide: Laboratory Value Set Companion Guide Release 1, STU Release 3 - US Realm HL7 Standard for Trial Use, provides cross-implementation	 Secure Communication – create a secure channel for client-to- serve and server-to-server communication.
guide value set definitions and harmonized requirements. See HL7 V2 projects in the Interoperability Proving Ground.	 Secure Message Router – securely route and enforce policy on inbound and outbound messages without interruption of delivery.
	 Authentication Enforcer – centralized authentication processes.
	 Authorization Enforcer – specifies access control policies.
	 Credential Tokenizer - encapsulate credentials as a security token for reuse (e.g., – SAMI Kerberos).
	 Assertion Builder – define processing logic for identity, authorization and attribute statements.
	User Role – identifies the role asserted by the individual initiating the transaction.
	Purpose of Use - Identifies the purpose for the transaction.
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ACLA Comment:

The quality of the data in the laboratory order from the provider may impact the laboratory result time to response and content, as we learned during the COVID-19 pandemic.

We suggest that ONC sponsor an HL7 project to develop US Core FHIR IG for laboratory order. Currently it's a "Future Candidate".

From HL7 FHIR:

Future Candidate Requirements Under Consideration

http://hl7.org/fhir/us/core/future-of-US-core.html#future-candidate-requirements-under-consideration ServiceRequest - The CDS hooks community, and other implementers are gathering requirements for the ServiceRequest Resource.

Receive Electronic Laboratory Test Results

https://www.healthit.gov/isa/receive-electronic-laboratory-test-results

Туре	Standard / Implementation Specification	Standards Process Maturity	Implementation Maturity	Adoption Level	Federally required	Cost	Test Tool Availability
Implementation Specification	HL7® Version 2.5.1 Implementation Guid e: S&I Framework Lab Results Interface, R elease 1—US Realm [HL7 Version 2.5.1: O RU_R01] Draft Standard for Trial Use, July 2012	Balloted Draft	Production	•0000	Yes	Free	Yes
Implementation Specification	NCPDP Specialized Standard, Implement ation Guide, Version 2017071	Final	Production	•0000	Yes		No
Emerging Standard	HL7® Implementation Guide for C-CDA R elease 2.1: Consolidated CDA for Clinical Notes and C-CDA on FHIR R4	īnal	Production	•0000	No	\$	No
Emerging Implementation Specification	HL7® Version 2.5.1 Implementation Guid e: Lab Results Interface (LRI) Release 1, ST U Release 3 - US Realm		Pilot	•0000	No	Free	No
■ HL7@ Version 2.1	mplementation Guide: Laboratory Value Set C	ompanion Guide Pele	- Secure Comm	unication create	s secure channel	for client to se	nie and senier to sen
STU Release 3 - L definitions and h	mplementation Guide: Laboratory Value Set C JS Realm, June 2018, provides cross-implemen armonized requirements. ccts in the Interoperability Proving Ground.		communication	n.	y route and enfo		rve and server-to-ser
STU Release 3 - L definitions and h	JS Realm, June 2018, provides cross-implemen armonized requirements.		communicatio Secure Messa, messages with Authenticatio	n. ge Router – securel lout interruption of on Enforcer – centra	y route and enfor delivery. lized authenticat	rce policy on int	
STU Release 3 - L definitions and h	JS Realm, June 2018, provides cross-implemen armonized requirements.		Secure Messa messages with Authorization	n. ge Router – securel iout interruption of on Enforcer – centra n Enforcer – specifie	y route and enfor delivery. lized authenticat s access control p	rce policy on into ion processes. policies.	
STU Release 3 - L definitions and h	JS Realm, June 2018, provides cross-implemen armonized requirements.		Secure Messa messages with Authenticatio Authorization Credential Tol Kerberos).	n. ge Router – securel iout interruption of on Enforcer – centra n Enforcer – specifie	y route and enfor delivery. lized authenticat s access control p te credentials as	rce policy on inli ion processes. policies. a security toker	oound and outbound n for reuse (e.g., – S
STU Release 3 - L definitions and h	JS Realm, June 2018, provides cross-implemen armonized requirements.		communicatio Secure Messa messages with Authenticatio Authorization Credential Tol Kerberos). Assertion Buil statements.	n. ge Router – securel gout interruption of on Enforcer – centra n Enforcer – specifie kenizer – encapsula	y route and enfor delivery. lized authenticat s access control s te credentials as sing logic for ider	rce policy on inl ion processes. policies. a security token ntity, authorizat	n for reuse (e.g., –

ACLA Comment:

Re: NCPDP Specialized Standard, Implementation Guide, Version 2017071

- Please update the hyperlink in the "Federally required" column so implementers can understand the federal
 requirement. Most Federally Required hyperlinks are to a Federal Register posting. The NCPDP "Federally
 Required" hyperlink is to a NCPDP web page which does not explain the federal requirement.
- Implementers, including ACLA members, do not have access to the (National Council for Prescription Drug Programs) NCPDP link provided in the response. You must pay \$750 to become a NCPDP member to download a standard. We do not have access to this standard and we do not understand why this NCPDP standard is included in content representing laboratory domain since NCPDP typically deals with medications.

Re: HL7® Implementation Guide for C-CDA Release 2.1: Consolidated CDA for Clinical Notes and C-CDA on FHIR R4

- Please separate the two C-CDA references so they are listed separately on two distinct rows. This entry refers to
 two distinct implementation guides, one that is Clinical Document Architecture (CDA) based and one that is Fast
 Healthcare Interoperability Resources (FHIR) based
- 1. The proper title is: HL7 CDA® R2 IG: C-CDA Templates for Clinical Notes R2.1 Companion Guide, Release 2 US Realm
 - o Remove \$ in 'Cost' column; HL7 standards are available with no fee license.
- 2. The proper title is: <u>C-CDA on FHIR Implementation Guide (IG)</u>
 - The hyperlink for C-CDA on FHIR is: http://hl7.org/fhir/us/ccda/history.html This lists multiple versions; the latest version published in 2018 is a STU (standard for trial use)
 - Please change the Standards Maturity from 'Final' to 'Balloted Draft' (because it is a STU).
 - o Remove \$ in 'Cost' column; HL7 standards are available with no fee license.
- Please add <u>US Core DiagnosticReport Profile for Laboratory Results Reporting</u> as an "Emerging Standard"

Electronic Transmission of Reportable Lab Results to Public Health Agencies https://www.healthit.gov/isa/electronic-transmission-reportable-lab-results-public-health-agencies

Туре	Standard / Implementation Specification	Standards Process Maturity	Implementation Maturity	Adoption Level	Federally required	Cost	Test Tool Availability
Implementation Specification	HL7 Version 2.5.1: Implementation Guid e: Electronic Laboratory Reporting to Pub lic Health (US Realm), Release 1 with Errat a and Clarifications and ELR 2.5.1 Clarific ation Document for EHR Technology Certi fication	Final	Production		Yes	Free	Yes
Implementation Specification	HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 2 (US Realm)	Balloted Draft	Production	•0000	No	Free	No
Implementation Specification	HL7 Version 2.5.1 Implementation Guide: Laboratory Results Interface, Release 1 S TU Release 3 - US Realm	Balloted Draft	Production	•0000	No	Free	No
■ Value Set IG - F	dencies, and Preconditions for Consideration Please also refer to the HL7 Version 2 Implemen panion Guide Release 1, STU Release 3 - US Real	tation Guide: Laborat		nunication – create		for client-to-se	rver and server-to-se
	nould refer to the health department in their sta			nge Router – secure		rce policy on in	bound and outboun
applicable, and	oarding procedures, obtain a jurisdictional imple determine which transport methods are accept ırsidictional variation or requirements.		EK 03	on Enforcer – centr			
	es differ, please note the content in the first two implementation specifications listed above is n		file in	kenizer – encapsul	ate credentials as	a security toke	n for reuse (e.g., – S
	, the Laboratory Results Interface (LRI) impleme						

ACLA Comment:

See HL7 V2 projects in the Interoperability Proving Ground.

EHRs should report required information with eCR (electronic case reporting) so ancillary information that does not pertain to laboratories does not have to be added to the ELR.

statements.

• User Role – identifies the role asserted by the individual initiating the transaction.

• Purpose of Use - Identifies the purpose for the transaction.

Specialty Care and Settings

2021-09-13 screenprint

Interoperability for COVID-19 Novel Coronavirus Pandemic https://www.healthit.gov/isa/covid-19

Type	Standard / Implementation Specification	Standards Process Maturity	Implement	tation Maturity	Adoption Level	Federally	equired	Cost	Test Tool Availability	
andard	LOINC®	Final	Production			Yes		Free	N/A	
tandard	SNOMED CT®	Final	Production		00000	Yes		Free	N/A	
tandard	ICD-10-CM	Final	Production		00000	Yes		Free	N/A	
tandard	Current Procedural Terminology (CPT)	Final	Production		00000	Yes		\$	N/A	
tandard	HCPCS	Final	Production		••••	Yes		Free	N/A	
Emerging Implementation Specification	Logica COVID-19 (FHIR v4.0.1) implementation Guide Ci Build	In Development	Feedback n	equested	Feedback Requested	No		Free	N/A	
merging implementation Specification	HL7 FHIR (v4.0.1) Situational Awareness for Novel Epidemic Res ponse (SANER) IG 0.1.0 Continuous Build	Balloted Draft	Feedback n	equested	Feedback Requested	No		Free	N/A	
imitations, Dependencies, and Prec	onditions for Consideration			Applicable Value Set(s) and St	arter Set(s)					
	ditional guidance on adopting codes, terminologies and coding gu	uldance:		COVID-19 Related Value S	ets In NLM Value Set Authority	Center				
u u	ind Reporting Guidelines for ICD-10-CM			LOINC terms for SARS-CoV-2 and COVID-19 related concepts						
 Logica (FHIR v4.0) Implement 	tation Guide: COVID-19			AMA CPT coding and guidance for COVID-19						
 SNOMED CT Coding for COVI 	D-19 Data			AMA CPT New SARS-CoV-2 Vaccine Codes						
 Guidance for mapping to SAI 	RS-CoV-2 LOINC terms			- Princial Litera appearance treating sounds						
LOINC In Vitro Diagnostic (LIV	VD) Test Code Mapping for SARS-CoV-2 Tests, Specimens and Res	ults (CDC/FDA)								
	COVID-19 contains FHIR profiles representing COVID-19 related d gg, The goal is to create consistent and reusable data and FHIR pr		care,							
	reness for Novel Epidemic Response (SANER) implementation Go from inpatient facilities to centralized data repositories to suppo									
Regenstrief, Logica Health, the Na	ance stewards more than 600 value sets on behalf of collaborator tional Association of Community Health Centers, MITRE and more cohort identification, clinical trials, and medical research.									
 CDC and FDA maintain mapping or results. 	f all current US approved SARS-CoV-2 invitro diagnostic lab and th	heir corresponding specimen typ	es and							
CMS Press Release on HCPCS Cod	es for Coronavirus Lab Testing									
	aboratories to report results of SARS-CoV2 or COVID-19 testing to									

ACLA Comment:

Please add hyperlinks in the "Federally Required" column when Federally Required is 'Yes'

Please revise both hyperlinks for Logica (https://covid-19-ig.logicahealth.org/index.html) to reference the official HL7 Logica webpage: https://hl7.org/standards/hsp-marketplace/index.html. The current ISA LOGICA hyperlink is to a non-HL7 website; HL7 projects must be hosted on an HL7 website per HL7 policy.

The SANER specification was published by HL7. Please update the hyperlink to the published version at: HL7 FHIR® Implementation Guide: Situational Awareness for Novel Epidemic Response (SANER) STU 1. The current hyperlink is to HL7 FHIR's 'build' environment which is preparatory to balloting and publication. (build.fhir.org/ig/HL7/fhir-saner/)

Please update:

 CARES Act Section 18115 require laboratories to report results of SARS-CoV2 or COVID-19 testing to the Secretary of HHS in the form and manner outlined in this memo "COVID-19 Pandemic Response, Laboratory Data Reporting: CARES Act Section 18115 June 4, 2020" and updated January 8, 2021

Please add reference to additional HHS artifacts which ultimately reference HL7, LOINC, and SNOMED standards:

- <u>COVID-19 Lab Data Reporting Implementation Specifications</u>: <u>https://www.hhs.gov/sites/default/files/hhs-guidance-implementation.pdf</u>
 - This document (last column) references HL7 Field and HL7 V2 Guidance: https://confluence.hl7.org/display/OO/Proposed+HHS+ELR+Submission+Guidance+using+HL7+v2+Messages