



Clinical Health Information Messaging Exchange

Electronic Lab Results Messaging Guide: Common Elements

Abstract

This document will elaborate on the message format, content, and transmission standards preferred by the Indiana State Department of Health (ISDH).

Last Update

5/11/11

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ELECTRONIC LAB RESULTS MESSAGING GUIDE: COMMON ELEMENTS

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DOCUMENT OVERVIEW

The Electronic Lab Result Messaging Guide for Common Elements is intended to provide additional clarification to reporting requirements and preferences for lab reports required to be sent to the Indiana State Department of Health (ISDH). This document will elaborate on the message format and content preferred by the ISDH. Additional guidance as to which lab results should be considered reportable can be found in condition specific ELR Messaging Guides. This document does not replace, revise or amend any requirements of existing law, but only provides supplemental information and the ISDH preferred methods for communicating lab results.

RECENT REVISIONS

Date	Version	Description
6/1/2010	0.1	Draft created.
5/1/2011	1.0	Version 1

CONTACTS

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LEGISLATIVE REFERENCE(S)

Communicable Disease Reporting Rule, see Indiana Administrative Code: 410 IAC 1-2.3-48,
http://www.in.gov/isdh/files/comm_dis_rule%281%29.pdf

MESSAGE TRANSMISSION

Electronic lab result messages should be transferred to the ISDH utilizing an approved secure mechanism such as a file server location accessed via VPN, SFTP, PHIN-MS, NHIN Connect, etc.

MESSAGE FORMATTING

Electronic lab result messages should be formatted utilizing HL7. The appropriate guide is "HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 (US Realm)" and can be obtained from the HL7.org web site, <http://www.hl7.org/Implement/standards/v2messages.cfm>. This implementation guide describes the transmission of laboratory-reportable findings to appropriate local, state, territorial and federal health agencies using the HL7 2.5.1 ORU^R01 message. In particular, this guide addresses messaging content and dynamics related to the transmission of Laboratory Reportable Result Messages.

MESSAGE CONTENT

Table 1 below includes a set of common core data elements that should be submitted for any condition required to be reported to the ISDH. The common core data set is meant to serve as the basis for an initial laboratory result report from laboratories and hospitals to public health.

Nationally notifiable conditions are identified by CSTE and are accessible here: <http://www.cste.org/dnn/LinkClick.aspx?fileticket=7CCxM20JUGg%3D&tabid=36&mid=1496>. Notifiable conditions for the ISDH can be found here: <http://www.in.gov/isdh/files/ReportableDiseaseList.pdf>.

Table 1 - Core Data Elements for Laboratory Result Reporting Version 2

Report				
Data element	Definition	HL7 Message Context	HL7 Data Type	Optionality
Report date/time	The date and time the report is being sent to public health	MSH-7 Message date/time	TS	R - required
Notification ID	The unique identifier for the notification record	MSH-10 Message Control ID	ST	R
Reporting system	Sending Application	MSH-3 Sending Application	HD	O - optional
Reporting facility	Facility sending the report to public health. Typically CLIA, may be other, e.g., license number, OID	MSH-4 Sending Facility	HD	R
Receiving system	Literal CHIME^2.16.840.1.114222.4.3.3.10^ISO	MSH-5 Receiving Application	HD	R
Receiving facility	Literal ISDH^2.16.840.1.114222.4.1.3653^ISO	MSH-6 Receiving Facility	HD	R
Provider (person)				
Data element	Definition	HL7 Message Context	HL7 Data Type	Optionality
Identifier	Name and ID of the person who diagnosed the subject of the report	ORC-12 or OBR-16: Ordering Provider	XCN	R
Phone	The phone number of the person who diagnosed the subject of the report	ORC-14 or OBR-17: Call Back Phone Number	XTN	R
Address	The address of the person who diagnosed the subject of the report	ORC-24: Ordering Provider Address	XAD	P - preferred

Ordering Facility				
Data element	Definition	HL7 Message Context	HL7 Data Type	Optionality
Name	Name of the facility that diagnosed the subject of the report	ORC-21: Ordering Facility Name	XON	R
Phone	The phone number of the facility that diagnosed the subject of the report	ORC-23: Ordering Facility Phone Number	XTN	P
Address	The address of the facility that diagnosed the subject of the report	ORC-22: Ordering Facility Address	XAD	P
Subject (Patient)				
Data element	Definition	HL7 Message Context	HL7 Data Type	Optionality
Identifier	The subject of the report	PID-2: Patient ID	CX	R
Name	The name of the subject of the report	PID-5: Patient Name	XPN	R
Address	The address of the subject of the report	PID-11: Patient Address	XAD	R
Phone	The phone number of the subject of the report	PID-13: Phone Number – Home	XTN	O
Medicaid Number		PID-18: Patient Account Number	CX	O
Date of birth	The date of birth (DOB) of the subject of the report	PID-7: Date/Time of Birth	TS	R
Gender	The current gender of the subject of the report	PID-8: Administrative Sex	IS	R
Race	The race(s) of the subject of the report	PID-10: Race	CE	P
Ethnicity	The ethnicity of the subject of the report	PID-22: Ethnic Group	CE	P

Next of Kin				
Data element	Definition	HL7 Message Context	HL7 Data Type	Optionality
Name	The name of the next of kin for the subject of the report	NK1-2: Name	XPN	P
Address	The address of the next of kin for the subject of the report	NK1-4: Address	XAD	O
Phone	The phone number of the next of kin for the subject of the report	NK1-5: Phone Number	XTN	P
Relationship	The relationship of the next of kin to the subject of the report	NK1-3: Relationship	CE	O
Clinical Information				
Data element	Definition	HL7 Message Context	HL7 Data Type	Optionality
Specimen collection date/time		OBR-7: Observation Date/Time	TS	R
Study identifier	Accession number	OBR-3: Filler Order Number	EI	R
Specimen received date/time		OBR-14: Specimen Received Date/Time	TS	O
Reason for study		OBR-31: Reason for Study	CE	P
Specimen source	Source type and body site collected	OBR-15: Specimen Source	SPS	R
Test ordered		OBR-4: Universal Service Identifier	CE	R
Test(s) performed		OBX-3: Observation Identifier	CE	R
Test result type		OBX-2: Value Type	ID	R
Test result		OBX-5: Observation Value	Varies by OBX-2	R
Units		OBX-6: Units	CE	R
Reference range		OBX-7: References Range	ST	R
Result status		OBX-11: Result Status	ID	R
Result date		OBX-14: Date/Time of the Observation	TS	R
Performing lab identifier		OBX-15: Producer's Reference	CE	P
Performing lab name		OBX-23: Performing Organization Name	XON	O
Performing person name		OBR-34: Technician	NDL	O

MESSAGE DATA QUALITY REQUIREMENTS

ELR messages should:

- be submitted to the ISDH at least weekly pursuant to 410 IAC 1-2.3-48;
- be formatted according to guidance provided within this document;