Los Angeles County Messaging Guide for Syndromic Surveillance

HL7 2.5.1 messaging specifications and minimum dataset requirements for Emergency Department (ED) and inpatient settings at ED-receiving hospitals.

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH
ACUTE COMMUNICABLE DISEASE CONTROL PROGRAM

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INTRODUCTION

This guide is intended for eligible hospitals (EHs) seeking to meet Los Angeles County Department of Public Health's current requirements for the federal Promoting Interoperability (PI), formerly known as Meaningful Use, Stage 3 Syndromic Surveillance (SS) reporting objectives.

The Acute Communicable Disease Control Program's (ACDC) Syndromic Surveillance Project (SSP) has accepted Emergency Department (ED) data submissions from ED receiving hospitals since 2002. The timely assessment of these pre-diagnostic and diagnostic data have improved ACDC's emerging event detection capabilities as well as the surveillance of ongoing health conditions.

Current Centers for Disease Control and Prevention SS data message recommendations are defined in the "PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care, Inpatient and Ambulatory Care Settings, Release 2.0 (April, 2015)," accessible here:
https://www.cdc.gov/nssp/documents/guides/syndrsurvmessagguide2_messagingguide_phn.pdf

While each jurisdiction has adapted the PHIN messaging guide to satisfy local requirements, your organization may benefit by referring directly to the PHIN messaging guide for additional clarification or specification not covered within this document. An updated version of the PHIN messaging guide has been drafted but has not yet been finalized by the Syndromic Surveillance community.

The specifications provided within this guide are adapted specifically for Los Angeles County (LAC) hospitals to ensure the most useful and meaningful SS data for local disease capture, surveillance and reporting. We hope that this translates to data that are timely and which contain as much diagnostic and causal information as possible regarding the acute health conditions which bring patients to LAC area hospitals.

NEW CONNECTIONS

The SSP is currently onboarding new hospital connections. Hospitals must be ED receiving; connections with private providers or medical groups cannot be accommodated at this time. Eligible hospitals may contact lacphsynd@ph.lacounty.gov to begin the active engagement process. Due to high demand, the hospital may be placed in a temporary hold queue.

EXISTING CONNECTIONS

Hospitals that have existing SS feeds are eligible for an upgrade. Eligible hospitals may contact lacphsynd@ph.lacounty.gov to begin the active engagement process. Data feeds for hospitals already transmitting HL7 2.5.1 messages to the SSP will be reviewed by the SSP to ensure that dataset requirements are met according to the latest implementation guidelines. Due to high demand, the hospital may be placed in a temporary hold queue before assessment and work can begin.

NEW AND EXISTING CONNECTIONS

I. ORIENTATION

- Initial communications to establish upgrade eligibility, communicate the goals and expected deliverables of the project, establish expectations for deliverables during the testing and validation process, and provide reference materials. This is also a time for establishing project contacts -- typically it is best to include hospital staff familiar with patient workflow and electronic health records as well as data feed connectivity experts.

II. ESTABLISHMENT OF NEW DATA ENVIRONMENT FOR TEST/LIVE CONNECTIONS

- Hospital (or hospital vendor) IT staff will work with LAC's data to establish port/IP assignments for new test and live environments to accommodate the new or upgraded data feed.
  Note: If this is an upgrade rather than a new connection, the legacy feed is expected to continue in parallel for at least two weeks after the upgraded live data feed has passed final validation.

III. TEST ENVIRONMENT MESSAGE VALIDATION

PHASE 1: Data element availability assessment

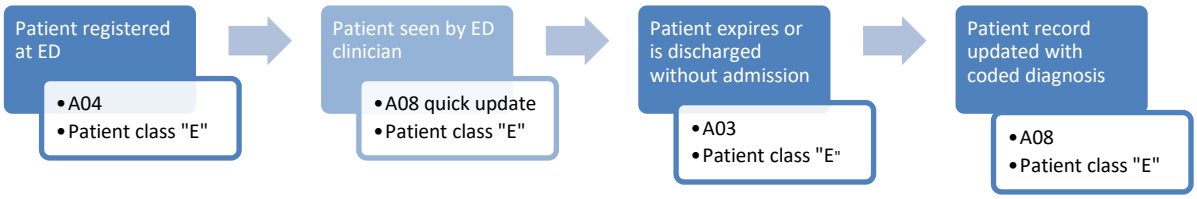
- The hospital will review the list of requested data elements specified. The hospital will then transmit sample admit-discharge-transfer (ADT) messages for test patients from each hospital to determine what data elements are available for transmission to the SSP.

PHASE 2: Patient workflow testing

- The SSP and hospital will generate a customized patient workflow template that includes the data elements with verified availability (established during PHASE 1).

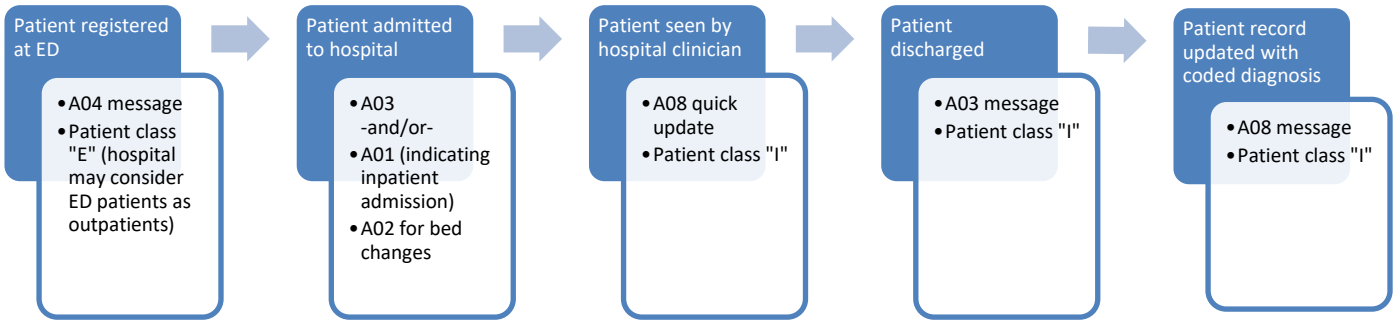
- The hospital will consider testing the most common workflows for patient encounters that originate at the ED or begin with direct inpatient admission to the hospital. Although patient workflows differ from hospital to hospital, in general, the SS feed should capture the following actions typical of a patient's ED visit (lighter boxes may not trigger a separate HL7 message):

The patient arrives and is registered at the ED (triggering an A04 message). The patient is then seen by an ED clinician (typically this step triggers one or more A08 messages as the patient record is updated for demographic, clinical or other reason for visit information). The patient then is discharged from the ED, generating an A03 message. Subsequent updates to the patient's record such as diagnosis information may generate additional A08 messages.



The patient may alternatively be admitted as an inpatient to the hospital. The action of inpatient admission from the ED may generate the following ADT messages:

- A03 with updated discharge disposition (PV1-36) value to indicate inpatient admission, *before* the patient class (PV1-2) is changed from "E" to "I"
- A01, A03, or A04 to reflect change in patient class (PV1-2) from "E" to "I," updated patient location (PV1-3), updated coded/standardized patient location (OBX 56816-2), updated previous hospital unit (PV1-6) to "emergency," and updated date/time of admission (PV1-44) to indicate time of admission to the hospital.



While a patient is admitted in the hospital (patient class PV1.2 = "I"), in addition to ADT types A01, A03, A04, and A08, we would also like information on bed transfers (A02 messages) for each inpatient encounter if available. We hope to utilize this information to determine whether the patient had ever stayed in an ICU ward/bed during their encounter.

The patient may expire or elope sometime during their visit. We would like to receive all available ADT messages (such as A03, A04, and A08 messages) pertaining to these workflows.

A separate mapping key (provided via a screenshot, excel workbook, or via email) should be provided for the general type of service (e.g. ICU/PICU/NICU, med-surg, telemetry, observation, ED) for all possible values of PV1.3.1 (patient observation point of service).

IV. PATIENT WORKFLOW VALIDATION

Once we are able to determine what data elements are available for transmission, we will generate a patient workflow template that is specific to the hospital.

The hospital will be asked to use the patient workflow template to generate scripts (populating specific data element values for patient demographics and encounter information) for each workflow, and for each hospital to be included within the data feed.

Workflow testing is most effective when all relevant data fields are populated, and then populated with unique values. Please pay special attention when drafting workflow scripts to include:

- Examples of all diagnosis types that will be passed through to the Syndromic data feed (such as primary, secondary, reason-for-visit – with the types labeled in DG1-6), so that LAC can see which values will be coming through.
- *Unique* values for each reason-for-visit data field (such as clinical chief complaint in PV2-3, patient provided chief complaint in OBX 8661-1, triage notes in OBX 54094-8, and the different diagnosis types in DG1). Unique values help the hospital to identify where in the EHR software the data are sourced during troubleshooting.
- Both positive and negative values for binary data fields such as pregnancy status and smoking status so that we can ensure that both positive and negative values come across.
- An array of values for data fields which permit multiple values (e.g. race, travel history and diagnosis), so that we can ensure that all values come across.

The hospital will trigger ADT messages for test patients with information populated according to the script. The hospital will have the option to perform this validation with the SSP team in real time, receiving live feedback from the SSP team. The intent of this validation step is to ensure that ADT messages are triggered and populated as expected.

LAC will also assist with testing other scenarios such as negative scenarios as well, upon request.

> Note: Although real-time validation with the SSP is optional, it is highly recommended and, often, much less time consuming overall. We highly suggest testing internally first, and then scheduling a live session with the SSP team once internal testing is complete. Alternatively, a prepopulated script may be submitted to the SSP team, and corresponding ADT messages can then be triggered by the hospital for review by the SSP team.

V. LIVE ENVIRONMENT MESSAGE VALIDATION

- Once data element and patient workflow testing is complete in the test environment, the hospital will be asked to turn the live feed on (if this is an upgrade, the upgraded feed will run in parallel with the legacy feed).
- The SSP team will conduct final checks of the live feed for message content and volume for final approval.
- If this is an upgrade rather than a new connection, the legacy feed should continue to run for at least two weeks *after* final approval of the upgraded data feed.

VI. WRAPUP

Protocol and contacts for troubleshooting any potential live feed issues will be reviewed.

Daily SS report recipients at the hospital will be reviewed.

A letter confirming the presence and contents of the HL7 2.5.1 data feed to LAC will be provided to the hospital upon request.

MESSAGE TIMELINESS AND CONSISTENCY

TIMELINESS OF MESSAGE GENERATION
Data must be timely for syndromic surveillance. Data must be submitted at least within 24 hours of the date and time of the patient's initial encounter. Any subsequent updates to a patient's record must also be submitted within 24 hours of the information (transaction) being added to the patient record.

CONSISTENCY AND TIMING OF MESSAGE TRANSMISSION TO LACDPH SERVER
Transmission of near real time HL7 ADT messages to the LACDPH server is preferred. If a near real time data feed cannot be established, transmission of ADT messages in batch transmission mode may also be accepted. If batch transmission mode is utilized:

- Batched messages must be transferred to the LACDPH server at least once every 6 hours.
- Transmission of batched messages to LACDPH's server should be initiated at consistent times (e.g. at 5:05am, 12:05pm, 5:05pm and 12:05am). This allows for the establishment of consistent baseline trends for analysis.
- The last batch transmission of each morning should initiate before 6am to ensure that as many as possible of the previous day's messages are received in time for syndromic analysis and reporting.

MESSAGE CONTENT REQUIREMENTS

MESSAGE TYPES
Depending on the hospital's workflow, some Admit-Discharge-Transfer (ADT) message types may not be applicable. ADT messages should be cumulative, containing all (correct) information sent in previous messages, as well as the addition of any new information. The following types are accepted:

Message type	Description	Usage*	Implementation notes
A01	Inpatient admission	R	Typical indication of admission of ED patient to hospital as inpatient
A02	Bed transfers during inpatient admission	R	Generated when patient is moved to a different bed within the hospital
A03	Discharge from hospital	R	May or may not be triggered upon admission from ED to hospital (please specify).
A04	Patient registration	R	Generated upon registration of the patient at an ED, urgent care, or outpatient facility; admission of the patient to the inpatient facility, and

			transfer of the patient from another setting such as ED to the hospital
A08	Update patient information	R	Additional information, such as a coded diagnosis, is added to the patient record.

*The "usage" column be interpreted as follows:

R = Required
RE = Required but may be unpopulated
O = Optional (except where workflow requires its use)
C = Conditionally required - depends on the presence of another variable

HEADERS

The following headers are accepted (at minimum):

Header	Description	Implementation notes
MSH	Message header	
EVN	Event	
PID	Patient ID	
PV1	Patient visit information	
PV2	Patient visit information	
OBX	Observations	May have several segments per message
DG1	Diagnosis	May have several segments per message
IN1	Insurance	May have several segments per message
PR1	Procedure codes	May have several segments per message
ZPD	Additional header	Some hospitals choose to populate ZPD with newly available data elements such as gender identity and sex assigned at birth.

UNIQUE ENCOUNTER ID

The encounter ID (**PV1-19**) will be used to link together initial and all subsequent update ADT messages for a single ED encounter. Therefore, all messages that are produced as the result of a single patient encounter, for the purpose of SS, shall have the same value for the encounter ID; messages produced as a result of different patient encounters in a single hospital shall not have the same visit ID. Patients who are assigned an encounter ID upon registration at the ED, for example, should not be assigned a new encounter ID upon admission to a hospital inpatient facility.

PATIENT CLASS

The data feed should include both emergency department and inpatient workflows. The patient class (**PV1-2**) field should distinguish inpatient ("I") from ED ("E") encounters and should update if an ED ("E") patient is admitted to the hospital ("I"). Please exclude preadmission ("P"), recurring ("R"), and outpatient ("O") patient classes.

NOTABLE EXCLUSIONS

Please **exclude** the following:

- Patient resident address elements *other than* the ZIP code (PID-11), city, (PID-11.3), state (PID-11.4) and country (PID-11.6)
- Patient medical record numbers, account numbers, social security numbers (PID-3) and names (PID-5)
- Patient phone numbers (PID-13)
- Next of kin information (NK1)

INCLUDING DIAGNOSES AND CHIEF COMPLAINTS SPECIFIC TO THE CURRENT VISIT

Data elements detailing patient reason for ED admission such as patient or clinician provided reason for visit, triage notes and diagnoses should be directly relevant to the current ED visit. Please refrain from populating these data fields with chronic or historical health conditions such as those found in "patient problem lists" (i.e. *all* current or active diagnoses), unless they are directly relevant to the current ED visit. If including historical or chronic diagnoses or patient problem lists cannot be avoided, please ensure that they are consistently labeled, such as within diagnosis type DG1-6, so that we may filter these on our end.

Message field	Field name	Implementation notes	Usage	Example
MSH-3	Sending application	Typically name of sending application e.g. EPIC, Cerner, etc.	R	
MSH-4	Sending facility	MSH4.1: Sending facility name MSH 4.2: Facility NPI (preferred) or OID MSH 4.3: Literal value “NPI” or “OID” depending on MSH 4.2	R	
MSH-7	Message date and time	YYYYMMDDHHMMSS	R	20150101205030
MSH-9	Message type	“ADT^A01^”, “ADT^A02^’’, “ADT^A03’’, “ADT^A04’’ or “ADT^A08”	R	ADT^A08
MSH-10	Message ID	Unique messages should have message control IDs unique to the sending application	R	150
MSH-11	Processing ID	“T” for testing and validation, “P” for production	R	
MSH-12	HL7 Version ID		R	2.5.1
EVN-7.2	Coded facility name (treating)	Facility where patient is treated; please hard code this value as assigned by LA County	R	ZZP
PID-3.1*	Unique patient identifier	Medical record number	R	
PID-5*	Patient name	PID5.1: Family name PID5.2: Given name PID5.3: Second given name or initials) PID5.7: Name type • Legal name: “L” • Name known but intentionally excluded: "S"; • Name unknown: "U"	R	
PID-7	Date of birth	Day, month, and year	R	20150101
PID-8	Administrative sex	Female/Male/Other/Unknown	R	https://phinvads.cdc.gov/vads/ViewValueSet.action?id=6358110D-9517-E011-87A0-00188B39829B
PID-10	Race	If coded, include text translation or provide key	RE	2054-5^**Black or African American**^CDCREC https://phinvads.cdc.gov/vads/ViewValueSet.action?id=67D34BBC-617F-DD11-B38D-00188B398520
PID-11.1*	Street address		R	
PID-11.2*	Other street designation	Sometimes apartment or unit number is included here.	RE	
PID-11.3	City/Town		RE	

PID-11.4	State/Province		R	CA
PID-11.5	ZIP code		R	90012 or 90012-1234
PID-11.6	Country code	Please include concept code (alphabetical abbreviation)	RE	https://phinvads.cdc.gov/vads/ViewValueSet.action?id=8628EEFE-2F6A-4BC1-BBEB-609153F92CF7
PID-11.7	Address type	Patient's home address is preferred	R	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.801
PID-11.9	County	County of patient residence in USA – please include concept name (e.g. Los Angeles)	R	https://phinvads.cdc.gov/vads/ViewValueSet.action?id=FA221794-C665-E811-98FD-0017A477041A#
PID-13*	Home phone number		RE	
PID-22	Ethnicity	If coded, include text translation or provide key	RE	2186-5^**NOT HISPANIC OR LATINO**^CDCREC https://phinvads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520
PID-29	Death date and time	YYYYMMDDHHMMSS (Seconds optional). Typically equivalent to patient discharge date/time (PV1-45) if patient is deceased.	C	20150102050
PID-30	Death indicator	Indicator for whether patient is deceased	RE	Y/N (may be blank if false)
PV1-2	Patient class	Exclude preadmissions ("P"), recurring ("R"), and outpatient ("O") patient classes. The value should update if an ED patient ("E") is admitted ("I").	R	E/I https://phinvads.cdc.gov/vads/ViewValueSet.action?id=564F8F8B-E1DE-E411-8970-0017A477041A
PV1-3	Assigned patient location	This field contains the patient's initial assigned location or the location to which the patient is being moved. The first component may be the nursing station for inpatient locations, or clinic or department, for locations other than inpatient.	RE	Please provide a translation table for PV1.3.1 that we can use to determine services provided (e.g. Med-surg, telemetry, observation, labor and delivery, ICU, NICU, PICU, ED, etc.). We understand that in reality this mapping is in flux especially in surge situations. Please take special care to define ICU points of care. Note: OBX 56816-2 may also be used to denote PHIN VADS mappings of PV1.3.1 values; or as a special demarcation for ICU usage.
PV1-4	Admission type	Circumstances under which the	R	https://phinvads.cdc.gov/vads/

		patient was admitted. If urgent care messages are included in the feed, they are to be distinguished here.		ViewValueSet.action?id=08D34BBC-617F-DD11-B38D-00188B398520
PV1-6	Previous Hospital Unit	Hospital unit where patient was prior to the current transaction. Inpatient data element of interest - potentially used for filtering on A01 admits if previous location was "Emergency."	RE	
PV1-14	Admission source	If coded, please provide translation key	R	https://phinvads.cdc.gov/vads/ViewValueSet.action?id=7C5E5BC0-D265-E911-817A-005056ABE2F0
PV1-18	Patient type	Sometimes used to screen out or pass hospital specific patient types to the interface.	O	E/I: https://phinvads.cdc.gov/vads/ViewValueSet.action?id=564F8F8B-E1DE-E411-8970-0017A477041A
PV1-19	Visit number	Messages related to the same ED encounter should share a visit number unique to the encounter.	R	
PV1-36	Discharge disposition	An ADT message should be generated to reflect admission from the ED to the hospital.	RE	01 or Discharged to home or self care (routine discharge) https://phinvads.cdc.gov/vads/ViewValueSet.action?id=EA5C4177-0FA5-4F7F-A837-2533BE6AEF46
PV1-44	Date and time of admission	YYYYMMDDHHMMSS (Seconds optional). This should reflect the time a patient is registered at the ED; and should update to reflect date/time of admission to the hospital as an inpatient if applicable, along with a patient class (PV1-2) change from "E" to "I."	R	201501012050
PV1-45	Date and time of departure	YYYYMMDDHHMMSS (Seconds optional)	RE	201501012050
PV2-3	Chief complaint (clinician reported/coded reason for admission).	Short description of the provider's reason for patient admission. May be coded or free text. If both free text and drop down selection text are available, send both. Please specify: • PV2-3.1: Identifier. Use ICD-9CM, ICD-10CM, or SNOMED CT codes. • PV2-3.2: Text accompanying identifier. If only free text is used, communicate this here. If structured text is captured,	R	SORE THROAT

		concatenate values and include here. • PV2-3.3: Name of coding system, valued if PV2-3.1 (identifier) is valued. • PV2-3.3: if applicable, admit reason code system name, valued as one in set ('I9C' 'I10C' 'I10' 'SCT') Please ensure character limit accommodates content.		
PV2-38 (typical but can accommodate elsewhere)	Mode of transportation to ED	If coded, include text translation or provide key	O	"WALK-IN" "CAR" "AMBULANCE" etc.
OBX (11289-6)	Initial body temperature	Fahrenheit preferred	RE	OBX|1|NM|11289-6^BODYEMPERATURE:TEMP:ENCTRFIRST:PATIENT:QN^LN||**98.3**|[degF]^FARENHEIT^UCUM|||||F||||||||||||
OBX (CWE|8661-1)	Self-reported chief complaint (in patient's own words).	Send the most complete description of the patient's chief complaint in their own words; in some cases this may entail sending multiple values (for example, should both free text and dropdown values be available). The chief complaint text should never be replaced with other information (such as diagnosis) either manually or by the provider's data system; keep it the same as what was captured at the time of admission. Avoid sending historical patient problem lists not relevant to current visit.	RE	OBX|1|CWE|8661-1^CHIEF COMPLAINT:FIND:PT:PATIENT:NOM:REPORTED^LN||^^^^^^^^**DEPRESSION**||||||F||||||||||||
OBX(CWE|72166-2)	Smoking status of patient	Populate OBX-5 with PHIN VADS values (https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.6027)	RE	OBX|1|CWE|72166-2^TOBACCO SMOKING STATUS^LN||428071000124103 **^Current Heavy tobacco smoker** ^SCT||||||F|||20110217
OBX(CWE|11449-6)	Pregnancy status	Yes, no, or unknown (https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.888)	RE	OBX|1|CWE|11449-6 Pregnancy Status ^LN||Y^**Yes**^HL70136||||||F
OBX (TX|54094-8)	ED triage notes	Typically free text	RE	OBX|6|TX|54094-8^TRIAGE NOTE:FIND:PT:EMERGENCY DEPARTMENT:DOC:||**Pt c/o left ear pain for two days. pt flew back from Mexico**

				yesterday, (+) cough.||||||F|||
OBX(TX|10182-4)	Travel history	May be free text including locations of travel and dates (if available). Multiple instances of travel may be concatenated into one line. Alternatively, separate OBX lines for each instance of travel may be used. If formatting is available, please use the following format: • Travel location (OBX 5.1) • Beginning date (OBX 5.2) • End date (OBX 5.3)	RE	**Free text example:** OBX|1|TX|10182-4^History of travel Narrative^LN||**Arrived home from Liberia two days ago**||||||F|||20110217 **Formatted examples:** OBX|1|TX|10182-4^History of travel Narrative^LN|1|**Brazil^20181005^20181006**||||||F|||20181010115100 OBX|1|TX|10182-4^History of travel Narrative^LN|2|**Mexico^20181007^20181008**||||||F|||20181010115100
OBX (NM|21612-7)	Reported age at time of visit		O	OBX|2|NM|21612-7^AGE TIME PATIENT REPORTED^LN||**70**|a^YEAR^UCUM|||||F||||||||||||
OBX (SS003)	Facility or visit type	Location where patient is receiving care, typically: emergency, inpatient or urgent care	O	EMERGENCY https://phinvads.cdc.gov/vads/ViewValueSet.action?id=43E2BA38-DFDE-E411-8970-0017A477041A
OBX (TX|44833-2)	Clinical impression/preliminary diagnosis	Should capture additional clinical impression information not mapped to DG1. Please specify: • Free text or drop-down?	O	OBX|6|TX|44833-2^DIAGNOSIS.PRELIMINARY:IMP:PT:PATIENT:NOM:^LN||**pt recently admitted and discharge for COPD, reports cough with white phlegm**||||||F||||||||||||
OBX (NM|59408-5)	Oxygen saturation by pulse oximetry	Optional	O	OBX|2|NM|59408-5^OXYGEN SATURATION:MFR:PT:BLDA:QN:PULSE OXIMETRY^LN||**99**|%^PERCENT^UCUM|||||F||||||||||||
OBX (11368-8)	Illness or injury onset date	YYYYMMDDHHMM (Time optional)	O	OBX|4|TS|11368-8^ILLNESS OR INJURY ONSET DATE AND TIME:TMSTP:PT:PATIENT:QN^LN||**20150101**||||||F||||||||||||
OBX (56816-2)	Hospital unit (inpatient)	Inpatient data element of interest only. Hospital unit where patient is at the time the message is sent (admission and discharge). This is a standardization of the PV1-3 Assigned Patient Location that will	O (if PV1.3 is populated with	Example for filtering OBX 56816-2 solely to demarcate ICU usage: OBX|10|CWE|56816-2^Patient location^LN||**1027-**

		require a mapping to the Healthcare Service Location codes in OBX-5: https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.13.19 For OBX-3 use LOINC codes and PHIN values: https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.3589 Alternatively, some hospitals use this field to specially demarcate ICU points of care by suppressing codes for non-ICU points of care (populating this field only if the encounter is related to an ICU point of care).	point of services information)	**2^Medical Critical Care**^NHSN||||||F
OBX (93669-0)	Homelessness	LOINC question is "Are you homeless or worried about becoming homeless in the future?" We interpret however only as "Are you homeless?" Populate with "YES" "NO" or leave blank where applicable	O	OBX|1|TX|93669-0^Are you homeless^LN|1|**Yes**|||||F|||20210312
DG1-3	Diagnosis	Diagnosis from the provider (EHR) is preferred over the diagnosis provided through billing. Multiple DG1 segments can be accommodated in one message. DG1s with ICD codes should include: • Identifier (DG1-3.1). User ICD9CM, ICD-10CM, or SNOMED CT codes. • Text translation (DG1-3.2) • ICD type (DG1-3.3) to be valued as one in set ('I9C' 'I10C' 'SCT') • Diagnosis date/time (DG1-5) - optional • Diagnosis type (DG1-6) Where multiple diagnosis types (DG1-6) are available, please allow systems to pass all types through to the Syndromic data feed. Please ensure character limit accommodates content.	RE	DG1|1||**^NOSE BLEED||20190410|Admit Reason** DG1|2||**D68.9^Coagulation Defect, Unspecified^ICD10||20190412|Secondary Dx** DG1|3||**R04.0^Epistaxis^ICD10||20190412|Admitting Dx** DG1|4||**R04.0^Epistaxis^ICD10||20190412|Final Dx**
PR1	Procedure codes	Set ID (PR1-1): Numbers repetition of the segment.	RE	PR1|1||**5472^ABDOMEN WALL REPAIR**

		Code identifier (PR1-3.1): Unique identifier assigned to the procedure, sent as CPT-4, CPT-5, ICD-9-CM-PCS, ICD-10-PCS, or SNOMED CT Code text (PR1-3.2): Concept description text accompanying the identifier Coding system (PR1-3.3): If PR1-3.1 (the identifier) is provided then then value according to set ("C4", "C5", "I9C", "I10P", "SCT") Procedure date/time (PR1-5): Date/time the procedure was performed		**NEC^I9CP||201408081816** (procedure from ICD9-CM)
IN1	Insurance segment	Set ID (IN1-1): Numbers repetition of the segment Insurance company ID (IN1-3): National Health Plan identifier Plan type (IN1-15): Plan type such as Medicare, HMO, etc. May use values from https://phinvads.cdc.gov/vads/ViewValueSet.action?id=481580D6-3A63-4A4C-91E1-B749997AEAA2	O	https://phinvads.cdc.gov/vads/ViewValueSet.action?id=481580D6-3A63-4A4C-91E1-B749997AEAA2

* These values will be collected towards compliance with the Patient Safety Information Exchange (PSIE) Registry (also within LACDPH's Acute Communicable Disease Control Program).

FREQUENTLY ASKED QUESTIONS

Is the LACDPH SSP currently accepting private provider data?
No, we do not currently have plans to accept private provider data. An exclusion letter for private providers may be found here: http://www.publichealth.lacounty.gov/cdcp/meaningfuluse.htm

Our hospital is not a current syndromic surveillance participant – can we join?
Yes, LACDPH SSP will be accepting new connections and is anticipated to begin work in 2020. Please email lacphsynd@ph.lacounty.gov to register your organization's intent to onboard and to be added to the queue.

Are HL7 2.3.1 messages accepted for meeting MU2 or MU3 reporting objectives?
No, hospitals wishing to meet MU2 or MU3 requirements must transmit ADT HL7 2.5.1 messages.

What if we are already sending HL7 2.5.1 messages?
The SSP will review the hospital's data feed to determine that it is meeting current standards, as outlined in the most recent issue of the implementation guide.

Do you have an “intent to register form”?
Please email lacphsynd@ph.lacounty.gov for new connections, or to state that the hospital would like to have its existing feed reviewed for a potential upgrade towards meeting MU objectives.

Are urgent care, inpatient, or outpatient related messages required?
Only emergency department and inpatient ADT messages are required for submission to LACDPH. Urgent care and outpatient ADT messages are not currently accepted by the SSP.

What documentation will we receive from LACDPH to show that we upgraded or have established a new connection?
The SSP will provide your project manager or MU coordinator with a letter of attestation of production upon request, which will state the presence and type of HL7 feed as well as the data elements contained.

DOCUMENT HISTORY

Version	Date	Description	References and Comments
1.0	February 2016	First version	PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care, Inpatient and Ambulatory Care Settings, Release 2.0 (April, 2015) http://www.cdc.gov/phin/resources/phinguides.html Erratum to the PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care, Inpatient and Ambulatory Care Settings ADT Messages A01, A03, A04 and A08 Optional ORU^R01 Message Notation for Laboratory Data HL7 Version 2.5.1 (Version 2.3.1 Compatible) Release 2.0 April 21, 2015 http://www.cdc.gov/phin/resources/phinguides.html PHIN Vocabulary Access and Distribution System (VADS) https://phinvads.cdc.gov/vads/SearchVocab.action
1.1	December 2017	Adjustments for MU3	Includes new additional facility and patient demographic information requirements for MU3, including: Facility name, facility address, patient city town, smoking status, and pregnancy status. Also requests testing of inpatient data, and testing to still accept ICD9 codes.
1.2	April 2018	Adjustments for MU3	Includes addition of travel history data element. Elevation of triage notes from "O" to "RE."
1.3	June 2018	Adjustments for LA County	Removal of PID-3 and PID-18 (patient specific account numbers), facility identifiers, and coding of hospital name.
1.4	June 2019	Adjustments for LA County	Inclusion of patient workflow testing details; expanded DG1-6 diagnosis type request; additional details on travel history OBX.
1.5	June 2020	Adjustments for LA County	Change to require inpatient messages; urgent care messages optional. Inclusion of assigned patient location for department/bed type information (PV1-3), procedure codes (PR-1), insurance segments (IN1), employer/occupation information, processing ID (MSH-11), hospital unit (OBX 56816-2), assigned patient location (PV1-3), previous hospital unit (PV1-6).
1.6	December 2020	Adjustments for LA County	Change to require A02 for PV1-2="I" to capture inpatient message bed transfers, as well as ICU point of care codes used in PV1-3 and/or OBX 56816-2.
1.7	July 2021	Adjustments for LA County	Updated PHIN VADS standardizations to current standards, for following data elements: PV1-2: Patient class PV1-14: Admission source PV1-18: Patient type PV1-36: Discharge disposition IN1: Insurance segment
1.8	September 2021	Adjustments for LA County	Added PID-11.7 address type and OBX 93669-0 (homelessness). Clarified that OBX 56816-2 (hospital unit/service location) is optional if PV1.3 (assigned patient location) is populated. Some jurisdictions however opt to also send OBX56816-2 (in addition to PV1.3), as a way to specify ICU care, specifically, so that example was included.
1.9	April 2022	Adjustments for LA County	Inclusion of additional data elements for compliance with LACDPH ACDC PSIE (Patient Safety Information Exchange) registry use.

ACKNOWLEDGEMENTS

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