Washington State Messaging Guide

for

Syndromic Surveillance

Table of Contents

I. Introduction

Washington State Department of Health (WA DOH) has compiled this guide for submission of syndromic surveillance data to Public Health. This document is intended to be a consolidated guide for the content and submission of syndromic surveillance messages in Washington State. It is not meant to be a comprehensive reference on the construction and processing of HL7 messages. Users of this guide must be familiar with HL7 messaging and standard terminology systems; for more information, refer to the "Useful Resources" links on page 5.

Washington State guidance in relation to national guidance documents

This guidance document primarily reflects the national guidance for syndromic surveillance messaging developed by the Public Health Information Network (PHIN) and released in the following two documents: The ***PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care, Inpatient and Ambulatory Care Settings*** *(Release 2.0, April 2015)* and ***Erratum to the CDC PHIN 2.0 Implementation Guide (August, 2015).***

Washington State-specific departures from national Release 2.0 Minimum Data Element specifications are marked with *asterisks. Some elements specified as "O" or "RE" usage status in the national Release 2.0 guidance are "RE" or "R" in Washington because the element is necessary for our routing or other administrative or surveillance purposes.

We recognize that the Office of the National Coordinator for Health Information Technology (ONC) 2015 Edition certification criteria require that certified Electronic Health Record (EHR) technology follow the national Release 2.0 standard, and that some EHR products may not support a few of the Washington State-specific requirements. We request that facilities communicate with us about any such implementation barriers by e-mailing syndromic.surveillance@doh.wa.gov with the subject line, "SS message implementation".

II. Data Submission

Scope of Messaging

Participating facilities and providers located in Washington State should submit syndromic surveillance messages from all visits with no filtering done prior to submission to WA DOH. Multi-state networks should discuss implementation details with each state in which they operate.

Emergency departments, urgent care centers, and non-urgent ambulatory care facilities shall send syndromic surveillance messages from all visits (including virtual or telehealth) by all patients, regardless of the nature of the visit. Hospitals providing inpatient care shall send syndromic surveillance messages from all inpatient stays, *regardless of the source of admission*. Inpatient records should include patients classified as observation or obstetric (e.g., labor and delivery). Hospitals may exclude records pertaining to patients classified as outpatient, preadmit, or recurring.

ORU laboratory result messages associated with these patients shall be filtered only on the LOINC term classes specified in *Appendix D*.

Facility Identification

Washington's facility registration process will not replace the need to include facility identification details in the HL7 messages sent for syndromic surveillance. Information about the treating facility (e.g. facility name (EVN-7.1), facility identifier (EVN-7.2), and facility type (OBX)) shall be included in each message.

Patient & Visit Identification

The facility-provided Patient ID and Visit ID are the key link for circumstances that require follow-up by Public Health. The combination of Patient ID and Visit ID provided in a syndromic surveillance message must allow the sending facility to identify the patient and visit that triggered the message of interest. Patient ID is intended to provide a single unique identifier per patient within a facility or network. Visit ID must provide a single unique identifier for a distinct patient encounter. This unique Visit ID must be used for all messages triggered by any activity associated with that patient encounter, including changes in patient class, such as emergency department to inpatient admission. (From the April 2015 PHIN Guide, "ALL messages constrained by this guide that are produced as a result of a single patient encounter for the purpose of Syndromic Surveillance, SHALL have the same value for PV1-19.1 (Visit ID). Messages constrained by this guide that are produced as a result of different patient encounters for the purpose of Syndromic Surveillance, SHALL NOT have the same value for PV1-19.1 (Visit ID).")

Message Frequency

WA DOH requests that syndromic surveillance data be submitted in hourly batches. The timing of files may be adjusted up or down in frequency as is convenient for data submitters. Files must, at a minimum, be sent as early as possible after midnight and contain information on all visits from the previous 24 hours, even if incomplete. Data submission should occur 24 hours a day, 7 days a week. HL7 batch protocol, as specified in *Appendix E*, must be used to submit messages in batches.

Message File Size

Files should, on average, not exceed 10MB in size. Message file size limitation also applies when sending back data and/or corrected data.

Message File Names

WA DOH requests that message file names indicate the sending or treating facility, syndromic

surveillance, and the time of file transmission. *Each file transmitted must have a unique filename.* This could take the form "HOSPA_SS_YYYYMMDDhhmm.hl7" where HOSPA is a generic placeholder for the sending or treating facility name. *If you are submitting messages in real-time and using a timestamp to create unique filenames, you will need to extend the precision of the timestamp to millisecond to avoid producing files with duplicate names.* Do not begin file names with "WA" or "DOH", and do not include spaces. If your organization needs to include WADOH in the file name for internal purposes, please use the form "HOSPA_SS_WADOH_YYMMDDHHMM.hl7". *The file extension must be ".hl7" to ensure proper routing and processing.*

Message Updates

WA DOH supports patient updates. When *any* of the requested data elements described in the messaging guides are updated in the data provider's system, whether before or *after* discharge, an update message (ADT^A08) should be triggered. The information contained shall be cumulative, including all previously sent information that remains correct and adding the new or changed information. (From the April 2015 PHIN Guide, *"When data elements are updated in the sender's system, the entire record (i.e., all specified elements sent in previous messages) SHALL be resent."*) Please review your protocol for triggering syndromic message updates to ensure that unrelated changes to the patient record do not trigger syndromic message updates, as this produces a high volume of duplicative messages.

Message Acknowledgement

Senders using the OneHealthPort HIE will receive an ACK message from OneHealthPort when a file is successfully received by DOH.

Sender Usage Requirements

Data fields of interest for syndromic surveillance have the following sender usage requirements designated:

Sender Usage	Sender Usage Description
R : Required	Data fields marked "R" must be present in all messages transmitted.
RE : Required but may be empty	Data fields marked "RE" are required when the data is present in the patient record (expected in the majority of situations.) *"RE" does not mean optional.* A certified EHR is expected to support collection and transmission of all RE data elements. "RE"-designated information may legitimately be missing in some circumstances, e.g., information on patient demographics when the patient arrives unconscious or if specific data is not collected routinely as part of the standard clinical workflow.
O : Optional	WA DOH is supporting and requesting all "Optional" data fields. These fields are of interest for improving the performance of syndromic surveillance. However, each sender may make their own determination if some "Optional" fields will be excessively burdensome to provide.
C : Conditional	Data fields marked "C" are conditionally required.
CE : Conditionally empty	When conditionality predicate evaluates to 'True', behaves the same as 'RE'. When conditionality predicate evaluates to 'False', do not populate the field.

Requirements by Patient Care Setting

In general, information in this guide shall be taken to apply to all care settings eligible for participation in submission of syndromic surveillance data (emergency, inpatient, non-urgent ambulatory, and urgent care settings). Any required distinctions among these care settings are noted explicitly in the implementation

notes for specific data fields in ***Appendices A-C***.

III. Supported HL7 Messages

In alignment with the 2015 Edition of the ONC Certification Criteria for EHR Technology, WA DOH requires all syndromic surveillance messages submitted under Promoting Interoperability to be HL7 version 2.5.1.

Syndromic surveillance in Washington State will use information from HL7 2.5.1 messages of types ADT (Admit, Discharge, Transfer) and ORU (Unsolicited Observation). ADT messages form the basis of syndromic surveillance; all required data elements are transmitted by ADT messages. The laboratory data provided by ORU messages improve the performance of syndromic surveillance; transmission of laboratory results by ORU messages is optional but strongly requested.

Usage of each message type is expected as follows:

ADT^A04: Registration
   A patient has arrived or checked in. This includes one-time and recurring patients.

ADT^A08: Patient Information Update
   Patient information has changed or new information has become available, but no other trigger event has occurred. These A08 update messages shall be sent at the time the new or changed information becomes available, whether before *or after* discharge. The information they contain shall be cumulative, presenting all previously sent information that remains correct and adding the new or changed information.

ADT^A03: Discharge
   A patient's encounter in a healthcare facility has ended and their status is changed to discharged.

ADT^A01: Admission
   A patient is undergoing the admission process which assigns the patient to a bed for inpatient care. It signals the beginning of a patient's stay in a healthcare facility.

ORU^R01: Laboratory Result
(Unsolicited Observation Result)
   A laboratory test result becomes available. This includes preliminary, final, and corrected results. All laboratory results (positive, negative, indeterminate, etc.) indicated in ***Appendix D*** shall be transmitted.

HL7 Message type requirements by care setting

Patient Care Setting		ADT			ORU
Message Trigger Types	A04	A08	A03	A01	R01
Eligible hospitals providing inpatient care	R	R	R	R	O
Eligible hospitals providing emergency care only	R	R	R	C	O
Eligible professionals (urgent and non-urgent ambulatory care)	R	R	R	C	O

R = Required; C = Required only if used during normal flow of business; O = Optional but strongly requested

IV. Useful Resources

Washington State Public Health Promoting Interoperability resources:

Washington State Department of Health Promoting Interoperability website
https://doh.wa.gov/public-health-healthcare-providers/healthcare-professions-and-facilities/data-exchange

Washington State Department of Health Syndromic Surveillance website
https://doh.wa.gov/public-health-healthcare-providers/healthcare-professions-and-facilities/data-exchange/syndromic-surveillance-rhino

Syndromic surveillance messaging standards referenced by the 2015 edition of the ONC Certification Criteria for EHR Technology:

PHIN Messaging Guide for Syndromic Surveillance: Emergency Departments, Urgent Care, Inpatient and Ambulatory Care Settings (Release 2.0, April 2015)
http://www.cdc.gov/nssp/documents/guides/syndrsurvmessagguide2_messagingguide_phn.pdf

Erratum to the PHIN Messaging Guide for Syndromic Surveillance: Emergency Departments, Urgent Care, Inpatient and Ambulatory Care Settings (Release 2.0, April 21 2015)
http://www.cdc.gov/nssp/documents/guides/erratum-to-the-cdc-phin-2.0-implementation-guide-august-2015.pdf

Current national standard for laboratory results (basis for ORU messages in syndromic surveillance):

HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1
http://www.hl7.org/implement/standards/product_brief.cfm?product_id=98

Messaging and terminology standards and validation:

National Institute of Standards and Technology (NIST) Syndromic Surveillance 2015 edition validation tool
http://hl7v2-ss-r2-testing.nist.gov/ss-r2/#/home

PHIN 2.0 Implementation Guide Meaningful Use Clarifying Document
http://hl7v2-ss-r2-testing.nist.gov/ss-r2/api/documentation/doc?name=NIST-SS-Clarifications-and-Validation-Guidelines-V1-6.pdf

Health Level Seven International (HL7) standards development organization http://www.hl7.org/

PHIN Vocabulary Access and Distribution System (VADS) http://phinvads.cdc.gov/

International Classification of Diseases, Tenth Revision (ICD10) http://www.icd10data.com/

Logical Observation Identifiers Names and Codes (LOINC) resource http://loinc.org/

Systematized Nomenclature of Medicine-Clinical Terms (SNOMED CT) http://www.ihtsdo.org/snomed-ct/

American Medical Association Current Procedural Terminology (CPT)
http://www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/cpt.page

Questions?

For questions about this guide or about syndromic surveillance submission to the Washington State Department of Health, please contact the Department of Health Syndromic Surveillance (RHINO) Program by email at: syndromic.surveillance@doh.wa.gov

APPENDIX A: ADT MESSAGE DATA ELEMENTS, WASHINGTON STATE-SPECIFIC GUIDANCE
* in Usage column indicates a different Sender Usage requirement than that found in PHIN Release 2.0 guidance

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes	
MESSAGE HEADER	**MSH**	**R**	**INFORMATION FOR PARSING AND PROCESSING MESSAGE** MSH segments per message: one (1)	
Field Separator	MSH-1	R	Use the literal value "|"	
Encoding Characters	MSH-2	R	Use the literal value "^~\&"	
Sending Application	MSH-3	O	Uniquely identifies the sending application among all applications in network enterprise	
Sending Facility	MSH-4	R	The name of the sending facility may differ from the name of the treating facility.	
MSH-4 implementation differs depending on message transport mechanism:			**For facilities sending data via OneHealthPort HIE:**	**For facilities sending data directly to WA DOH:**
NamespaceID	MSH-4.1	R*	Use the organization ID provided for your organization during registration with OneHealthPort	Use a business name abbreviation descriptive enough to clearly identify the sending facility
Universal ID	MSH-4.2	R	Use the facility-level OID assigned by OneHealthPort	OID or NPI is preferred
Universal ID Type	MSH-4.3	R	Use literal value "ISO"	Use literal value "ISO" for OID, "NPI" for NPI
Receiving Application	MSH-5	R*	Use literal value "WADOHPHEEDS^2.16.840.1.113883.3.237.4.6^ISO"	
Receiving Facility	MSH-6	R*	Use literal value "dn1fro00"	
Date/Time Of Message	MSH-7	R	Date/time that the sending system created the message; minimum precision is to the nearest minute: YYYYMMDDHHMM[SS[.S[S[S[S]]]]] [+/-ZZZZ]	
Message Type	MSH-9	R	"ADT^A01^ADT_A01", "ADT^A03^ADT_A03'', "ADT^A04^ADT_A01'' or "ADT^A08^ADT_A01"	
Message Control ID	MSH-10	R	Each unique message should have a message control ID that is unique at least within the sending application	
Processing ID	MSH-11	R	Use literal value "T" during testing and validation; use literal value "P" once the messages have been fully validated and are in production	
Version ID	MSH-12	R	Use the literal value "2.5.1"	
Message Profile Identifier	MSH-21	R	The Department will not be sending acknowledgement messages for each message received. Use one of the following literal values: "PH_SS-NoAck^SS Sender^2.16.840.1.114222.4.10.3^ISO" or "PH_SS-Batch^SS Sender^2.16.840.1.114222.4.10.3^ISO"	

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes	
EVENT TYPE	**EVN**	**R**	**TRIGGER EVENT INFORMATION** EVN segments per message: one (1)	
Recorded Date/Time	EVN-2	R	Expected to be the system date/time that the transaction was entered (NOTE, EVN-2 does not have to equal MSH-7); minimum precision is to the nearest minute: YYYYMMDDHHMM[SS[.S[S[S]]]] [+/-ZZZZ]	
Event Facility	EVN-7	R	This field shall identify the individual facility where the patient was treated	
NamespaceID	EVN-7.1	RE	Use an abbreviation descriptive enough to clearly identify the treating facility	
EVN-7.2 & 7.3 implementation differs depending on message transport mechanism:			**For facilities sending data via OneHealthPort HIE:**	**For facilities sending data directly to WA DOH:**
Universal ID	EVN-7.2	R	Use a facility-level (aka child) OID assigned by OneHealthPort that identifies the individual facility providing service	OID or NPI is preferred, and must identify *the individual facility providing service*; If no existing OID or NPI uniquely identifies the facility providing service, see https://www.hl7.org/oid/index.cfm for information on registering an OID for the facility
Universal ID Type	EVN-7.3	R	Use literal value "ISO"	Use literal value "ISO" for OID, "NPI" for NPI
PATIENT IDENTIFICATION	**PID**	**R**	**PATIENT IDENTIFYING AND DEMOGRAPHIC INFORMATION** PID segments per message: one (1)	
Set ID - PID	PID-1	R	Use the literal value "1"	
Patient Identifier List	PID-3	R	Patient's unique identifier(s) from the submitting facility/organization; identifiers should be strong enough to remain unique across submitting organizations. PID-3 is a repeating field that can accommodate multiple patient identifiers.	
ID Number	PID-3.1	R	The identifier provided should allow the treating facility to retrieve information on the patient if requested by Public Health. This is a repeating field. Multiple values may be sent. Please order the identifiers submitted using the following hierarchy: (1) Master patient index, if available (2) Medical record number, if available (3) Patient account number, if available (4) Other internal patient identifier, if none of the above patient identifiers are available	
Assigning Authority	PID-3.4	O	This field shall identify the organizational entity responsible for assigning the unique Patient ID Number specified in PID-3.1 for all ADT and ORU messages associated with the patient visit	
Identifier Type Code	PID-3.5	R	Use literal value: "PT" for Master Patient Index; "MR" for medical record number; "PI" for patient internal identifier	

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
Assigning Facility	PID-3.6	O	This field shall identify the facility responsible for assigning the unique Patient ID Number specified in PID-3.1 for all ADT and ORU messages associated with the patient visit
Patient Name	PID-5	R*	Patient name is required in Washington State. If name is unknown, PID-5 shall be valued as "^^^^^^~^^^^^^U".
Family Name	PID-5.1	RE*	Patient's last name
Given Name	PID-5.2	RE*	Patient's first name
2nd Given Name or Initial	PID-5.3	RE*	Patient's middle name or initial
Suffix	PID-5.4	RE*	Suffix to patient's name such as Sr., Jr. or III
Name type	PID-5.7	R*	If patient legal name is provided, use literal value "L"; if patient name is unknown, use "U"
Date/Time of Birth	PID-7	RE*	Expressed with precision to the day: YYYYMMDD. Leave blank if unknown or unavailable.
Administrative Sex	PID-8	RE	Use value set *PHVS_Gender_SyndromicSurveillance*
Race	PID-10	RE	Patient may have more than one race defined. Leave blank if race is unknown.
Identifier	PID-10.1	RE	Use value set *PHVS_RaceCategory_CDC*
Text	PID-10.2	O	Concept name associated with code in PID-10.1
Name of Coding System	PID-10.3	CE	**Condition Predicate**: If PID-10.1 (Identifier) is valued, then 10.3 shall be valued "CDCREC"
Patient Address	PID-11	RE*	Transmit patient's primary/current address
Street Address	PID-11.1	RE*	Free text; patient's physical street address
City or Town	PID-11.3	RE*	Free text
State or Province	PID-11.4	RE*	For US residents, use value set *PHVS_State_FIPS_5-2*; otherwise, use local code
ZIP or Postal Code	PID-11.5	RE	USPS 5-digit code for US residents; otherwise, use local postal code
Country	PID-11.6	RE*	Use value set *PHVS_Country_ISO_3166-1*
County/Parish Code	PID-11.9	RE	For US residents, use value set *PHVS_County_FIPS_6-4*
Phone Number	PID-13	RE*	Transmit patient's phone number. A home or mobile number is requested.
Telephone use code	PID-13.2	RE*	"PRN" – Primary Residence Number, "ORN" – Other Residence Number, "WPN" – Work Number, "EMR" Emergency Number"PH" – Telephone, "CP" – Cellular Phone
Telecommunication	PID-13.3	RE*	"PH" – Telephone, "CP" – Cellular Phone
Country Code	PID-13.5	RE*	
Area/City Code	PID-13.6	RE*	
Local Number	PID-13.7	RE*	
Extension	PID-13.8	RE*	
Unformatted telephone	PID-13.12	O*	Transmit 10-digit phone number

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
Patient Email	PID-13	RE*	Transmit patient's email address
Telephone use code	PID-13.2	RE*	"NET"
Telecommunication Equipment Type	PID-13.3	RE*	"Internet"
Email Address	PID-13.4	RE*	Patient's email address
Primary Language	PID-15	O	Preferred or primary spoken language
Patient Account/Control Number	PID-18	O	Patient's unique alpha-numeric number assigned by the hospital to facilitate retrieval of individual patient records
Ethnic Group	PID-22	RE	Leave blank if unknown
Identifier	PID-22.1	RE	Use value set *PHVS_EthnicityGroup_CDC*
Text	PID-22.2	O	Concept name associated with code in PID-22.1
Name of Coding System	PID-22.3	CE	**Condition Predicate**: If PID-22.1 (Identifier) is valued, then 22.3 shall be valued "CDCREC"
Patient Death Date and Time	PID-29	CE	Date/time at which patient death occurred, expressed with minimum precision to the nearest minute: YYYYMMDDHHMM[SS[.S[S[S[S]]]]] [+/-ZZZZ] **Condition Predicate**: If PV1-36 (Discharge Disposition) is valued "20", "40", "41", or "42", then PID-29 shall be populated
Patient Death Indicator	PID-30	CE	**Condition Predicate**: If PV1-36 (Discharge Disposition) is valued "20", "40", "41", or "42", then PID-30 shall be valued "Y". Leave blank if patient has not died.
Last Update Date/Time	PID-33	O	Last update date/time for the data contained in the PID segment
Last Update Facility	PID-34	O	Identifies the facility which last updated the data contained in the PID segment

PATIENT VISIT	**PV1**	**R**	**VISIT-SPECIFIC INFORMATION** PV1 segments per message: one (1)
Set ID - PV1	PV1-1	RE	Use the literal value "1"
Patient Class	PV1-2	R	Use value set *PHVS_PatientClass_Syndromic Surveillance*; Data providers should include ALL classes of patients cared for at their facility EXCEPT Preadmit and Recurring. Hospitals may additionally exclude records for patients classified as Outpatient.
Assigned Patient Location	PV1-3	O	Indicates patient's initial assigned location or the location to which the patient is being moved.
Admission Type	PV1-4	O	This field indicates the circumstances under which the patient was or will be admitted (e.g. routine, emergency, elective, etc.); use value set *PHVS_Admission_Type_HL7_2x*
Previous Hospital Unit	PV1-6	O	Unit where patient was prior to the current transaction
Physician Identifier	PV1-7	RE*	Attending physician's NPI

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
Hospital Service	PV1-10	O	Treatment or type of surgery the patient is scheduled to receive; Use **HL7 Table 0069 codes:** CAR (Cardiac Service), MED (Medical Service), PUL (Pulmonary Service), SUR (Surgical Service),
Admit Source	PV1-14	O	Indicates setting from which the patient was admitted; Use value set **PHVS_AdmitSource_HL7_2x**
Ambulatory Status	PV1-15	O	Indicates any permanent or transient handicapped condition
Visit Number	PV1-19	R	Uniquely identifies the patient visit among all visits at the facility/organization
ID Number	PV1-19.1	R	All syndromic surveillance messages produced as a result of a single patient encounter must have the same value for PV1-19.1; messages produced as a result of different patient encounters must not share PV1-19.1 values
Assigning Authority	PV1-19.4	O	This field shall identify the organizational entity responsible for assigning the unique patient Visit ID Number specified in PV1-19.1 for all syndromic surveillance messages associated with the patient visit
Identifier Type Code	PV1-19.5	R	Use the literal value "VN"
Assigning Facility	PV1-19.6	O	The facility responsible for assigning the unique patient Visit ID Number
Discharge Disposition	PV1-36	R	Use the value set **PHVS_DischargeDisposition_HL7_2x** Data may be updated throughout encounter (e.g., Final ED disposition vs. Final inpatient disposition). This field is not required in ambulatory settings.
Admit Date/Time	PV1-44	R	Date/time patient presents for care, expressed with minimum precision to the nearest minute: YYYYMMDDHHMM[SS[.S[S[S]]]] [+/-ZZZZ]. This value should be held constant across all messages for a specific encounter and not updated as the patient moves through the clinical workflow (e.g., registered, bedded, admitted).
Disposition or Discharge Date/Time	PV1-45	RE*(A08) R*(A03)	Date/time of patient disposition or discharge, expressed with minimum precision to the nearest minute: YYYYMMDDHHMM[SS[.S[S[S]]]] [+/-ZZZZ] This field shall not be populated in A01 or A04 messages; field shall be populated in A03 discharge messages when available, and subsequent A08 updates. This field is not required in ambulatory settings.

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
PATIENT VISIT, ADD'L INFO	**PV2**	**RE**	**ADMIT REASON INFORMATION** PV2 segments per message: none or one (0-1)
Admit Reason	PV2-3	RE	*Clinician's* description of reason for patient encounter or admission
Identifier	PV2-3.1	RE	Use ICD-10CM
Text	PV2-3.2	RE	It is strongly recommended that text be sent to accompany any identifier; if only free text is used to capture admit reason, it is communicated in this component. If structured text is captured, concatenate all values and include in this field.
Name of Coding System	PV2-3.3	C	**Condition Predicate**: If PV2-3.1 (Identifier) is valued, PV2-3.3 shall be valued to "I10C"

OBSERVATION/RESULT	**OBX**	**R/RE/O**	**OBSERVATION INFORMATION** (of variable structure)
			OBX segments per message: expect at least 5 (absolute minimum of 2 in rare circumstances; maximum is unlimited)
			See *Appendix B* **for full description of all OBX segment data of interest**

DIAGNOSIS	**DG1**	**RE**	**DIAGNOSIS INFORMATION** DG1 segments per message: none to many (0 - max unlimited)
Set ID - DG1	DG1-1	R	The first occurrence of a DG1 Segment SHALL have the literal value of "1"; each following occurrence shall be numbered consecutively; maintain the ranking of diagnosis codes with **primary diagnosis being included in the first occurrence of the DG1 Segment**.
Diagnosis Coding Method	DG1-2	O	Name of standardized coding scheme used for the code in DG1-3. If no code was specified in DG1-3.1, there is no need to populate this component. ICD10 is the preferred coding methodology. Literal Values: "I10C" (ICD-10CM)
Diagnosis Code - DG1	DG1-3	R	Include all diagnoses including E-, V-, W-, X-, Y-, and T- codes; the **first code should be the primary diagnosis**. Provider diagnoses are preferred to billing codes. Updates to diagnoses may be sent after discharge.
Identifier	DG1-3.1	R	Use ICD-10CM
Text	DG1-3.2	RE	It is strongly recommended that text be sent to accompany any identifier
Name of Coding System	DG1-3.3	R	"I10C"
Diagnosis Date/Time	DG1-5	O	Date/time that diagnosis was determined
Diagnosis Type	DG1-6	R	Use value set ***PHVS_DiagnosisType_HL7_2x***; submit all Admitting, Working, and Final diagnosis types. Does not apply in ambulatory settings.

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
PROCEDURES	**PR1**	**RE***	**INFORMATION ABOUT PROCEDURES PERFORMED** **PR1 segments per message: none to many (0 - max unlimited)**
Set ID – PR1	PR1-1	R	Numbers the repetitions of the segment, beginning with 1
Procedure Coding Method	PR1-2	O	Name of standardized coding scheme used for the code in PR1-3. If no code was specified in PR1-3.1, there is no need to populate this component. ICD10 is the preferred coding methodology. Literal Values: "C4", "C5", "I10P", "SCT"
Procedure Code	PR1-3	R	PR1 segments per message: none to many (0 - max unlimited)
Identifier	PR1-3.1	RE	Procedure codes may be sent as CPT-4, CPT-5, -ICD-10CM or SNOMED CT
Text	PR1-3.2	RE	It is strongly recommended that text be sent to accompany any identifier
Name of Coding System	PR1-3.3	CE	**Condition Predicate**: If PR1-3.1 (Identifier) is valued, then PR1-3.3 shall be valued to one of the literal values in the set ("C4", "C5", "I10P", "SCT")
Procedure Date/Time	PR1-5	RE*	Date/time the procedure was performed

INSURANCE	**IN1**	**O**	**INFORMATION ABOUT INSURANCE POLICY COVERAGE** IN1 segments per message: none to many (0 - max unlimited)
Set ID – IN1	IN1-1	R	Numbers the repetitions of the segment, beginning with 1
Insurance Plan ID	IN1-2	R	Unique identifier for the insurance plan
Insurance Company ID	IN1-3	O*	Use National Health Plan Identifier (HPID) in field IN1-3.1
Plan Type	IN1-15	O	Plan type, e.g. Medicare, Medicaid, Blue Cross, HMO, etc.; may use value set: ***PHVS_SourceOfPaymentTypology_PHDSC***

APPENDIX B: ADT OBX SEGMENT SUMMARY AND SPECIFICATIONS

Appendix B contains comprehensive guidance for OBX segment implementation in syndromic surveillance ADT messages for Washington State. Most of this guidance reflects national guidance; Washington-specific usage differences are indicated with an *asterisk.

Summary of OBX segment requirements, by care setting

(**ED** = emergency department, **IN** = inpatient, **AC** = non-urgent ambulatory care, **UC** = urgent care)

An absolute minimum of one OBX segment is expected with each syndromic surveillance message:

Care setting:	ED	IN	AC	UC	Washington-specific notes
Treating Facility Location	RE	RE	RE	RE	This information should be captured during the registration process.
Facility/Visit Type	R	R	R	R	Values should match the type of care provided at the treating facility
Age	RE	RE	RE	RE	Initial messages should not be delayed if age information is not immediately available; an update message shall be sent as soon as age information becomes available
Chief Complaint/Reason for Visit	RE	RE	RE	RE	

The following OBX segments are encouraged for improving syndromic surveillance and supporting population health services:

Care setting:	ED	IN	AC	UC	Notes
Hospital Unit	O	RE*	O	O	
Pregnancy Status	RE*	RE*	O	O	
Occupation	RE*	RE*	O	O	
Employer	RE*	RE*	O	O	
Triage Notes	RE*	RE*	O*	O	If triage notes are not available, please send "nurse notes" or similar fields from provider's notes
Initial Temperature	RE*	RE*	O*	O	
Clinical Impression	O	O*	O	O	
Date of Onset	RE*	RE*	O	O	
Systolic Blood Pressure	O*	O*	O	O*	If sending a SBP segment, a DBP segment is also required
Diastolic Blood Pressure	O*	O*	O	O*	If sending a DBP segment, a SBP segment is also required
Travel History	O	O	O	O	

Care setting:	ED	IN	AC	UC	Notes
Initial Pulse Oximetry	O	O	O	O	
Initial Acuity	O	O	O	O*	
Problem List	O	O	O	O	
Medication List	O	O	O	O	
Medications Prescribed or Dispensed	O	O	O	O	
Height	O	RE	RE	O	If sending a Height OBX segment, a Weight OBX segment is also required
Weight	O	RE	RE	O	If sending a Weight OBX segment, a Height OBX segment is also required
Body Mass Index	O*	O	O	O*	
Provider Type	O	O	O	O	
Smoking Status	RE	RE	RE	RE	

OBX Segment Specifications (Consolidated guidance for syndromic surveillance messages in Washington State)

Segment Usage column abbreviations: **ED** = emergency department, **IN** = inpatient, **AC** = non-urgent ambulatory care, **UC** = urgent care

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Treating Facility Location If multiple locations exist within an organization, provide the address that specifies where the service was provided	ED: RE IN: RE AC: RE UC: RE	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"XAD"
		OBX-3.1	Obs Identifier	"SS002"
		OBX-3.3	Name of Coding System	"PHINQUESTION"
		OBX-5.1	Facility Street Address	Street address of facility where patient received care
		OBX-5.2	Other Designation *(Opt)*	Additional address information may be placed here *(Optional)*
		OBX-5.3	Facility City	City of facility where patient received care
		OBX-5.4	Facility State	From value set: *PHVS_State_FIPS_5-2*
		OBX-5.5	Facility ZIP Code	USPS zip code
		OBX-5.6	Facility Country	From value set: *PHVS_Country_ISO_3166-1*
		OBX-5.9	Facility County	From value set: *PHVS_County_FIPS_6-4*
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Facility / Visit Type	ED: R IN: R AC: R UC: R	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"CWE"
		OBX-3.1	Obs Identifier	"SS003"
		OBX-3.3	Name of Coding System	"PHINQUESTION"
		OBX-5.1 OBX-5.2	Coded Identifier Text	For emergency department: "261QE0002X^Emergency Care" For urgent ambulatory care: "261QU0200X^Urgent Care" For non-urgent ambulatory care: "261QP2300X^Primary Care" OR "261QM2500X^Medical Specialty" For inpatient care: "1021-5^Inpatient Practice Setting" For observation: "1021-5^Inpatient Practice Setting" From value set: *PHVS_FacilityVisitType_SyndromicSurveillance*
		OBX-5.3	Name of Coding System	"HCPTNUCC"
		OBX-5.4	Alternate Identifier	If the sender records visit type using a coding system other than NUCC provider codes, provide values from the implemented coding system in OBX-5.4, 5.5, and 5.6
		OBX-5.5	Alternate Text	
		OBX-5.6	Name of Alt Coding Sys	
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Age	ED: RE	OBX-1	Set ID	Use the literal value "1"
	IN: RE	OBX-2	Value Type	"NM"
	AC: RE	OBX-3.1	Obs Identifier	"21612-7"
	UC: RE	OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Numeric Value	Numeric value of the patient's age in years _at the time of the visit_; for patients less than 2 years of age, report age in months. Round values to the nearest integer.
		OBX-6.1	Units Identifier	Use literal value "a" (year) or "mo" From value set: '**_PHVS_AgeUnit_SyndromicSurveillance'_**
		OBX-6.3	Units Coding System	"UCUM"
		OBX-11	Obs Result Status	From value set: **_PHVS_ObservationResultStatus_HL7_2x_**
Hospital Unit (Inpatient) / Service Location (Outpatient)	ED: O	OBX-1	Set ID	Use the literal value "1"
	IN: RE*	OBX-2	Value Type	"CWE"
	AC: O	OBX-3.1	Obs Identifier	"56816-2"
	UC: O	OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Coded Identifier	From value set: **_Healthcare Service Location (NHSN)_** Of particular interest are the following critical care unit codes: 1027-2, 1029-8, 1039-7, 1040-5, 1044-7, 1045-4, 1047-0, 1034-8, 1033-0
		OBX-5.2	Text	Text associated with code from the value set specified
		OBX-5.3	Name of Coding System	"HSLOC"
		OBX-5.4	Alternate Identifier	If the sender records service location using a different coding system than that provided in the value set '**_Healthcare Service Location (NHSN)_**', values from the alternate system must be provided in fields OBX 5.4, 5.5, and 5.6 of this segment
		OBX-5.5	Alternate Text	
		OBX-5.6	Name of Alt Coding Sys	
		OBX-11	Obs Result Status	From value set: **_PHVS_ObservationResultStatus_HL7_2x_**
		OBX-14.1	Date/Time of Obs _(Optional)_	YYYYMMDDHHMM[SS[.S...]] [+/-ZZZZ] (Date/time that information was recorded in system)

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Chief Complaint / Reason for Visit (patient-reported)	ED: RE IN: RE AC: RE UC: RE	**Free text (strongly requested)**		
		OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"TX"
		OBX-3.1	Obs Identifier	"8661-1"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Original Text	Original free text recorded from **patient's** reported reason for visit; If structured text is also captured (e.g., drop-down pick list), include those values as well. Include ALL values captured in a pick-list. **Do not overwrite free text values with standardized or coded values.**
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Height and Weight: Both must be sent (two separate OBX segments) to enable BMI calculation				
Height	ED: O IN: RE AC: RE UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"NM"
		OBX-3.1	Obs Identifier	"8302-2"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Numeric Value	Numeric value of the patient's height at this visit
		OBX-6.1	Units Identifier	From value set: *PHVS_HeightUnit_UCUM* Transmit height in original units in which it was recorded
		OBX-6.2	Units Description	Include Preferred Concept Name from value set: *PHVS_HeightUnit_UCUM*
		OBX-6.3	Units Coding System	"UCUM"
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Weight	ED: O IN: RE AC: RE UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"NM"
		OBX-3.1	Obs Identifier	"3141-9"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Numeric Value	Numeric value of the patient's weight at this visit
		OBX-6.1	Units Identifier	From value set: *PHVS_WeightUnit_UCUM* Transmit weight in original units in which it was recorded
		OBX-6.2	Units Description	Include Preferred Concept Name from value set: *PHVS_WeightUnit_UCUM*
		OBX-6.3	Units Coding System	"UCUM"
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Body Mass Index	ED: O IN: O AC: O UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"NM"
		OBX-3.1	Obs Identifier	"59574-4"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Numeric Value	Numeric value of the patient's BMI at this visit
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Provider Type	ED: O IN: O AC: O UC: O	OBX-1	Set ID	Use the literal value of "1"
		OBX-2	Value Type	
		OBX-3.1	Obs Identifier	"54582-2"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Coded Identifier	From value set: *PHVS_ProviderCodes_NUCC*
		OBX-5.2	Text	Text associated with code from the value set specified
		OBX-5.3	Name of Coding System	"NUCC"

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Smoking Status	ED: RE IN: RE AC: RE UC: RE	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"CWE"
		OBX-3.1	Obs Identifier	"72166-2"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Coded Identifier	From value set: *PHVS_SmokingStatus_MU*
		OBX-5.2	Text	Text associated with code from the value set specified
		OBX-5.3	Name of Coding System	"SCT"
		OBX-5.4	Alternate Identifier	If the sender records smoking status using a different coding system than that provided in the value set '*PHVS_SmokingStatus_MU*', values from the alternate system must be provided in fields OBX 5.4, 5.5, and 5.6 of this segment
		OBX-5.5	Alternate Text	
		OBX-5.6	Name of Alt Coding Sys	
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Initial Temperature	ED: RE* IN: RE* AC: O* UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"NM"
		OBX-3.1	Obs Identifier	"11289-6"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Numeric Value	Numeric value of the patient's first temperature reading during this visit
		OBX-6.1	Units Identifier	From value set: *PHVS_TemperatureUnit_UCUM*
		OBX-6.2	Units Description	Include Preferred Concept Name from value set: *PHVS_TemperatureUnit_UCUM*
		OBX-6.3	Units Coding System	"UCUM"
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
		OBX-14.1	Date/Time of Obs *(Optional)*	YYYYMMDDHHMM[SS[.S...]] [+/-ZZZZ] (Datetime of measurement)

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Triage Notes	ED: RE* IN: RE* AC: O* UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"TX"
		OBX-3.1	Obs Identifier	"54094-8"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Text data	Original free text triage notes for the patient visit. If not available, nurse's notes or other clinically relevant notes can be sent.
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Date of Onset	ED: RE* IN: RE* AC: O UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"TS"
		OBX-3.1	Obs Identifier	"11368-8"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Time	YYYYMMDD[HHMM] (Date of onset of symptoms associated with reason for visit)
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Initial Pulse Oximetry	ED: O IN: O AC: O UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"NM"
		OBX-3.1	Obs Identifier	"59408-5"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Numeric Value	Numeric value of the patient's first pulse oximetry reading
		OBX-6.1	Units Identifier	"%" (from value set: *PHVS_PulseOximetryUnit_UCUM*)
		OBX-6.2	Units Description	Preferred Concept Name from value set: *PHVS_PulseOximetryUnit_UCUM*
		OBX-6.3	Units Coding System	"UCUM"
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
		OBX-14.1	Date/Time of Obs *(Optional)*	YYYYMMDDHHMM[SS[.S...]] [+/-ZZZZ] (Datetime of patient measurement)

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Clinical Impression	ED: O IN: O* AC: O UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"TX"
		OBX-3.1	Obs Identifier	"44833-2"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Text data	Clinician's preliminary diagnosis as free text
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Blood Pressure: If sending, systolic and diastolic blood pressure must both be sent (two separate OBX segments)				
Systolic Blood Pressure (BP)	ED: O* IN: O* AC: O UC: O*	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"NM"
		OBX-3.1	Obs Identifier	"8480-6"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Numeric Value	Numeric value of the patient's most recent systolic BP
		OBX-6.1	Units Identifier	"mm[Hg]"
		OBX-6.2	Units Description	Preferred Concept Name from value set: *PHVS_BloodPressureUnit_UCUM*
		OBX-6.3	Units Coding System	"UCUM"
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
		OBX-14.1	Date/Time of Obs *(Optional)*	YYYYMMDDHHMM[SS[.S...]] [+/-ZZZZ] (Datetime of patient measurement)
Diastolic Blood Pressure (BP)	ED: O* IN: O* AC: O UC: O*	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"NM"
		OBX-3.1	Obs Identifier	"8462-4"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Numeric Value	Numeric value of the patient's most recent diastolic BP
		OBX-6.1	Units Identifier	"mm[Hg]"
		OBX-6.2	Units Description	Preferred Concept Name from value set: *PHVS_BloodPressureUnit_UCUM*
		OBX-6.3	Units Coding System	"UCUM"
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
		OBX-14.1	Date/Time of Obs *(Optional)*	YYYYMMDDHHMM[SS[.S...]] [+/-ZZZZ] (Datetime of patient measurement)

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Initial Acuity	ED: O	OBX-1	Set ID	Use the literal value "1"
	IN: O	OBX-2	Value Type	"CWE"
	AC: O	OBX-3.1	Obs Identifier	"11283-9"
	UC: O*	OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Coded Identifier	May use values 1-5 with 1 indicating most severe. May also use value set: ***PHVS_AdmissionLevelOfCareCode_HL7_2x***
		OBX-5.2	Text	Text associated with code from the value set specified
		OBX-5.3	Name of Coding System	"HL70432"
		OBX-11	Obs Result Status	From value set: ***PHVS_ObservationResultStatus_HL7_2x***
		OBX-14.1	Date/Time of Obs (Opt)	YYYYMMDDHHMM[SS[.S...]] [+/-ZZZZ] (Datetime of assessment)
Problem List	ED: O	OBX-1	Set ID	Use the literal value "1"
	IN: O	OBX-2	Value Type	"TX"
	AC: O	OBX-3.1	Obs Identifier	"11450-4"
	UC: O	OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Text data	Narrative description of conditions currently being monitored
		OBX-11	Obs Result Status	From value set: ***PHVS_ObservationResultStatus_HL7_2x***
Medication List	ED: O	OBX-1	Set ID	Use the literal value "1"
	IN: O	OBX-2	Value Type	"TX"
	AC: O	OBX-3.1	Obs Identifier	"10160-0"
	UC: O	OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Text data	Narrative description of current medications
		OBX-11	Obs Result Status	From value set: ***PHVS_ObservationResultStatus_HL7_2x***

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Medications Prescribed or Dispensed	ED: O IN: O AC: O UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"CWE"
		OBX-3.1	Obs Identifier	"8677-7"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Coded Identifier	Medication code from: *RxNorm*
		OBX-5.2	Text	Description of medication code
		OBX-5.3	Name of Coding System	
		OBX-5.4	Alternate Identifier	
		OBX-5.5	Alternate Text	
		OBX-5.6	Name of Alt Coding Sys	
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Pregnancy Status	ED: RE* IN: RE* AC: O UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"TX"
		OBX-3.1	Obs Identifier	"11449-6"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Text data	Send "Y", "N", or leave blank if unknown. Only needs to be populated for females.
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*

OBX Segment Data	Segment Usage	Segment-specific implementation		
		Field	Field Name	Literal values (in quotes) and implementation notes
Travel History	ED: O IN: O AC: O UC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"TX"
		OBX-3.1	Obs Identifier	"10182-4"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Text data	Provide any information about travel history collected, including if patient reports no travel. A 30 day travel history is requested at a minimum. Sample travel history with multiple travel locations and dates: "Yes~Brazil;20181005;20181006~Mexico;20181007;20181008"
		OBX-11	Obs Result Status	From value set: *PHVS_ObservationResultStatus_HL7_2x*
Occupation	ED: RE* IN: RE* UC: O AC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"TX"
		OBX-3.1	Obs Identifier	"85658-3"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Text data	Send patient occupation. If none available, do not send segment.
		OBX-11	Obs Result Status	"F"
Employer	ED: RE* IN: RE* UC: O AC: O	OBX-1	Set ID	Use the literal value "1"
		OBX-2	Value Type	"TX"
		OBX-3.1	Obs Identifier	"80427-8"
		OBX-3.3	Name of Coding System	"LN"
		OBX-5.1	Text data	Send name of patient's employer. If none available, do not send segment.
		OBX-11	Obs Result Status	"F"

APPENDIX C: ORU MESSAGE MINIMUM STANDARD FOR SYNDROMIC SURVEILLANCE

This guidance is intended to be compatible with the national standard for electronic laboratory reporting to public health, described in *HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1*. This guidance is intended to specify only the subset of this standard that is requested for syndromic surveillance purposes in Washington State. More extensive ORU messages assembled per the full national standard for ELR to Public Health may be transmitted as well. Also, please note that MSH-5, Receiving Application, is different for WA DOH Syndromic Surveillance than for WA DOH Electronic Laboratory Reporting.

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes	
MESSAGE HEADER	**MSH**	**R**	**INFORMATION FOR PARSING AND PROCESSING MESSAGE** MSH segments per message: one (1)	
Sending Facility	MSH-4	R	The name of the sending facility may differ from the name of the treating facility. If the message is sent by a vendor on behalf of a health care facility, use the name of the vendor	
MSH-4 implementation differs depending on message transport mechanism:			**For facilities sending data via OneHealthPort HIE:**	**For facilities sending data directly to WA:**
NamespaceID	MSH-4.1	R	Use the organization ID provided for your facility during registration with OneHealthPort	Use a business name abbreviation descriptive enough to clearly identify the sending facility
Universal ID	MSH-4.2	R	Use the facility-level OID assigned by OneHealthPort	OID or NPI is preferred
Universal ID Type	MSH-4.3	R	Use literal value "ISO"	Use literal value "ISO" for OID, "NPI" for NPI
Receiving Application	MSH-5	R	Use literal value "WADOHPHEEDS^2.16.840.1.113883.3.237.4.6^ISO"	
Receiving Facility	MSH-6	R	Use literal value "dn1fro00"	
Message Control ID	MSH-10	R	Each unique message should have a message control ID that is unique within the sending application	
Processing ID	MSH-11	R	Use literal value "T" during testing and validation; use literal value "P" once the messages have been fully validated and are in production	
Message Profile Identifier	MSH-21	R	Used to reference or assert adherence to a message profile; see pg. 91 of the *HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1* for more information	

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
PATIENT IDENTIFICATION	**PID**	**R**	**PATIENT IDENTIFYING AND DEMOGRAPHIC INFORMATION** PID segments per message: one (1)
ID Number	PID-3.1	R	The identifier provided should allow the treating facility (where a provider ordered the lab test/panel) to retrieve information on the patient if additional information is requested by Public Health. Use the following hierarchy: (1) Master patient index, if available (2) Medical record number, if available (3) Patient account number, if available (4) Other internal patient identifier, if none of the above patient identifiers are available
Assigning Authority	PID-3.4	RE	This field shall identify the highest organizational entity responsible for assigning the unique Patient ID Number specified in PID-3.1 for all ADT and ORU messages associated with the patient visit
Identifier Type Code	PID-3.5	R	Use literal value: "PT" for Master Patient Index; "MR" for medical record number; "AN" for account number; "PI" for patient internal identifier
Patient Name	PID-5	R	Patient name is a required field for WA State. This is in contrast to the national PHIN If name is unknown, PID-5 shall be valued as "^^^^^^~^^^^^^U".
Family Name	PID-5.1	RE*	Patient's last name
Given Name	PID-5.2	RE*	Patient's first name
2nd Given Name or middle initial	PID-5.3	RE*	Patient's middle name or initial
Suffix	PID-5.4	RE*	Suffix to patient's name such as Sr., Jr. or III
Name type	PID-5.7	R	If patient legal name is provided, use literal value "L"; if patient name is known but intentionally excluded, use literal value "S"; if patient name is unknown, use "U"
Mothers Maiden Name	PID-6	X	Do not transmit
Date/Time of Birth	PID-7	RE*	Expressed with precision to the day: YYYYMMDD
Patient Gender	PID-8	RE	Use value set ***PHVS_Gender_SyndromicSurveillance***
Race	PID-10	RE	Patient may have more than one race defined. Leave blank if race is unknown.
Identifier	PID-10.1	RE	Use value set ***PHVS_RaceCategory_CDC***
Text	PID-10.2	O	Concept name associated with code in PID-10.1
Name of Coding System	PID-10.3	CE	**Condition Predicate**: If PID-10.1 (Identifier) is valued, then 10.3 shall be valued "CDCREC"

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
Patient Address	PID-11	RE	Transmit patient's primary/current address
Street Address	PID-11.1	RE*	Free text; patient's physical street address
City or Town	PID-11.3	RE	Free text
State or Province	PID-11.4	RE	For US residents, use value set *PHVS_State_FIPS_5-2*; otherwise, use local code
Patient Zip Code	PID-11.5	RE	USPS 5-digit code for US residents; otherwise, use local postal code
Patient Country	PID-11.6	RE	Use value set *PHVS_Country_ISO_3166-1*
Patient County	PID-11.9	RE	For US residents, use value set *PHVS_County_FIPS_6-4*
Ethnic Group	PID-22	RE	Leave blank if unknown.
Identifier	PID-22.1	RE	Use value set *PHVS_EthnicityGroup_CDC*
Text	PID-22.2	O	Concept name associated with code in PID-22.1
Name of Coding System	PID-22.3	CE	**Condition Predicate**: If PID-22.1 (Identifier) is valued, then 22.3 shall be valued "CDCREC"
PATIENT VISIT	**PV1**	**R**	**VISIT-SPECIFIC INFORMATION** ONE (1) PV1 SEGMENT PER MESSAGE
Set ID	PV1-1	R	Use literal value "1"
Visit Number	PV1-19	R	This field shall uniquely identify the patient's visit to the treating facility during which the test was ordered
ID Number	PV1-19.1	R	This number shall match the Visit ID Number value used in PV1-19.1 of the ADT messages associated with the same visit
Assigning Authority	PV1-19.4	RE	This field shall identify the organizational entity responsible for assigning the unique patient Visit ID Number specified in PV1-19.1 for all ADT and ORU messages associated with the patient visit
Identifier Type Code	PV1-19.5	R	Use literal value "VN"
ORDER COMMON	**ORC**	**R**	**BASIC INFORMATION ABOUT THE ORDER FOR TESTING THE SPECIMEN** AT LEAST ONE (1) ORC SEGMENT PER MESSAGE (to provide ordering facility information)
Order Control	ORC-1	R	Use literal value "RE" for results
Placer Order Number	ORC-2	R	This field must contain the same value as the corresponding OBR-2
Filler Order Number	ORC-3	R	This field must contain the same value as the corresponding OBR-3
Ordering Facility Name	ORC-21	R	
Ordering Facility Address	ORC-22	R	

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
OBSERVATION REQUEST	**OBR**	**R**	**INFORMATION ABOUT ONE TEST BEING PERFORMED ON A SPECIMEN** AT LEAST ONE (1) OBR SEGMENT PER MESSAGE (One OBR segment per order group)
Set ID	OBR-1	R	Use "1" for the first repeat, "2" for the second, etc.
Placer Order Number	OBR-2	R	This field must contain the same value as the corresponding ORC-2
Filler Order Number	OBR-3	R	This field must contain the same value as the corresponding ORC-3
Lab test / panel requested	OBR-4	R	Laboratory test or panel ordered
Orderable identifier	OBR-4.1	R	Use LOINC codes in *PHVS_LabTestOrderables_CDC*. Local code and local test name should also be included. If a test is new and has not yet been coded by LOINC or no valid LOINC code exists, local code may be used exclusively
Identifier description	OBR-4.2	R	Text description of LOINC or local code
Coding system	OBR-4.3	R	Literal value "LN"
Results Report DateTime / Status Change DateTime	OBR-22	O	Date result was reported by the performing lab: YYYYMMDDHHMM[SS[.S...]] [+/-ZZZZ]
Result Status	OBR-25	R	Use one of the following literal values (see pgs. 68-71 of HL7 v 2.5.1 ORU^R01 guidance document for further information): 'P' for preliminary results 'S' for partial result 'R' for unverified result 'F' for final result 'C' for corrected result (messages with status O, I, S or X are not requested to be transmitted)
Reason for Study	OBR-31	RE	Use ICD10 codes

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
OBSERVATION rel. to OBR	**OBX**	**R**	**INFORMATION REGARDING A SINGLE OBSERVATION (ANALYTE) RESULT** AT LEAST ONE (1) OBR-related OBX SEGMENT PER MESSAGE (One OBX per result group)
Set ID	OBX-1	R	Use "1" for the first repeat, "2" for the second, etc.
Value Type	OBX-2	R	Identifies the data type given in OBX-5; use value set *PHVS_ValueType_HL7_2x*
Laboratory Test Performed	OBX-3	R	Laboratory test or panel performed
Identifier code	OBX-3.1	R	Use LOINC codes in *PHVS_LabTestName_ReportableConditions*. Local code and local test name should also be included. If a test is new and has not yet been coded by LOINC or no valid LOINC code exists, a local code may be used exclusively
Identifier description	OBX-3.2	R	Text description of LOINC or local code
Coding system	OBX-3.3	R	Literal value "LN"
Laboratory Result	OBX-5	RE	Laboratory result structured as indicated by OBX-2 (OBX-5 will be empty if OBX-11 value is "X"). May use value set: *PHVS_EvaluationFinding_CDC*
Laboratory Result Units	OBX-6	CE	Required if OBX-2 is valued "NM" or "SN" and OBX-11 is not valued "X" or "N"; Use value set *PHVS_UnitsOfMeasure_CDC*
Laboratory Test Status	OBX-11	O	Laboratory test status; Use value set *PHVS_ObservationResultStatus_HL7_2x*
Date/time of laboratory test	OBX-14	RE	Per HL7 and national ELR guide, this field shall contain the clinically relevant date/time of an observation. For specimen-based observations, this is the time of specimen collection. Point-of-care tests may have identical values in OBX-14 and OBX-19. If OBR-7 or SPM-17.1 are valued, OBX-14 shall contain the same value.
Date/time of Analysis	OBX-19	RE	Per HL7 and national ELR guide, this field shall contain the date/time at which the test was performed. Point-of-care tests may have identical values in OBX-14 and OBX-19.
Performing Organization Name	OBX-23	O	Name and identifier of the laboratory that produced the test result; Use the XON datatype; CLIA identifier may be used
Performing Organization Address	OBX-24	O	Address of the laboratory that produced the test result

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes
SPECIMEN	**SPM**	**RE**	**CHARACTERISTICS OF A SINGLE SPECIMEN SAMPLE** AT LEAST ONE (1) SPM SEGMENT PER MESSAGE (One SPM segment per specimen group)
Set ID	SPM-1	R	Use "1" for the first repeat, "2" for the second, etc.
Specimen ID	SPM-2	R	Unique identifier per specimen; may be associated with multiple orders
Specimen type	SPM-4	R	Must include code, text, coding system, and coding system version. Use value set: ***PHVS_SpecimenType_HL7_2x*** and/or SNOMED CT. Use 'UNK^UNKNOWN^NULLFL' if no specimen type is available.
Specimen Collection Date/Time	SPM-17	R	Date/time at which or range over which specimen was collected. SPM-17.1 should contain the same value as OBX-14 for specimen-related observations.

APPENDIX D: ORU SCOPE OF MESSAGING, WASHINGTON STATE-SPECIFIC GUIDANCE

Specifications are presented using the LOINC coding system, which is strongly requested. For facilities using local codes, please send laboratory result messages for the set of local codes that is equivalent to the set of LOINC concepts specified here.

LOINC Laboratory Term Class	LOINC Class Abbrev	Washington State Syndromic Surveillance Implementation Notes
Microbiology	MICRO	ALL results from the MICRO class shall be transmitted
Microbiology order set	PANEL.MICRO	ALL results from the PANEL.MICRO class shall be transmitted
Antibiotic susceptibilities	ABXBACT	ALL results from the ABXBACT class shall be transmitted
Susceptibility order sets	PANEL.ABXBACT	ALL results from the PANEL.ABXBACT class shall be transmitted
Drug levels & Toxicology	DRUG/TOX	ALL results from the DRUG/TOX class shall be transmitted
Drug level & Toxicology order set	PANEL.DRUG/TOX	ALL results from the PANEL.DRUG/TOX class shall be transmitted
Chemistry	CHEM	ONLY the following are requested: Serum alanine aminotransferase (LOINC 1742-6, 1743-4, 1744-2) HbA1c / total hemoglobin (LOINC 4548-4, 4549-2, 17856-6, 59261-8)

APPENDIX E: HL7 BATCH PROTOCOL
* in Usage column indicates a different Sender Usage requirement than that found in PHIN Release 1.1 guidance

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes	
FILE HEADER	**FHS**	**R**	FHS segments per file: One (1)	
File Field Separator	FHS-1	R	Use the literal value "|"	
File Encoding Characters	FHS-2	R	Use the literal value "^~\\&"	
File Sending Application	FHS-3	R*	Uniquely identifies the sending application among all applications in network enterprise	
File Sending Facility	FHS-4	R*	The name of the sending facility may differ from the name of the treating facility. If the message is sent by a vendor on behalf of a health care facility, use the name of the vendor	
FHS-4 implementation differs depending on message transport mechanism:			**For facilities sending data via OneHealthPort HIE:**	**For facilities sending data directly to WA DOH via SFT or PHIN-MS:**
NamespaceID	FHS-4.1	R*	Use the organization ID provided for your organization during registration with OneHealthPort	Use a business name abbreviation descriptive enough to clearly identify the sending facility
Universal ID	FHS-4.2	R*	Use the organizational level OID assigned by OneHealthPort	OID or NPI is preferred
Universal ID Type	FHS-4.3	R*	Use literal value "ISO"	Use literal value "ISO" for OID, "NPI" for NPI
File Receiving Application	FHS-5	R*	Use literal value "WADOHPHEEDS^2.16.840.1.113883.3.237.4.6^ISO"	
File Receiving Facility	FHS-6	R*	Use literal value "dn1fro00"	
File Creation Date/Time	FHS-7	R*	YYYYMMDDHHMM[SS[.S[S[S]]]] [+/-ZZZZ]	

Name	Field	Usage	Washington State Syndromic Surveillance Implementation Notes	
BATCH HEADER	**BHS**	**R**	BHS segments per file: One (1)	
Batch Field Separator	BHS-1	R	Use the literal value "|"	
Batch Encoding Characters	BHS-2	R	Use the literal value "^~\&"	
Batch Sending Application	BHS-3	R	Uniquely identifies the sending application among all applications in network enterprise	
Batch Sending Facility	BHS-4	R	The name of the sending facility may differ from the name of the treating facility. If the message is sent by a vendor on behalf of a health care facility, use the name of the vendor	
BHS-4 implementation differs depending on message transport mechanism:			**For facilities sending data via OneHealthPort HIE:**	**For facilities sending data directly to WA DOH via SFT or PHIN-MS:**
NamespaceID	BHS-4.1	R	Use the organization ID provided for your organization during registration with OneHealthPort	Use a business name abbreviation descriptive enough to clearly identify the sending facility
Universal ID	BHS-4.2	R	Use the organizational level OID assigned by OneHealthPort	OID or NPI is preferred
Universal ID Type	BHS-4.3	R	Use literal value "ISO"	Use literal value "ISO" for OID, "NPI" for NPI
Batch Receiving Application	BHS-5	R	Use literal value "WADOHPHEEDS^2.16.840.1.113883.3.237.4.6^ISO"	
Batch Receiving Facility	BHS-6	R	Use literal value "dn1fro00"	
Batch Creation Date/Time	BHS-7	R	Date/time that the sending system created the batched file; minimum precision is to the nearest minute: YYYYMMDDHHMM[SS[.S[S[S]]]] [+/-ZZZZ]	
(Body of batch file containing HL7 Syndromic Surveillance messages)				
BATCH TRAILER	**BTS**	**R**	BTS segments per file: one (1)	
Batch Message Count	BTS-1	R	The number of messages contained in the batch	
Batch Comment	BTS-2	O	Limit of 80 characters if populated	
FILE TRAILER	**FTS**	**R**	FTS segments per file: one (1)	
File Batch Count	FTS-1	R	Must be "1" (only one batch per file)	
File Trailer Comment	FTS-2	O	Limit of 80 characters if populated	

APPENDIX F: REVISION HISTORY

1.7 Version Modifications

#	Revision Description	Purpose of Revision	Section	Version Modified
1	Updated references from MU to PI & removed all ICD-9-CM references	Alignment with Promoting Interoperability	Entire Document	1.7
2	Added references to telehealth and file size requirements	Clarity	II. Data Submission	1.7
3	Updated sender usage table to reflect field requirements in appendix A	Clarity	II. Data Submission	1.7
4	Updated URL links	Clarity	IV. Useful Resources	1.7
5	Added description of Assigning Facility (PID-3.6)	Clarity	Appendix A	1.7
6	Added new fields (e.g. Phone number, email, pregnancy status, occupation, employer) or additional specifications/different usage requirements to existing fields (e.g. patient name, patient date of birth, patient address, date of onset, procedure code, temperature, hospital unit)	Washington State Update – New Required Fields	Appendix A	1.7
7	Added requested values to Hospital Service (PV1-10)	Clarity	Appendix A	1.7
8	Added notes that primary diagnosis (DG1) should be the first diagnosis received	Clarity	Appendix A	1.7
9	Updated Insurance segment (IN1) with new usage requirements	Alignment with CMS HPID Final Rule	Appendix A	1.7
10	Updated summary table of OBX segment requirements, by care setting	New required fields in Washington State	Appendix B	1.7
11	Updated Triage Notes OBX (54094-8) to include additional note fields such as nurse's notes in the absence of triage notes	Clarity	Appendix B	1.7
12	Clarified physician identifier (PV1-7) to be physician's NPI	Clarity	Appendix A	1.7
13	Addition of Diagnosis Coding Method (DG1-2) as an "O" data element	Public Health Information Network Guide for Syndromic Surveillance update	Appendix A	1.7
14	Addition of Procedure Coding Method (PR1-2) as an "O" data element	Public Health Information Network Guide for Syndromic Surveillance update	Appendix A	1.7
15	Updated Sender Usage for Height for ED and UC care settings to "RE" in OBX	Alignment with MU Stage 3	Appendix B	1.7

	segments summary and specifications tables			
16	Updated Sender Usage for Weight for ED and UC care settings to "O" in OBX segments summary and specifications tables	Alignment with MU Stage 3	Appendix B	1.7
17	Updated Sender Usage for Body Mass Index for ED and UC care settings to "RE" in OBX segments summary and specifications tables	Alignment with MU Stage 3	Appendix B	1.7
18	Updated Sender Usage for Smoking Status for ED and UC care settings to "RE" in OBX segments summary and specifications tables	Alignment with MU Stage 3	Appendix B	1.7
19	Updated Sender Usage for Clinical Impression for IN care settings to "O*" in OBX segments summary and specifications tables	Alignment with MU Stage 3	Appendix B	1.7
20	Updated Sender Usage for Initial Pulse Oximetry for IN and AC care settings to "O" in OBX segments summary and specifications tables	Alignment with MU Stage 3	Appendix B	1.7
21	Updated Sender Usage for Systolic Blood Pressure for ED, IN and UC care settings to "O" in OBX segments summary and specifications tables	Alignment with MU Stage 3	Appendix B	1.7
22	Updated Sender Usage for Diastolic Blood Pressure for ED, IN and UC care settings to "O" in OBX segments summary and specifications tables	Alignment with MU Stage 3	Appendix B	1.7
23	Updated Sender Usage for Initial Acuity for UC care settings to "O" in OBX segments summary and specifications tables	Alignment with MU Stage 3	Appendix B	1.7
24	Added additional guidance for reporting travel history (OBX-5.1)	Clarification	Appendix B	1.7
25	Updated Sender Usage of Family and Given Name (PID-5.1 & PID-5.2) to "RE" for ORU messages	New required fields in Washington State	Appendix C	1.7
26	Addition of Patient Street Address (PID-11.1) as an "RE" free-text field for ORU messages	New required fields in Washington State	Appendix C	1.7
27	Updated standards referenced to those named in ONC 2015 Certification Criteria	Alignment with MU Stage 3	Entire document	1.6
28	Removed references to future, extended data elements and ORU message types being optional in WA as these were adopted in PHIN 2.0 guidance as optional requirements	Alignment with MU Stage 3	I. Introduction	1.6
29	Updated reference to current 2015 ONC certification	Alignment with MU Stage 3	I. Introduction	1.6

#	Revision Description	Purpose of Revision	Section	Version Modified
30	Minor language updates to improve clarity	Clarity	II. Data Submission	1.6
31	Additional guidance on file naming conventions and precision of timestamps for creating unique file names	Clarity	II. Data Submission – Message File Names	1.6
32	Language updates to "RE" data usage description to improve clarity	Clarity	II. Data Submission – Sender Usage Requirements	1.6
33	Updated sender usage of ORU messages to be Optional	Alignment with MU Stage 3	III. Supported HL7 Messages	1.6
34	Removed reference and links to 2014 edition of the ONC Certification Criteria	Alignment with MU Stage 3	IV. Useful Resources	1.6
35	Removed reference and link to NIST 2014 edition validation tool	Alignment with MU Stage 3	IV. Useful Resources	1.6
36	Added reference and link to PHIN 2.0 Implementation Guide Meaningful Use Clarifying Document	Alignment with MU Stage 3	IV. Useful Resources	1.6
37	Clarification to leave Date/Time of Birth (PID-7) blank if unknown	Clarity	Appendix A	1.6
38	Clarification to leave Race (PID-10) blank if unknown	Clarity	Appendix A	1.6
39	Addition of Patient City or Town (PID-11.3) as an "RE" free-text field	Alignment with MU Stage 3	Appendix A	1.6
40	Updated Sender Usage of Patient State (PID-11.4) to "RE"	Alignment with MU Stage 3	Appendix A	1.6
41	Updated Sender Usage of Patient Country (PID-11.6) to "RE"	Alignment with MU Stage 3	Appendix A	1.6
42	Updated guidance for patient county (PID-11.9) to indicate requirement applies to US residents only	Clarity	Appendix A	1.6
43	Clarification to leave Ethnicity (PID-22) blank if unknown	Clarity	Appendix A	1.6
44	Updated sender usage of Patient Class (PV1-2) to be "R"	Alignment with MU Stage 3	Appendix A	1.6
45	Clarified expectations for patient classes to be included.	Clarity	Appendix A	1.6
46	Added Previous Hospital Unit (PV1-6) as an optional data element	Alignment with MU Stage 3	Appendix A	1.6
47	Added Physician Identifier (PV1-7) as an optional data element	Alignment with MU Stage 3	Appendix A	1.6
48	Added clarification on updates to Discharge Disposition (PV1-36) and expectations for use in ambulatory care settings	Clarity	Appendix A	1.6
49	Updated sender usage of Discharge Disposition (PV1-36) to "R" in A03 messages	Alignment with MU Stage 3	Appendix A	1.6

#	Revision Description	Purpose of Revision	Section	Version Modified
50	Added clarification that Admit Date/Time (PV1-44) should remain constant across messages for a single encounter	Clarity	Appendix A	1.6
51	Added clarification that discharge date/time (PV1-45) is not required from ambulatory care settings	Alignment with MU Stage 3	Appendix A	1.6
52	Updated description of Admit Reason (PV2-3)	Error	Appendix A	1.6
53	Updated guidance for submission of Admit Reason Text (PV2-3.2)	Clarity	Appendix A	1.6
54	Updated description of diagnosis codes to be included (DG1-3), order of diagnoses, and preference of provider-assigned over billing-assigned codes	Alignment with MU Stage 3	Appendix A	1.6
55	Clarified that diagnosis updates (DG1-3) may be sent after patient discharge	Clarity	Appendix A	1.6
56	Removed ICD10 as a coding option for diagnosis code (DG1-3.1)	Clarity	Appendix A	1.6
57	Clarified that diagnosis type (DG1-6) does not apply in ambulatory care settings	Alignment with MU Stage 3	Appendix A	1.6
58	Updated sender usage of IN1 segment from "CE" to "O"	Alignment with MU Stage 3	Appendix A	1.6
59	Updated OBX requirements to a minimum of 1 OBX segment per messages	Alignment with MU Stage 3	Appendix B	1.6
60	Updated sender usage requirement of Treating Facility Location (OBX) from "R" to "RE"	Alignment with MU Stage 3	Appendix B	1.6
61	Added description of Facility/Visit type	Clarity	Appendix B	1.6
62	Updated sender usage requirement for Age (OBX) from "R" to "RE"	Alignment with MU Stage 3	Appendix B	1.6
63	Updated sender usage for Hospital Unit/Service Location (OBX) from "O*" to "O"	Alignment with MU Stage 3	Appendix B	1.6
64	Updated sender usage for Height (OBX) in inpatient and ambulatory care settings from "O*" to "RE"	Alignment with MU Stage 3	Appendix B	1.6
65	Added guidance for sending height unit description (OBX-6.2)	Clarity	Appendix B	1.6
66	Updated sender usage for Weight (OBX) in inpatient and ambulatory care settings from "O*" to "RE"	Alignment with MU Stage 3	Appendix B	1.6
67	Added guidance for sending weight unit description (OBX-6.2)	Clarity	Appendix B	1.6
68	Added Body Mass Index (OBX) as an optional data element and corresponding technical specifications	Alignment with MU Stage 3	Appendix B	1.6

#	Revision Description	Purpose of Revision	Section	Version Modified
69	Added Provider Type (OBX) as an optional data element and corresponding technical specifications	Alignment with MU Stage 3	Appendix B	1.6
70	Updated sender usage for Smoking Status (OBX) in inpatient and ambulatory care settings from "O*" to "RE"	Alignment with MU Stage 3	Appendix B	1.6
71	Updated sender usage for Initial Temperature (OBX) in inpatient and ambulatory care settings to "O*"	Washington Update	Appendix B	1.6
72	Added guidance for sending Temperature unit description (OBX-6.2)	Clarity	Appendix B	1.6
73	Updated sender usage for Initial Pulse Oximetry (OBX) in inpatient and ambulatory care settings to "O*"	Washington Update	Appendix B	1.6
74	Added guidance for sending Pulse Oximetry unit description (OBX-6.2)	Clarity	Appendix B	1.6
75	Updated sender usage for Systolic Blood Pressure (OBX) in ambulatory care settings from "O*" to "O"	Alignment with MU Stage 3	Appendix B	1.6
76	Added guidance for sending Systolic Blood Pressure unit description (OBX-6.2)	Clarity	Appendix B	1.6
77	Updated sender usage for Diastolic Blood Pressure (OBX) in ambulatory care settings from "O*" to "O"	Alignment with MU Stage 3	Appendix B	1.6
78	Added guidance for sending Diastolic Blood Pressure unit description (OBX-6.2)	Clarity	Appendix B	1.6
79	Updated sender usage for Initial Acuity (OBX) in inpatient and ambulatory care settings from "X" to "O"	Alignment with MU Stage 3	Appendix B	1.6
80	Added Problem List (OBX) as an optional data element and corresponding technical specifications	Alignment with MU Stage 3	Appendix B	1.6
81	Added Medication List (OBX) as an optional data element and corresponding technical specifications	Alignment with MU Stage 3	Appendix B	1.6
82	Added Medications Prescribed or Dispensed (OBX) as an optional data element and corresponding technical specifications	Alignment with MU Stage 3	Appendix B	1.6
83	Added Travel History (OBX) as an optional data element and corresponding technical specifications	Alignment with MU Stage 3	Appendix B	1.6
84	Added specifications and value set for Facility Country (OBX-5.6)	Alignment with MU Stage 3	Appendix B	1.6
85	Updated "Name of coding system" (OBX-5.3) for Facility/Visit Type from "HCPT" to "HCPTNUCC"	Alignment with MU Stage 3	Appendix B	1.6

#	Revision Description	Purpose of Revision	Section	Version Modified
86	Updated guidance to request age in months if patient <2 years (OBX-5 & 6)	Alignment with MU Stage 3	Appendix B	1.6
87	Updated Value Type (OBX-2) for Chief Complaint from "CWE" to "TX"	Alignment with MU Stage 3	Appendix B	1.6
88	Updated description of Chief Complaint (OBX) to better describe what is expected	Clarity	Appendix B	1.6
89	Updated description of Clinical Impression (OBX-5.1)	Clarity	Appendix B	1.6
90	Removed guidance to exclude patient identifiers from ORU messages	Washington State Requirement	Appendix C	1.6
91	Added guidance for reporting Patient Gender (PID-8) in ORU messages	Alignment with MU Stage 3	Appendix C	1.6
92	Added guidance for reporting Race (PID-10) in ORU messages	Alignment with MU Stage 3	Appendix C	1.6
93	Updated guidance for transmitting Patient Address (PID-11)	Alignment with MU Stage 3	Appendix C	1.6
94	Added guidance for reporting Ethnic Group (PID-22) in ORU messages	Alignment with MU Stage 3	Appendix C	1.6
95	Added guidance for reporting Lab Test/Panel Requested (OBR-4)	Alignment with MU Stage 3	Appendix C	1.6
96	Updated sender usage for Results Report Date/Time (OBR-22) from "R" to "O"	Alignment with MU Stage 3	Appendix C	1.6
97	Added guidance for reporting lab test code and name (OBX-3) in ORU messages	Alignment with MU Stage 3	Appendix C	1.6
98	Added guidance for reporting Laboratory Result Units (OBX-6) in ORU messages	Alignment with MU Stage 3	Appendix C	1.6
99	Updated sender usage for Laboratory Test Status (OBX-11) from "R" to "O"	Alignment with MU Stage 3	Appendix C	1.6
100	Updated sender usage for Performing Organization Name (OBX-23) from "R" to "O" and added additional guidance for reporting	Alignment with MU Stage 3	Appendix C	1.6
101	Updated sender usage for Performing Organization Address (OBX-24) from "R" to "O"	Alignment with MU Stage 3	Appendix C	1.6
102	Updated guidance for reporting Specimen Type (SPM-4)	Alignment with MU Stage 3	Appendix C	1.6