APHL-CDC Public Health Laboratory Interoperability Project (PHLIP)

MESSAGING GUIDE FOR INFLUENZA TEST RESULT REPORTING

BY PUBLIC HEALTH LABORATORIES

ORU^R01

HL7 Version 2.3.1

Document Version ID: 1.0.2

September 15, 2009

Revision 1 dated June 18th, 2010

Centers for Disease Control and Prevention

REVISION HISTORY

Date	Version	Description
6/8/2007	1.0.1	First draft of the PHLIP HL7 2.3.1 Messaging Specification that covers only the ORU^R01 Unsolicited Transmission of an Observation
6/11/2007	1.0.1	Added newly assigned Code System OIDs specific to PHLIP
6/12/2007	1.0.1	Added sample messages
6/29/2007	1.0.1	Added updates from discussions 6/13, 6/20 & 6/27
7/10/2007	1.0.1	Final updates
7/23/07	1.0.1	Update to Data Element LAB330
1/23/08	1.0.2	Remove HL7 table reference in guide to follow PHIN Structure
1/23/08	1.0.2	Make birthdate and patient age, county and zip RE
1/23/08	1.0.2	Added requirements to business rules for retroactive reporting of flu
1/23/08	1.0.2	Added business rule to describe reporting “test not performed” and “absence finding”
1/23/08	1.0.2	Added business rule to note that messages not containing LAB202 (Specimen ID) in OBX.3 will not pass validation as it is marked as Required in the Data Elements of Interest.
1/28/08	1.0.2	Updated to Data Element TRAVEL05 to “Destination(s) Traveled To”
1/28/08	1.0.2	Added note in business rules to describe reporting of standard and local codes in CE Data Type
5/28/08	1.0.2	Added business rule to describe reporting of non-influenza virus detected while testing for influenza
7/2/08	1.0.2	Added business rule to describe reporting non-standard counties (DEM165)
7/2/08	1.0.2	Updated guide to reflect use of HL7 Table0396 rather than OIDs to identify Coding Systems. Also updated sample message and data elements of interest.
7/16/08	1.0.2	Updated Section 2.2 - Remove warning if same LAB202 repeats. Repeating LAB202 is acceptable if the value is identical
7/23/08	1.0.2	Change optionality for assigning authority for placer order number (ORC-2.3, OBR-2.3) from RE to R. Also added business rule describing the use of assigning authority.
7/29/08	1.0.2	Update examples with new HL70396 values (replace OIDs), Add HL7 code system references to tables
8/6/08	1.0.2	In all XAD change value set to FIPS 5-2 and add in comment to use 2 letter alpha codes in this field
8/2208	1.0.2	In data elements of interest table changed program requirements for DEM162 (Patient Address State) from R to RE
7/21/09	1.0.2	Updated date, Updated headers in message structure tables to match implementation profiles rather than standards (change OPT to Usage and RPT to Cardinality. Added explanation of RE into date elements of interest usage definitions
7/30/09	1.0.2	Update date Add clarification on handling of unsupported fields
8/12/09	1.0.2	Changes per meeting with V+M and New States groups:

Date	Version	Description
		Changed verbiage on usage definitions Changed ORC.2 from C to RE to match OBR.2
8/18/09	1.0.2	Dropped out OID table per 8/12/09 group decision Pre-adopted MSH.21 from v2.5.1 to be able to indicate implementation guide version used (from last week's new state update in notes Added verbiage to indicate need for reporting of negative influenza results under reporting of non-influenza viruses Updated sample message to match storyboard
9/9/09	1.0.2	Changed MSH.10, PID.3.1, OBR.3.1 and OBX.5.1(CX datatype) length to 30 per cr#
9/9/09	1.0.2	Changed ORC.3.1, OBR.2.1, ORC.2.1, OBR.29.1.1, OBR.29.2.1 length to 30
9/9/09	1.0.2	Added support for OBX.17.1, 17.2, 17.3 (Observation Method)
9/11/09	1.0.2	Changed numbering of OBR 10.8 to the proper 10.10 as per standard to report name type code for colletor identifier
11/2/09	1.0.2	Changed v1.0.1 to v1.0.2 in footer and table of contents Changed publication date in footer to September 15, 2009 Corrected the concept name for FLU002 in data element table to include "for Influenza" (as it appears in example)
12/14/09	1.0.2_r1	Added rows to MSH table, where content of component was lumped into main field: MSH.7, MSH.9, MSH.11, PID.5.1,
3/3/2010	1.0.2_r1	Updated OBX.6 cardinality to CE and updated the rule to reflect OBX.2 = SN for conditionality rule – need to think about using C to make it stronger and giving explanation to use "1" anytime a value is unitless, for example a titer
3/26/2010	1.0.2_r1	Changed usage codes for LAB114 and LAB192 to C to match updated guide usage for OBX.5 for those data types
4/14/2010	1.0.2_r1	Updated link to OID sheet and added link to HL70396 table
4/21/2010	1.0.2_r1	Clarified language regarding start of flu season
4/27/2010	1.0.2_r1	PID.3 Clarified language regarding Patient Identifier.
5/14/2010	1.0.2_r1	Sample message: Changed description from display name to LOINC shortname
6/18/2010	1.0.2_r1	Updated title page, footers and file name per CCB decision to publish 6/18/2010

TABLE OF CONTENTS

INDEX OF TABLES

HL7 V2.3.1 DATA MESSAGING GUIDE FOR INFLUENZA TEST RESULT REPORTING BY PUBLIC HEALTH LABORATORIES

1 INTRODUCTION

Laboratory tests are essential for the control and prevention of influenza. The accurate and rapid exchange of information about influenza tests and results among public health laboratories and their partners is essential to the prevention and control of influenza.

The purpose of this document is to specify the Health Level Seven (HL7) messaging guide, as supported by laboratory information systems, for the reporting of influenza test results. This document describes the APHL/CDC pilot implementation of HL7 messages for influenza testing in conformance with HL7 message standards.

An HL7 message guide is a precise and unambiguous specification of an HL7 standard-defined message that has been analyzed for use within a particular set of requirements. It is a particular style or usage of a standard HL7 message, driven by use case analysis and interaction modeling. An HL7 message guide defines both the static structure and content of the message and the dynamic message definition, such as defining the communication of a message from the sending application to one or more receiving applications.

2 GENERAL INFORMATION FOR PHLIP VERSION 1.0.1

2.1 UNSOLICITED RESULTS: FROM STATE-TO-CDC ONLY

This Messaging Guide (PHLIP version 1.0.1, HL7 version 2.3.1) addresses only the ORU^R01 Unsolicited Observation message sent from the state-to-CDC.

State-to-State messages and CDC-to-State messages will be addressed in separate documents.

2.2 SINGLE SPECIMEN PER ORU^R01 MESSAGE

Only one (1) specimen is allowed per message.

There may be multiple OBRs, but each will have the same collection information because all will be associated with one (1) specimen. If a single message contains repeating Specimen IDs (LAB202), this is acceptable if the IDs are identical. However, the message should

error out, if there are multiple, non-matching Specimen IDs in a single message.

2.3 ORU^R01 MAY NOT INCLUDE ORDER INFORMATION

Because the ORU^R01 is a result message, some ordering information may or may not be included in the message (e.g., ORC-2 Placer Order Number, OBR-2 Placer Order Number, ORC segment, etc.).

2.4 CORRECTED RESULTS

A corrected result occurs when a previously final result report (i.e., an OBR and associated OBXs where OBR-25 was "Final" and all OBX-11s were "Final") is resent with a change to a value in one or more OBXs.

- OBR-25 (Result Status): The status of the entire report is marked as "C-Corrected" in OBR-25.
- OBX-11 (Observation Result Status): The status of individual OBXs is marked as either "Final" or "Corrected." The corrected OBX values should have an OBX-11 status of "C-Corrected." The OBXs that remain unchanged should have an OBX-11 status of "F-Final." A minimum of one OBX must be marked as corrected.

For this version of PHLIP, the CDC will expect only "Final" or "Corrected" results.

2.5 RATIO RESULTS

Ratio results are not supported with PHLIP Version 1.0.1 of the *Messaging Guide*.

2.6 NON-HUMAN SAMPLES

EPI is assuming that the specimens are only from human sources, even if the virus originated in a different species (i.e. swine or avian).

2.7 REPORTING OF TRIPLETS IN CE DATA TYPE IN THE OBX.5 SEGMENT

Standard code should be reported in the 1st set of triplets. The local codes transmitted in the 2nd set of triplets should be used to further clarify the data passed in the standard codes. The preference is to include both standard and local codes in the message. However, if standard codes are not available, then local codes should be sent. See the guidelines below:

- **BEST = Components 1 – 6**
  - All six segments could be used for grouping and subgrouping of data
- **Acceptable = Components 1 - 3**
  - CDC would use the standard triplet for grouping purposes
- **Acceptable = Components 4 - 6**
  - CDC would use local triplet as more descriptive versions of standard codes, but may need to verify local code with lab

2.8 REPORTING "TEST NOT PERFORMED" AND "ABSENCE FINDING"

States should not send blank OBX's – if you find one agent, report one agent, if you find n agents, report n agents using OBX 4 to distinguish results

Use OBX.11 to report "Test Not Performed".

- OBX-11 = "N" - Not asked; used to affirmatively document that the observation identified in the OBX was not sought when the universal service ID in OBR-4 implies that it would be sought.
- OBX-11 = "X" - Results cannot be obtained for this observation

2.9 SPECIMEN ID (LAB202) IS REQUIRED

Messages not containing LAB202 (Specimen ID) in OBX.3 will not pass validation as it is marked as Required in the Data Elements of Interest.

2.10 RETROACTIVE REPORTING OF FLU

Background: Reporting for flu season starts on September 1st and analysis is based on data from MMWRweek 40 to MMWRweek 20. The season starts with a clean database. If a state begins reporting after 9/1 using HL7, they will need to be able to retroactively report all results using HL7 from 9/1 to current date.

- Date for Retroactive Reporting: 9/1
- Data Fields to determine start date (in order):

1) Date of Receipt at Lab

a) HL7 Data Element: Specimen Received Date/Time (OBR-14)

b) Data Elements of Interest: Receive Date (LAB334)

i) Date and time specimen is received at the lab. The assumption is that labs WILL have this information in their LIMS. Thus, it is the primary field for checking the date

2) Specimen Collection Date

a) HL7 Data Element: Observation Date/Time (OBR-7)

b) Data Element of Interest: Collection Date (LAB163)

i) The date and time the specimen was collected.

3) Date of Illness Onset

a) HL7 Data Element: Date/Time of Illness Onset (OBX-3 & OBX-5)

b) Data Element of Interest: Illness Onset Date (11368-8)

i) Date and time of illness onset

4) Test Date

a) HL7 Data Element: Date/Time of the Observation (OBX-14)

b) Data Element of Interest: Test Date (LAB108)

i) For PHLIP, this field will be used to record the observation time.

Note: CDC Influenza branch uses MMWR week numbers to define flu season. The season runs from week 40 of one year through week 39 of the following year. For this season, it means that the season started on September 30, 2009 and will end on September 27, 2010. The next season will start September 28, 2010.

We can use the Date of Receipt at Lab if that is available and if not, we would use, in order, the Specimen Collection Date, Date of Illness Onset, or Test Date. If states are sending retrospective data to cover an entire season, they could send anything with a Date of Receipt at lab (or other appropriate date if that isn't available) of September 1 or later.

2.11 REPORTING NON-INFLUENZA VIRUSES

If the sample was tested for Influenza, CDC does want to receive the results even if a non-influenza virus was detected. CDC also wants to receive all negative results for the Influenza tests, so they can derive the denominator to calculate percent positive for the respective test.

Approach for reporting non-influenza virus:

If the SNOMED code exists in the PHLIP Encoding Guideline, report the specific SNOMED code for the non-influenza virus. The non-influenza viruses have been added to both the mapping workbook and the respiratory virus result value set in the encoding guidelines. If SNOMED cannot be found, leave 1st triplet blank and report the virus name in the local code section.

EXAMPLE ONE: NON-INFLUENZA VIRUS DETECTED (INCLUDED IN ENCODING GUIDELINE)

- OBX5:
  - OBX-5-1: 39164004
  - OBX-5-2: Human echovirus
  - OBX-5-3: 2.16.840.1.113883.6.96
  - OBX-5-4: <Local Code – if available>
  - OBX-5-5: Human echovirus

- OBX-5-6: L

EXAMPLE TWO: NON-INFLUENZA VIRUS DETECTED (NOT INCLUDED IN ENCODING GUIDELINE)

- OBX5:
  - OBX-5-1:
  - OBX-5-2:
  - OBX-5-3:
  - OBX-5-4: <Local Code – if available>
  - OBX-5-5: <Local Term for Virus found>
  - OBX-5-6: L

2.12 USING THE CORRECT ASSIGNING AUTHORITY

According to HL7 the assigning authority is the unique name for the system (or organization or agency or department) that created the data (in this case the identifier). Also according to HL7, the assigning facility is not considered part of the identifier, rather it's historical information provided to identify the place or location the identifier was first assigned. From the HL7 perspective, they can certainly be the same.

The key thing is that the assigning authority, in combination with the patient identifier, should create a globally unique identifier.

For instance, both IA and MN may use the paradigm First Three Letters of last name with 3 digit number. John Doe would be 'DOE-001' in MN (assuming John Doe was the first person in your system with a name starting with 'Doe'). Steve Doe would be 'DOE-001' in IA.

CDC Receives the following in the HL7 message (using facility OIDS):

- PID3: DOE-001^^^&2.16.840.1.114222.4.1.10080&ISO (from MN) – John Doe
- PID3: DOE-001^^^&2.16.840.1.114222.4.1.10411&ISO (from IA) – Steve Doe

This is ok because the concatenated ID is globally unique.

The instance outlined above assumes that 'DOE-001' is unique within the MN and IA facilities.

That may or may not be true. If you have multiple applications that can create Patient IDs, the Facility OID may not be good enough.

For instance, MN Application 1 may create 'DOE-001' for John Doe and MN Application 2 may create 'DOE-001' for Steve Doe. In this case, the facility OID in combination with the patient ID does not provide a globally unique identifier.

In this case, you would need to use the Application OID. Of course, this assumes that you cannot assign the same Patient Identifier to different people within the same application.

- PID3: DOE-001^^^&2.16.840.1.114222.4.3.3.6.1.1&ISO (From MN Application 1) – John Doe
- PID3: DOE-001^^^&2.16.840.1.114222.4.3.3.6.1.2&ISO (From MN Application 2) – Steve Doe

The key point is that the assigning authority, in combination with the patient identifier, should create a globally unique identifier.

3 USE OF OBJECT IDENTIFIERS (OIDS)

To have computers manipulate information about objects, those objects, and occasionally the records about the objects, must be uniquely identified in some way. HL7 has identified object identifiers (OIDs)[1] as the preferred mechanism for the unambiguous global identification of for coding systems, vocabulary items, messaging partners, and well-known entities.

4 CODE SYSTEMS AND VALUE SETS

Successful message implementation requires that transmitted messages (message instances) contain valid values for coded fields. PHIN messaging uses the HL7-defined code sets where these have been identified and published by HL7. For "user-defined" tables, it uses those values developed by PHIN messaging for use in public health. However, all tables are implemented using PHIN vocabulary principles. It is important to note that code sets are relatively dynamic and subject to change between publications of these implementation guides.

Every code value passed in a message instance is drawn from a code system that has an associated HL7 code from Table 0396 as an identifier. In general, the coded values allowed in a field

a) may be drawn from more than one code system, and

b) may be a subset of the codes from a given coding system.

Combining (a) and (b) makes it possible for the allowed code value to be a combination of multiple subsets drawn from multiple coding systems. The subsets of the codes that are legal for a particular field are identified by an HL7 construct known as a "value set." A value set is a collection of coded values drawn from code systems. Value sets serve to identify the specific set of coded values for the

[1] The International Organization of Standardization (ISO) has developed the OID mechanism for the assignment of globally unique identifiers to any type of object in a decentralized way that retains some traceability of the object so identified. The Internet Engineering Task Force (IETF) realized the utility of this mechanism and formalized it in RFC 1778. This was further refined after comments and expressed desires for increased usability on the World Wide Web and released again in RFC 2252. The World Wide Web Consortium (W3C) supports the use of OIDs, and they are consistent with the implementation of the Domain Name System/Service (DNS) on the Web.

message from the universe of coded values across all coding systems.

The segment tables in the following sections identify the Value Set Name used for each supported field containing a coded value. Fields that use the data type "CE" require that messages include the HL7 code from Table 0396 that uniquely defines the coding system as well as the coded value itself. Some of these pre-coordinated value sets must be quickly updated (or new ones created) as new campaigns, new needs, and new sets of observations are identified.

Value sets are identified by an OID, but this OID is not transmitted in the message. However, the value set OID is useful and important when vocabulary items are modified or replaced.

For reporting of standard values, the 1st set of triplets should always contain Concept Code, Concept Name and the code from HL7 Table 0396 to identify the coding system. References to display names in the guide and vocabulary are informational only and should not be used as standard values in the message.

Example (standard):

- OBX3.1: 22827-0 (Concept Code)
- OBX3.2: FLUA Subtyp XXX PCR (Concept Name)
- OBX3.3: LN (Code for LOINC from Table 0396)

Example (PHLIP):

- OBX3.1: PLT17 (Concept Code)
- OBX3.2: Influenza Virus A H1 Real Time RT-PCR on clin spec (Concept Name)
- OBX3.3: PLT (Code for PHLIP Code from Table 0396)

5 HL7 MESSAGE FOR INFLUENZA TEST RESULT REPORT

(HL7 V2.3.1 Message ORU^R01)

The HL7 V2.3.1 ORU^R01 Unsolicited Observation Message has been selected for use within the Public Health Laboratory Interoperability Project for communication of test results among public health partners.

Segments that are NOT documented in this guide are considered NOT SUPPORTED. Inclusion of any segment that is not supported will result in the creation of an error message.

The abbreviated terms and their definitions used to describe the Message Profile are detailed in the following table.

5.1 HL7 MESSAGE PROFILE ATTRIBUTES

TABLE 5-1. MESSAGE PROFILE ATTRIBUTES

ABBREVIATION	DEFINITION
Segment	• Three-character code for the segment and the abstract syntax (e.g., the square and curly braces). Note that for segment groups there is no segment code present, but the square and curly braces will still be present. • [XXX] Optional • { XXX } Repeating • XXX Required • [{ XXX }] Optional and Repeating
Name	Name of the segment or segment group element.
Usage	Use of the segment for PHLIP. Indicates if the segment is required, optional, or conditional in a message. Legal values are: • R – Required. Must always be populated. • O – Optional. • C – Conditional. Must be populated based on computable Conditionality Statement. • X – Not used.
Cardinality	Minimum and maximum number of times the segment may appear. • [0..0] Segment never present. • [0..1] Segment may be omitted and can have, at most, one occurrence. • [1..1] Segment must have exactly one occurrence. • [0..n] Segment may be omitted or may repeat up to *n* times. • [1..n] Segment must appear at least once, and may repeat up to *n* times. • [0..*] Segment may be omitted or repeat an unlimited number of times. • [1..*] Segment must appear at least once, and may repeat unlimited number of times. • [m..n] Segment must appear at least *m* and at most *n* times.
Description	Explanation of the use of the segment.

5.2 HL7 V2.3.1 MESSAGE ORU^R01 SYNTAX

The 2.3.1 version ORU^R01 abstract message has been constrained for PHLIP Influenza Test Result Reporting as follows:

TABLE 5-2. HL7 V2.3.1 MESSAGE ORU^R01 SYNTAX				
SEGMENT	NAME	USAGE	CARDINALITY	DESCRIPTION
	HEADER Begin	R	[1..1]	
MSH	Message Header	R	[1..1]	The Message Header (MSH) Segment contains information explaining how to parse and process the message. This includes identification of message delimiters, sender, receiver, message type, timestamp, etc.
	HEADER End			
	PATIENT GROUP Begin	R	[1..1]	The Patient Group is required for PHLIP. This is a deviation from the HL7 Version 2.3.1 standard.
PID	Patient Identification	R	[1..1]	The Patient Identification (PID) segment contains patient identifying and demographic information. The PID is required for PHLIP.
[NK1]	Next-of-Kin/ Associated Parties	O	[0..1]	The Next-of-Kin/Associated Parties (NK1) segment contains the relationship information of patient and others. If the subject of the testing is something other than a person, the NK1 will document the person or organization responsible for, or owning, the subject. For patients who are persons, the NK1 documents the next of kin of the patient.
[NTE]	Notes and Comments	O	[0..*]	The Notes and Comments (NTE) segment for the NK1 Segment can be used to carry any associated party's related comments.
	PATIENT GROUP End			
{	***ORDER_OBSERVATION Begin***	R	[1..*]	The Order_Observation group is required and may repeat. This means that multiple test results may be reported on a single specimen.
[ORC]	Common Order	O	[0..1]	The Common Order (ORC) segment identifies basic information about the order for testing of the specimen. This segment includes identifiers for the order, who placed the order, when it was placed, etc.

TABLE 5-2. HL7 V2.3.1 MESSAGE ORU^R01 SYNTAX				
SEGMENT	NAME	USAGE	CARDINALITY	DESCRIPTION
OBR	Observation Request	R	[1..1]	The Observation Request (OBR) segment is used to capture information about a single test being performed on the specimen, or to report information about patient and specimen.
[NTE]	Notes and Comments	O	[0..*]	The Notes and Comments (NTE) segment for the OBR Segment can be used to carry any order-related comments.
{	***OBSERVATION Begin***	R	[1..*]	For PHLIP, the Observation group is required in the ORU^R01 message. This is a deviation from the HL7 Version 2.3.1 standard.
OBX	Observation/Result	R	[1..1]	The Observation/Result (OBX) segment following the OBR is used for observations regarding the test ordered. For instance, this may be used to capture test results, the specimen identifying information, and epidemiologically important information regarding the case diagnosis, such as patient vaccination history, travel history, treatment history, etc. For PHLIP, the OBX is required in the ORU^R01 message. This is a deviation from the HL7 Version 2.3.1 standard.
[NTE]	Notes and Comments	O	[0..*]	The Notes and Comments (NTE) segment for the OBX segment can be used to carry any observation-related comments.
}	***OBSERVATION End***			
}	***ORDER_OBSERVATION End***			

5.3 SEGMENT PROFILE ATTRIBUTES

Fields or components that are NOT documented in this guide are considered NOT SUPPORTED. Inclusion of any field or component that is not supported will result in the creation of an error message.

The abbreviated terms and their definitions used in the ORU^R01 segment profile are detailed in the following table.

TABLE 5-3. SEGMENT PROFILE ATTRIBUTES

ABBREVIATION	DEFINITION
Seq	Sequence of the elements as they are numbered in the HL7 segment.
Len	PHIN maximum length of the element. Length of an element is calculated using the following rules: Field length = (Sum of all supported component lengths) + (component number of the last supported component) – 1. Component length = (Sum of all supported sub-component lengths) + (sub-component number of the last supported component) – 1. Lengths should be considered recommendations, not absolutes. The receiver can truncate fields, components and sub-components that are longer than the recommended length. The receiver should continue to process a message even when a field, component, or sub-component length exceeds the maximum recommended length identified in this specification.
DT	Data type used by PHIN for HL7 element.
Usage	Indicator whether a data element is required, optional, or conditional in a message. Legal values are: • **R** Required. Must always be populated. May use "" (two sets of quote marks) for a null value if no specific value is delineated in the Description column of the table. • **RE**[2] Required, but may be empty (no values, no quotes) • **O** Optional. • **C** Conditional, must be populated, when condition is met, must be empty if condition is not met. • **CE** Conditional, must be populated, but may be empty when condition is met, must be empty if condition is not met, • **X** Not used. ***Note:*** *A required field in an optional segment does not mean the segment must be present in the message. It means that if the segment is present, the required fields within that segment must be populated. The same applies to required components of optional fields. If the field is being populated, then the required components must be populated. The same applies to required sub-components*

[2] The element may be missing from the message, but must be sent by sending application if there is relevant data. A conforming sending application must be capable of providing all 'RE' elements. If conforming sending application knows required values for the element, it must send that element. If conforming sending application does not know the required values, then that element will be omitted.

Receiving applications will be expected to process (save/print/archive, etc.) or ignore data contained in the element, but must be able to successfully process the message if the element is omitted (no error message should be generated because the element is missing).

Health Level Seven, Version 2.5, July 2003, Section 2.12.6.2

TABLE 5-3. SEGMENT PROFILE ATTRIBUTES	
ABBREVIATION	**DEFINITION**
	of optional components. If a component is being populated, then the required sub-components of that component must be populated.
Cardinality	Minimum and maximum number of times the segment may appear. • [0..0] Segment never present. • [0..1] Segment may be omitted and can have, at most, one occurrence. • [1..1] Segment must have exactly one occurrence. • [0..n] Segment may be omitted or may repeat up to *n* times. • [1..n] Segment must appear at least once, and may repeat up to *n* times. • [0..*] Segment may be omitted or repeat an unlimited number of times. • [1..*] Segment must appear at least once, and may repeat unlimited number of times. • [m..n] Segment must appear at least *m* and at most *n* times.
Value Set Name	Pre-coordinated tables used in public health messages, accessible via the Public Health Information Network Vocabulary Access and Distribution Services at http://www.cdc.gov/PhinVSBrowser/StrutsController.do.
HL7 Tbl	The HL7 table number as defined in the HL7 V2.3.1 (1999) standard.
Element Name	Descriptive name of the data element.
Description	Explanation of the use of the field/component/sub-component.

5.4 MESSAGE HEADER (MSH) SEGMENT LEVEL PROFILE

The MSH Segment is used to define the intent, source, destination, and some specifics of the syntax of the message. This segment includes identification of message delimiters, sender, receiver, message type, timestamp, etc. The message header is required for the test result message.

TABLE 5-4. MESSAGE HEADER (MSH) SEGMENT PROFILE - ORU^R01 USAGE

SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
1	1	ST	R	[1..1]		Field Separator	Character to be used as the field separator for the rest of the message. The supported value is |, ASCII (124).
2	4	ST	R	[1..1]		Encoding Characters	Literal value: ' ^~\&'.
3	224	HD	O	[0..1]		Sending Application	Field that may be used to uniquely identify the sending application for messaging purposes. If populated, it will contain an OID that represents the sending application instance. For this version of PHLIP, the sending application will be the name and OID from the state that is sending the message.
3.1	20	IS	RE	[0..1]		Namespace ID	Laboratory information system name.
3.2	199	ST	R	[1..1]		Universal ID	OID.
3.3	3	ID	R	[1..1]		Universal ID Type	Literal value: 'ISO'.
4	224	HD	R	[1..1]		Sending Facility	Unique identifier of the facility that sends the message. The sending facility must be part of the PHIN OID registry. For this version of PHLIP, the sending facility will be the name and OID from the state that is sending the message.
4.1	20	IS	RE	[0..1]		Namespace ID	Laboratory name.
4.2	199	ST	R	[1..1]		Universal ID	OID.
4.3	3	ID	R	[1..1]		Universal ID Type	Literal value: 'ISO'

TABLE 5-4. MESSAGE HEADER (MSH) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
5	224	HD	O	[0..1]		Receiving Application	Unique identifier of the receiving application for messaging purposes. If populated, it will contain an OID that represents the receiving application instance. For this version of PHLIP, the receiving application will always be the CDC application, as denoted in MSH-5.1 and MSH-5.2.
5.1	20	IS	RE	[0..1]		Namespace ID	Laboratory information system name. Literal value: 'US WHO Collab LabSys'
5.2	199	ST	R	[1..1]		Universal ID	Literal value: '2.16.840.1.114222.4.3.3.7'
5.3	3	ID	R	[1..1]		Universal ID Type	Literal value: 'ISO'.
6	224	HD	R	[1..1]		Receiving Facility	Unique identifier of the facility that is to receive the message. This unique identifier must be part of the PHIN OID registry. For this version of PHLIP, the receiving facility will always be the CDC facility, as denoted in MSH-6.1 & MSH-6.2.
6.1	20	IS	RE	[0..1]		Namespace ID	Laboratory name. Literal value: 'CDC–EPI Surv Branch'
6.2	199	ST	R	[1..1]		Universal ID	Literal value: '2.16.840.1.114222.4.1.10416'
6.3	3	ID	R	[1..1]		Universal ID Type	Literal value: 'ISO'
7	26	TS	R	[1..1]		Date/Time of Message	Date and time the message was created by the sending system. The user inputs values for the field only as far as needed. When a system has only a partial date/time, e.g., month, day, and year, but not hour and minute, the missing values may be interpreted as zeros.

TABLE 5-4. MESSAGE HEADER (MSH) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
7.1	24	DTM	R	[1..1]		Time	YYYY[MMDD[HH[MM[SS[.S[S[S[S]]]]]]]][+/-ZZZZ], where at least the first fourteen are used to specify to a precision of "second." The time zone (+/-ZZZZ) is represented as +/-HHMM offset from Coordinated Universal Time (UTC) (formerly Greenwich Mean Time [GMT]), where +0000 or -0000 both represent UTC (without offset). It is strongly recommended that the time zone be used in PHIN messaging.
9	7	CM	R	[1..1]		Message Type	Literal value: 'ORU^R01'.
9.1	3	ID	R	[1..1]		Message Code	Literal value: 'ORU'. Null flavors are not allowed.
9.2	3	ID	R	[1..1]		Trigger Event	Literal value: 'R01'. Null flavors are not allowed.
9.3	3	ID	?	?		Message Structure	Literal value: 'ORU_R01'. Null flavors are not allowed.
10	30	ST	R	[1..1]		Message Control ID	String that uniquely identifies the message instance from the sending application. Recommended to use a counter.
11	3	PT	R	[1..1]	Processing ID (HL7)table# HL70103	Processing ID	Indicator of the intent for processing the message, such as "T" - training, "D" - de-bugging, or "P" - production. For PHLIP, this field will always contain "P."
12	60	VID	R	[1..1]		Version ID	Literal value: "2.3.1."
21	424	EI	R	[1..1]		Message Profile Identifier	Field used to reference or assert adherence to a message profile. Message profiles contain detailed explanations of grammar, syntax, and usage for a particular message or set of messages.
21.1	199	ST	R	[1..1]		Entity Identifier	Literal value: 'PHLIP_ORU_v1.0.2'

TABLE 5-4. MESSAGE HEADER (MSH) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
21.2	20	IS	RE	[1..1]		Namespace ID	Recommended value: 'PHIN_Profile_ID'.
21.3	199	ST	R	[1..1]		Universal ID	First instance literal value: '2.16.840.1.114222.4.10.3'.
21.4	3	ID	R	[1..1]	Constrained HL7 table #301	Universal ID Type	Literal value: 'ISO'

5.5 PATIENT IDENTIFICATION (PID) SEGMENT LEVEL PROFILE

The PID Segment is used as the primary means of communicating patient identification information. This segment contains pertinent patient identifying and demographic information. The PID Segment is required in the patient group. For PHLIP, the patient group is required. If the message sender has detailed patient information, and that information is needed/required by the message receiver, this patient group will be used. For the PHLIP influenza test result message, only one PID Segment is expected per message. If the message sender does not have sufficient information to construct a legal PID Segment, such as a patient name and patient ID, the message sender should send the default data as noted in the Description column, below.

TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
1	4	SI	R	[1..1]		Set ID - PID	Literal value: "1."
3	564	CX	R	[1..*]		Patient Identifier List	This field contains the list of identifiers (one or more) used by the facility to uniquely identify a patient (e.g., medical record number, billing number, birth registry, national unique individual identifier, etc.)

TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
3.1	30	ST	R	[1..1]		Patient ID	. The assigning authority is required for PHLIP. *Note: If no Patient ID is available, the Specimen ID should be defaulted into this field. For PHLIP, the Specimen ID will be an observation sent in OBX-5 (Observation Value) with a data type of "CX." In the case where the Specimen ID is used in place of the Patient ID, it should also be a separate OBX.*
3.4	252	HD	R	[1..1]		Assigning Authority	Entity that assigned the Identifier.
3.4.1	48	IS	O	[0..1]		Namespace ID	
3.4.2	199	ST	R	[1..1]		Universal ID	OID.
3.4.3	3	ID	R	[1..1]		Universal ID Type	Literal value: 'ISO'.
3.5	25	IS	R	[1..1]	Identifier Type Composite value set: values from HL7 table# 203 or PHVS_IdentifierType_CDC	Identifier Type Code	
3.6	252	HD	O	[0..1]		Assigning Facility	Facility that assigned the Identifier.
3.6.1	48	IS	R	[1..1]		Namespace	
3.6.2	199	ST	R	[1..1]		Universal ID	OID.
3.6.3	3	ID	R	[1..1]		Universal ID Type	Literal value: 'ISO'.
5	236	XPN	R	[0..*]		Patient Name	
5.1	50	ST	RE	[0..1]		Last Name	
5.1.1	50	ST	RE	[0..1]		Surname	Note that if a patient name is not available, make the 1st repeat of PID-5 empty. The 2nd repeat should contain an "S" (code for pseudonym) in the Name Type Code component (~^^^^^^S)

TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
5.2	50	ST	RE	[0..1]		First Name	
5.3	50	ST	RE	[0..1]		Middle Initial/Middle Name	
5.4	20	ST	RE	[0..1]		Suffix	
5.5	20	ST	RE	[0..1]		Prefix	
5.6	20	IS	RE	[0..1]	Degree License Certification (HL7) table# 360	Degree	
5.7	20	ID	RE	[0..1]	Name Type (HL7) table# 200	Name Type Code	
7	26	TS	RE	[0..1]		Date/Time of Birth	Patient's date and time of birth.
8	1	IS	RE	[0..1]	Administrative Sex (HL7) table# 1	Sex	Patient's sex.
10	703	CE	RE	[0..*]		Race	Patient's race(s).
10.1	50	ST	C	[0..1]	Race Category (subset of PH_RaceAndEthnicity_CDC)	Identifier	Standardized code. Rule of conditionality: The standard code component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard. In the case that no standard code was found, this field may be blank.
10.2	100	ST	O	[0..1]		Text	Standardized description.
10.3	199	ID	C	[0..1]	Coding System (HL7) table# 396	Name of Coding System	HL7 identifier for Coding System (e.g. “LN” = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.

TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
10.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in component 5.
10.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is "Coded." Rule of conditionality: Required if no standardized code or local code value passed.
10.6	199	ID	C	[0..1]		Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
11	608	XAD	RE	[0..*]		Patient Address	Residence address of the patient. If multiple patient addresses are sent, the 1st repeat should contain the patient's primary address. *Note: If the state is not sent in the message, the receiver should default the sending system's state in PID-11.4.*
11.1	100	ST	RE	[0..1]		Street Address	
11.2	100	ST	RE	[0..1]		Other Designation	
11.3	100	ST	RE	[0..1]		City	
11.4	20	ST	RE	[0..1]	State (FIPS_5-2)	State or Province	Reference the FIPS 5-2 alpha codes here, though this is not a coded field, so no coding system will be identified.

TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
11.5	10	ST	RE	[0..1]		Zip or Postal Code	US Zip Codes, Zip+4 and Canadian Postal Codes will be supported.
11.6	100	ID	RE	[0..1]	Country (PH_Country_ISO_3166-1)	Country	
11.7	20	ID	RE	[0..1]	Address Type (HL7) table# 190	Address Type	
11.8	50	ST	RE	[0..1]		Other Geographic Designation	May be used for MSAs (Metropolitan and Micropolitan Statistical Areas). Source: http://www.whitehouse.gov/omb/bulletins/fy2007/b07-01.pdf
11.9	100	IS	RE	[0..1]	County (PH_County_FIPS_6-4)	County/Parish	
22	703	CE	RE	[0..1]		Ethnic Group	Field that defines the patient as Hispanic, Non-Hispanic or Unknown.
22.1	50	ST	C	[0..1]	Ethnicity Group (subset of PH_RaceAndEthnicity_CDC) including Unknown (subset of PH_NullFlavor_HL7_V3)	Identifier	Standardized code. Rule of conditionality: The standard code component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard. In the case that no standard code was found, this field may be blank.
22.2	100	ST	O	[0..1]		Text	Standardized description.
22.3	199	ID	C	[0..1]	Coding system (HL7) table 0396	Name of Coding System	HL7 identifier for Coding System (e.g. “LN” = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.

TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
22.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in component 5.
22.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is Coded. Rule of conditionality: Required if no standardized code or local code value passed.
22.6	199	ID	C	[0..1]		Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
29	26	TS	RE	[0..1]		Patient Death Date and Time	Date and time of patient's death, if the patient is known to be deceased at the time of the message.
30	1	ID	RE	[0..1]	Yes No Indicator (HL7)table# 136	Patient Death Indicator	Indicator (Y) of patient's death, if the patient is known to be deceased at the time of the message. If unknown, this field should be empty (no value, no quotes).

5.6 NEXT OF KIN/ASSOCIATED PARTIES (NK1) SEGMENT LEVEL PROFILE

The NK1 Segment contains information regarding the patient's other related parties.

TABLE 5-6. NEXT OF KIN/ASSOCIATED PARTIES (NK1) SEGMENT PROFILE - ORU^R01 USAGE

SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
1	4	SI	R	[1..1]		Set ID - NK1	Literal Value: "1."
2	236	XPN	RE	[0..1]		Name	Name of the next of kin or associated party.
2.1	50	ST	R	[1..1]		Last Name	
2.2	50	ST	R	[1..1]		First Name	
2.3	50	ST	RE	[0..1]		Middle Initial/Middle Name	
2.4	20	ST	RE	[0..1]		Suffix	
2.5	20	ST	RE	[0..1]		Prefix	
2.6	20	IS	RE	[0..1]	Degree License Certification (HL7) table# 360	Degree	
2.7	20	ID	RE	[0..1]	Name Type (HL7) table# 200	Name Type Code	
3	703	CE	RE	[0..1]		Relationship	Description of the relationship between the next of kin/related party and the patient.
3.1	50	ST	C	[0..1]	Relationship (HL7) table# 63	Identifier	Standardized code. Rule of conditionality: The standard code component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard. In the case that no standard code was found, this field may be blank.
3.2	100	ST	O	[0..1]		Text	Standardized description.

TABLE 5-6. NEXT OF KIN/ASSOCIATED PARTIES (NK1) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
3.3	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Coding System	HL7 identifier for Coding System (e.g. “LN” = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.
3.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in component 5.
3.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is Coded. Rule of conditionality: Required if no standardized code or local code value passed.
3.6	199	ID	C	[0..1]		Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
4	608	XAD	O	[0..*]		Address	The address of the next of kin/associated party. If multiple addresses are sent, the 1st repeat should contain the next of kin’s primary address. *Note: If the state is not sent in the message, the receiver should default the sending system’s state in NK1-4.4*
4.1	100	ST	O	[0..1]		Street Address	
4.2	100	ST	O	[0..1]		Other Designation	

TABLE 5-6. NEXT OF KIN/ASSOCIATED PARTIES (NK1) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
4.3	100	ST	O	[0..1]		City	
4.4	20	ST	RE	[0..1]	State (FIPS_5-2)	State or Province	Reference the FIPS 5-2 alpha codes here, though this is not a coded field, so no coding system will be identified.
4.5	10	ST	O	[0..1]		Zip or Postal Code	US Zip Codes, Zip+4 and Canadian Postal Codes will be supported.
4.6	100	ID	O	[0..1]	Country (PH_Country_ISO_3166-1)	Country	
4.7	20	ID	RE	[0..1]	Address Type (HL7) table# 190	Address Type	
4.8	50	ST	O	[0..1]		Other Geographic Designation	May be used for MSAs (Metropolitan and Micropolitan Statistical Areas). Source: http://www.whitehouse.gov/omb/bulletins/fy2007/b07-01.pdf
4.9	100	IS	O	[0..1]	County (PH_County_FIPS_6-4)	County/Parish	http://www.census.gov/geo/www/fips/fips.html

5.7 COMMON ORDER (ORC) SEGMENT LEVEL PROFILE

The ORC Segment is used to transmit test order information. This segment includes identifiers for the order, who placed the order, when it was placed, etc. The ORC Segment is optional in the Test Result (ORU) message. Any information that could be included in either the ORC or the OBR must be included in the OBR on reporting.

TABLE 5-7. COMMON ORDER (ORC) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
1	2	ID	R	[1..1]	Order Control Code (HL7) table# 119	Order Control	Order action to be performed with this specific order message. For the PHLIP result message, "RE" (observations to follow) is used.
2	255	EI	RE	[0..1]		Placer Order Number	Unique identifying number assigned to the test request or order by the system that initiated the request for performance of the test. *Note: The same value is populated in ORC.2 and OBR.2.*
2.1	30	ST	R	[1..1]		Entity Identifier	
2.2	20	IS	RE	[0..1]		Namespace ID	Assigning authority.
2.3	199	ST	R	[1..1]		Universal ID	Field required to contain an assigning authority OID for the application/ organization responsible for creating the placer order number. The placer order number is expected to be unique within this assigning authority.
2.4	3	ID	RE	[0..1]		Universal ID type	Literal value: 'ISO'.
3	255	EI	R	[1..1]		Filler Order Number	Order number associated with the filling application. *Note: The same value is populated in ORC.3 and OBR.3.*
3.1	30	ST	R	[1..1]		Entity Identifier	
3.2	20	IS	RE	[0..1]		Namespace ID	

TABLE 5-7. COMMON ORDER (ORC) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
3.3	199	ST	RE	[0..1]		Universal ID	Field required to contain an assigning authority OID for the application/organization responsible for creating the filler order number. The filler order number is expected to be unique within this assigning authority.
3.4	3	ID	RE	[0..1]		Universal ID Type	Literal value: 'ISO'.
5	2	ID	RE	[0..1]	Order Status (HL7) table# 38	Order Status	Status of an order.
21	50	XON	RE	[0..1]		Ordering Facility Name	Name of the facility that placed the order.
21.1	50	ST	R	[1..1]		Organization Name	
22	608	XAD	RE	[0..*]		Ordering Facility Address	Address of the facility that placed the order. If multiple addresses are sent, the 1st repeat should contain the ordering facility's primary address. *Note: If the state is not sent in the message, the receiver should default the sending system's state in ORC-22.4.*
22.1	100	ST	O	[0..1]		Street Address	
22.2	100	ST	O	[0..1]		Other Designation	
22.3	100	ST	O	[0..1]		City	
22.4	20	ST	R	[1..1]	State (FIPS_5-2)	State or Province	Reference the FIPS 5-2 alpha codes here
22.5	10	ST	O	[0..1]		Zip/Postal Code	US Zip Codes, Zip+4 and Canadian Postal Codes will be supported.
22.6	100	ID	O	[0..1]	Country (PH_Country_ISO_3166-1)	Country	

TABLE 5-7. COMMON ORDER (ORC) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
22.7	20	ID	RE	[0..1]	Address Type (HL7) table# 190	Address Type	
22.8	50	ST	O	[0..1]		Other Geographic Designation	May be used for MSAs (Metropolitan and Micropolitan Statistical Areas). Source: http://www.whitehouse.gov/omb/bulletins/fy2007/b07-01.pdf
22.9	100	IS	RE	[0..1]	County (PH_County_FIPS_6-4)	County/Parish	
23	211	XTN	RE	[0..*]		Ordering Facility Phone Number	Telephone number of the facility placing the order. The receiver must minimally support the 1st repeat when populating this field. Email address, if sent, is a separate "repeat" with appropriate Telecommunication Use Code and Telecommunication Equipment Type.
23.2	20	ID	RE	[0..1]	Telecommunication Use Code (HL7) table# 201	Telecom use code	
23.3	100	ST	RE	[0..1]	Telecommunication Equipment Type (HL7) table# 202	Telecom Equipment Type	
23.4	20	ST	RE	[0..1]		Email Address	Example of email address format: x@x.x
23.5	3	NM	RE	[0..1]		Country Code	
23.6	3	NM	RE	[0..1]		Area Code	Look-up service for area codes: http://www.nanpa.com/nas/public/npa_query_step1.do?method=resetNpaReportModel
23.7	17	NM	RE	[0..1]		Phone Number	
23.8	20	NM	RE	[0..1]		Extension	

TABLE 5-7. COMMON ORDER (ORC) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
23.9	20	ST	RE	[0..1]		Any Text	

5.8 OBSERVATION REQUEST (OBR) SEGMENT LEVEL PROFILE

The OBR Segment in the Test Result Message (ORU) is used to capture information about one test being performed on the specimen or report information about patient and specimen.

Note: For PHLIP, only one specimen is allowed per ORU^R01 message.

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
1	4	SI	R	[1..1]		Set ID - OBR	Sequence number of the OBR in relation to the Result message to which it refers. The sequence number should start at 1 and be incremented by 1 for each OBR in the result message.
2	255	EI	RE	[0..1]		Placer Order Number	Unique identifying number assigned to the test request or order by the system that initiated the request for performance of the test. *Note: The same value is populated in ORC.2 and OBR.2.*
2.1	30	ST	R	[1..1]		Entity Identifier	
2.2	20	IS	RE	[0..1]		Namespace ID	Assigning authority.
2.3	199	ST	R	[1..1]		Universal ID	Field required to contain an assigning authority OID for the application/ organization responsible for creating the placer order number. The placer order number is expected to be unique within this assigning authority.

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
2.4	3	ID	RE	[0..1]		Universal ID Type	Literal value: 'ISO'.
3	255	EI	R	[1..1]		Filler Order Number	Order number associated with the filling application. *Note: The same value is populated in ORC.3 and OBR.3.*
3.1	30	ST	R	[1..1]		Entity Identifier	
3.2	20	IS	RE	[0..1]		Namespace ID	
3.3	199	ST	RE	[0..1]		Universal ID	Field required to contain an assigning authority OID for the application/organization responsible for creating the filler order number. The filler order number is expected to be unique within this assigning authority.
3.4	3	ID	RE	[0..1]		Universal ID Type	Literal value: 'ISO'.
4	643	CE	R	[1..1]		Universal Service ID	Identifier code for the test. This will be used to pass PHLIP orderable test codes.
4.1	20	ST	C	[0..1]	Lab Test Order (PHLIP Flu) (Composite value set: values from LOINC and PLT)	Identifier	Standardized code. Rule of conditionality: The standard code component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard. In the case that no standard code was found, this field may be blank.
4.2	100	ST	O	[0..1]		Text	Standardized description.
4.3	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Coding System	HL7 identifier for Coding System (e.g. "LN" = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
4.4	20	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in component 5.
4.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is "Coded." Rule of conditionality: Required if no standardized code or local code value passed.
4.6	199	ID	C	[0..1]		Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
7	26	TS	R	[1..1]		Observation Date/Time	The date and time the specimen was collected. A minimum of year, month and day must be provided when the actual date/time is known. For unknown collection date/time use "0000".
10	337	XCN	O	[0..1]		Collector Identifier	This field will identify the person, department or facility that collected the specimen.
10.1	100	ST	O	[0..1]		ID Number	
10.2	50	ST	O	[0..1]		Family Name	
10.3	50	ST	O	[0..1]		Given Name	
10.4	50	ST	O	[0..1]		Middle Name/Initial	
10.5	20	ST	O	[0..1]		Suffix	
10.6	20	ST	O	[0..1]		Prefix	

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
10.7	20	IS	O	[0..1]		Degree	
10.10	20	IS	O	[0..1]		Name Type Code	
14	26	TS	RE	[0..1]		Specimen Received Date/Time	Date and time specimen is received at the submitter.
15	1060	CM	R	[1..1]		Specimen Source	Identifier of the type and/or source of specimen on which a test is performed.
15.1	703	CE	R	[1..1]	Specimen Source (HL7) table#70	Specimen Source Name or Code	Identifier of the type and/or source of specimen on which a test is performed. The SNOMED CT specimen concepts will not be used to encode this component in PHLIP. For this version of PHLIP, the HL7 table 0070 will be used as the reference table for OBR 15.1. If specimen source is not known, enter the HL7 table 0070 item: "USUB" and "Unknown substance" in the sub-components OBR-15.1.1 & 15.1.2, respectively.
15.1.1	50	ST	R	[1..1]		Identifier	Standardized code. The standard code sub-component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard. If the specimen source is not listed in table 0070, enter "ORH" and "Other" in sub-components 15.1.1 & 15.1.2, with the description of the specimen source in sub-component 15.1.5 (Alternate Text).
15.1.2	100	ST	O	[0..1]		Text	Standardized description.

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
15.1.3	199	ID	R	[1..1]	Coding system (HL7) table# 0396	Name of Coding System	HL7 identifier for Coding System (e.g. “LN” = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.
15.1.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code sub-component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in sub-component 5.
15.1.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is "Coded." Rule of conditionality: Required if standard code (15.1.1) is “ORH” .
15.1.6	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
15.4	354	CE	O	[0..1]		Body Site	For PHLIP, the 1st 3 sub-components of 15.4 are not supported. The local information will be entered in the Alternate Text sub-component OBR-15.4.5
15.4.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code sub-component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in sub-component 5.

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
15.4.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is "Coded." Rule of conditionality: Required if no standardized code or local code value passed.
15.4.6	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
16	591	XCN	RE	[0..1]		Ordering Provider	Identifier of the provider who ordered the testing being performed.
16.1	100	ST	RE	[0..1]		Ordering Provider ID	
16.2	50	ST	RE	[0..1]		Last Name	
16.3	50	ST	RE	[0..1]		First Name	
16.4	50	ST	RE	[0..1]		Middle Initial/Middle Name	
16.5	20	ST	RE	[0..1]		Suffix	
16.6	20	ST	RE	[0..1]		Prefix	
16.7	20	IS	RE	[0..1]	Degree License Certification (HL7) table# 360	Degree	
16.9	252	HD	O	[0..1]		Assigning Authority	Entity that assigned the ID.
16.9.1	48	IS	R	[1..1]		Namespace ID	
16.9.2	199	ST	R	[1..1]		Universal ID	OID.
16.9.3	3	ID	R	[1..1]		Universal ID Type	Literal value: 'ISO'

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
16.10	20	ID	RE	[0..1]	Name Type (HL7) table# 200	Name Type Code	
17	211	XTN	RE	[0..*]		Order Callback Phone Number	Phone number that can be called to obtain additional clarification regarding the order. *Note: The receiver must minimally support the 1st repeat when populating this field.* Email address, if sent, is a separate "Repeat" with appropriate Telecommunication Use Code and Telecommunication Equipment Type.
17.2	20	ID	RE	[0..1]	Telecommunication Use Code (HL7) table# 201	Telecom Use Code	
17.3	100	ST	RE	[0..1]	Telecommunication Equipment Type (HL7) table# 202	Telecom Equipment Type	
17.4	20	ST	RE	[0..1]		Email Address	Example of email address format: x@x.x
17.5	3	NM	RE	[0..1]		Country Code	
17.6	3	NM	RE	[0..1]		Area Code	Look-up service for area codes: http://www.nanpa.com/nas/public/npa_query_step1.do?method=resetNpaReportModel
17.7	17	NM	RE	[0..1]		Phone Number	
17.8	20	NM	RE	[0..1]		Extension	
17.9	20	ST	RE	[0..1]		Any Text	
22	26	TS	RE	[0..1]		Results Rpt/Status Change - Date/Time	Date/time the results were reported or status changed.

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
25	1	ID	R	[1..1]	Result Status (HL7) table# 123	Result Status	Status of results for this order. Corrected Results: A corrected result occurs when a previously final result report (i.e., an OBR and associated OBXs where OBR-25 was Final and all OBX-11s were Final) is being resent with a change to a value in one or more OBXs. OBR-25 (Result Status): The status of the entire report is marked as "C-Corrected" in OBR-25. OBX-11 (Observation Result Status): The status of each OBX is marked as either "Final" or "Corrected." Those OBX values being corrected should have an OBX-11 status of "C-Corrected." Those OBX values that remain unchanged should have an OBX-11 status of "F-Final." A minimum of one OBX must be marked as corrected.
26	745	CM	RE	[0..1]		Parent Result	Field defined to make it available for linkages between the parent result and its children result. This important information, together with the information in OBR.29 Parent, uniquely identifies the OBX Segment of the parent result related to this order.
26.1	623	CE	RE	[0..1]		OBX-3 (Observation Identifier) of Parent Result	
26.1.1	50	ST	C	[0..1]		Identifier	Standardized code. Rule of conditionality: The standard code sub-component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard. In the case that no standard code was found, this field may be blank.

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
26.1.2	100	ST	O	[0..1]		Text	Standardized description.
26.1.3	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Coding System	HL7 identifier for Coding System (e.g. “LN” = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.
26.1.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code sub-component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in sub-component 5.
26.1.5	199	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is "Coded." Rule of conditionality: Required if no standardized code or local code value passed.
26.1.6	20	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
26.2	20	ST	O	[0..1]		OBX-4 (Sub-ID) of Parent Result	
26.3	100	TX	RE	[0..1]		Part of OBX-5 (Observation Result) from Parent Result	The description of the organism from OBX-5, which will have a data type of "ST" or "TX."

TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
29	511	CM	RE	[0..1]		Parent	Parent ID number. Field that relates a child to its parent when a parent-child relationship exists.
29.1	255	EI	RE	[0..1]		Placer Order Number of Parent Result	From ORC-2 (Placer Order Number) or OBR-2 (Placer Order Number) of parent.
29.1.1	30	ST	R	[1..1]		Entity Identifier	
29.1.2	20	IS	RE	[0..1]		Namespace ID	
29.1.3	199	ST	RE	[0..1]		Universal ID	Field required to contain an assigning authority OID for the application/organization responsible for creating the placer order number. The placer order number is expected to be unique within this assigning authority.
29.1.4	3	ID	RE	[0..1]		Universal ID Type	Literal value: 'ISO'.
29.2	255	EI	R	[1..1]		Filler Order Number of Parent Result	From ORC-3 (Filler Order Number) or OBR-3 (Filler Order Number) of parent.
29.2.1	30	ST	R	[1..1]		Entity Identifier	
29.2.2	20	IS	RE	[0..1]		Namespace ID	
29.2.3	199	ST	RE	[0..1]		Universal ID	Field required to contain an assigning authority OID for the application/organization responsible for creating the filler order number. The filler order number is expected to be unique within this assigning authority.
29.2.4	3	ID	RE	[0..1]		Universal ID Type	Literal value: 'ISO'.

5.9 OBSERVATION/RESULT (OBX) SEGMENT LEVEL PROFILE

The OBX Segment in the Test Result (ORU) Message is used to transmit observations related to the test result and other information about patient and specimen, including test result, specimen-related information (such as specimen IDs from both the test order and the test filler), additional information passed by the test order, etc.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE

SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
1	4	SI	R	[1..1]		Set ID - OBX	Sequence number of the OBX in relation to the OBR Segment to which it refers. The sequence number should start at 1 and increment by 1 for each OBX in the Order_Observation group.
2	3	ID	R	[1..1]	Value Type (HL7) table# 125	Value Type	Field in which allowed values are "CE," "CX," "NM," "SN," "ST," "TS" and "TX." The CE data type is used primarily to convey epidemiologically important information and coded lab results like organism name. The CX data type is used primarily to convey additional specimen identifiers in OBXs. The NM data type is used to report a numeric value. The SN data type is used to report a numeric clinical value with qualifications. The ST data type is used to report a short string of text. The TS data type is used to convey the date/time of illness onset. The TX data type is used to carry a large text observation.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
3	703	CE	R	[1..1]	Resulted Lab Test Name (PHLIP Flu) (Composite value set: values from LOINC and PLT) or PHLIP Questions (Flu) (Composite value set: values from LOINC and PHINQUESTIONS)	Observation Identifier	Unique identifier for the observation. This field will be populated by either a resulted test identifier or an identifier for an observation related to patient or specimen information (EPI question).
3.1	50	ST	C	[0..1]		Identifier	Standardized code. Rule of conditionality: The standard code component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard.
3.2	100	ST	O	[0..1]		Text	Standardized description.
3.3	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Coding System	HL7 identifier for Coding System (e.g. “LN” = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.
3.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in component 5.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
3.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is "Coded." Rule of conditionality: Required if no standardized code or local code value passed. Not required but recommended to always send local codes.
3.6	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
4	20	ST	CE	[0..1]		Observation Sub-ID	Conditionality Rule: Field required if there is more than one OBX with the same OBX.3 (Observation Identifier) associated with the same OBR. Normally, this field is populated with a number, but text values may also be used.
5	65536	Varies-see below	R	[1..*]		Observation Value	Actual observation associated with the test order. The data type in OBX.2 Value Type indicates the format of the observation.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
5	703	CE	C	[0..1]	Lab Test Result (PHLIP Flu) Composite value set: values from SNOMED CT and PLR) or Patient Location Status at Specimen Collection (Composite value set:HL7 table# 4 and PH_HealthcareProviderTaxonomy_HIPAA) or Yes No Unknown (YNU) Composite value set: values from HI7 table#136 and NullFlavor_HL7_V3 or Country (ISO_3166-1)	Observation Value	Rule of conditionality: This data element is required unless OBX.11 = 'X' or 'N'. This data type transmits a code and the text associated with the code.
5.1	50	ST	C	[0..1]		Identifier	Standardized code. Rule of conditionality: The standard code component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard. In the case that no standard code was found, this field may be blank.
5.2	100	ST	O	[0..1]		Text	Standardized Description

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
5.3	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Coding System	HL7 identifier for Coding System (e.g. “LN” = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.
5.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in component 5.
5.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the value type is "Coded." Rule of conditionality: Required if no standardized code or local code value passed.
5.6	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
5	285	CX	R	[1..1]		Observation Value	The CX data type is used to carry the specimen ID from the filler.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
5.1	30	ST	R	[1..1]		Specimen ID	The laboratory-generated (local) number that identifies the specimen related to the test. *Note: PHLIP only supports 1 specimen per message.*
5.4	252	HD	R	[1..1]		Assigning Authority	Entity that assigned the ID.
5.4.1	48	IS	O	[0..1]		Namespace ID	
5.4.2	199	ST	R	[1..1]		Universal ID	OID.
5.4.3	3	ID	R	[1..1]		Universal ID Type	Literal value: 'ISO'.
5	65536	TX	C	[0..1]		Observation Value	Rule of conditionality: This data element is required unless OBX.11 = 'X' or 'N'. Field using the TX data type to carry a text result value. Numeric results and numeric results with units of measure should not be reported as text. These should be reported as "NM" or "SN" with the units of measure in OBX-6. The TX data type is intended for strings longer than 200 characters.
5.1	65536	TX	R	[1..1]		Text Data	Text observation in the result message.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
5	36	SN	C	[0..1]		Observation Value	Rule of conditionality: This data element is required unless OBX.11 = 'X' or 'N'. Test result in structured numeric format (i.e., an unambiguous expression of numeric clinical results along with qualifications). Structured numeric include intervals (^0^-^1), ratios (^1^/^2 or ^1^:^2), inequalities (<^10), or categorical results (2^+). The units for the structured numeric value should be reported in OBX-6.
5.1	2	ST	RE	[0..1]		Comparator	Component that must be one of '>' or '<' or '>='' or '<=' or '=' or '<>'. If this component is not valued, it defaults to equal ('=').
5.2	15	NM	R	[1..1]		Num1	
5.3	1	ST	RE	[0..1]		Separator/Suffix	Component that must be one of '-' or '+' or '/'' or '.' or ':'.
5.4	15	NM	RE	[0..1]		Num2	
5	16	NM	C	[0..1]		Observation Value	Rule of conditionality: This data element is required unless OBX.11 = 'X' or 'N'. Test result in numeric format.
5.1	16	NM	R	[1..1]		Numeric Data	Number consisting of an optional leading sign (+ or -), the digits, and an optional decimal point. In the absence of a sign, the number is assumed to be positive. If there is no decimal point, the number is assumed to be an integer.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
5	26	TS	R	[1..1]		Observation Value	Contains the test result as a time stamp. The date portion of the time stamp follows the rules of a date field (DT), and the time portion follows the rules of a time field (TM).
5.1	26	TS	R	[1..1]		Date and Time	Field uses the following format: YYYY[MM[DD[HHMM]]] Example: 200707060000 for July 6, 2007, 12:00 a.m.
5	199	ST	C	[0..*]		Observation Value	Rule of conditionality: This data element is required unless OBX.11 = 'X' or 'N'. Field using the ST data type to carry a short text result value. Numeric results and numeric results with units of measure should not be reported as text. These should be reported as NM or SN, with the units of measure in OBX-6.
5.1	199	ST	R	[1..1]		String Data	The ST data type is intended for short strings (e.g., less than 200 characters).

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
6	703	CE	C or CE?	[0..1]	PH_UnitsOfMeasure_UCUM (subset of UCUM) or Age Unit Composite value set: values from UCUM NullFlavor_HL7_V3)	Units	Field populated with units of measure if the data type identified in OBX.2 (and carried in OBX.5) is ""SN." If we use C, then need to explain to use "1" for any unitless value in OBX.5, for example a titer.
6.1	50	ST	C	[0..1]		Identifier	Standardized code. Rule of conditionality: The standard code component is mandatory unless there is no standard to match the local value passed by the application. An attempt will be made by the sender to map the local value to the standard. In the case that no standard code was found, this field may be blank.
6.2	100	ST	O	[0..1]		Text	Standardized description.
6.3	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Coding System	HL7 identifier for Coding System (e.g. "LN" = LOINC). Rule of conditionality: The HL7 coding system identifier is always required if there is a value in component 1.
6.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in component 5.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
6.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is "Coded." Rule of conditionality: Required if no standardized code or local code value passed.
6.6	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.
7	60	ST	RE	[0..1]		References Range	Interpretation range that applies to the value reported in OBX-5. It should provide enough information to understand the abnormal flags reported in OBX.8.
8	5	ID	RE	[0..1]	Abnormal Flag (HL7) table# 78	Abnormal Flags	Indicator of the normalcy of the result found in OBX.5.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
11	1	ID	R	[1..1]	Observation Result Status (HL7) table# 85	Observation Result Status	Status of the observation result. Corrected Results: A corrected result occurs when a previously final result report (i.e., an OBR and associated OBXs where OBR-25 was "Final" and all OBX-11s were Final) is being resent with a change to a value in one or more OBXs. OBR-25 (Result Status): The status of the entire report is marked as "C-Corrected" in OBR-25. OBX-11 (Observation Result Status): The status of each OBX is marked as either "Final" or "Corrected." Those OBX values being corrected should have an OBX-11 status of "C-Corrected." Those OBX values that remain unchanged should have an OBX-11 status of "F-Final." A minimum of one OBX must be marked as corrected. OBX-11 = “N” - Not asked; used to affirmatively document that the observation identified in the OBX was not sought when the universal service ID in OBR-4 implies that it would be sought. OBX-11 = ‘X” - Results cannot be obtained for this observation

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
14	26	TS	RE	[0..1]		Date/Time of the Observation	For PHLIP, this field will be used to record the observation time. *Note: This is a deviation from the HL7 Version 2.3.1 standard, which is the Specimen Collection Date/Time. In HL7 Version 2.5, the specimen information has been expanded. OBX-14 is Specimen Collection Date/Time; OBX-19 is Date/Time of the Analysis.*
17	354	CE	RE	[0..1]		Observation Method	Identifier of the method used to find the result. Note: For PHLIP, the 1st 3 components are not supported. The local information will be entered in the Alternate Text component OBX-17.5.
17.4	50	ST	C	[0..1]		Alternate Identifier	Local code. Rule of conditionality: The local code component is mandatory if there is no standard to match the local value passed by the application AND there is no text present in component 5.
17.5	100	ST	C	[0..1]		Alternate Text	Local description. Note that if the field is collected as text in the application, this may be the only field populated if the data type is "Coded." Rule of conditionality: Required if no standardized code or local code value passed.

TABLE 5-9. OBSERVATION/RESULT SEGMENT (OBX) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
17.6	199	ID	C	[0..1]	Coding system (HL7) table# 0396	Name of Alternate Coding System	Locally defined codes for purpose of sender or receiver. Local codes can be identified by "L" (for backward compatibility) or "99zzz" (where *z* is an alphanumeric character). Rule of conditionality: Required if an alternate identifier is present.

5.10 NOTES AND COMMENTS (NTE) SEGMENT LEVEL PROFILE

The NTE Segment in the test result message can be used to carry comments for the NK1, OBR, and OBX segments. The NTE segment applies to the entity that immediately precedes it (e.g., order-related comments if it follows the OBR segment, observation-related comments if it follows the OBX segment).

TABLE 5-10. NOTES AND COMMENTS SEGMENT (NTE) PROFILE - ORU^R01 USAGE							
SEQ	LEN	DT	USAGE	CARDINALITY	VALUE SET NAME	ELEMENT NAME	DESCRIPTION
1	4	SI	O	[0..1]		Set ID - NTE	
2	8	ID	O	[0..1]	Source of Comment (HL7) table# 105	Source of Comment	HL7 defined values from Table 0105 of the standard ("L" = Filler, "P" = Placer, "O" = Other)
3	65536	FT	R	[1..*]		Comment	This field uses an FT rather than a TX data type. Since there is no difference between an FT data type without any embedded formatting commands, and a TX data type, this change is compatible with previous versions.

6 PHLIP DATA ELEMENTS OF INTEREST

6.1 COLUMN DEFINITIONS FOR ELEMENTS OF INTEREST TABLE

Column	Description
Program Variables Section	
PHIN Variable ID	PHIN element UID drawn from the coding system PH_PHINQuestions_CDC
Label	Short name for the data element, which is passed in the message.
Description	Description of the data element.
Data Type	Data type for the variable response expected by the program area
Prog. Req/Opt	Indicator whether the program specifies the field as: **R** - Required - mandatory for sending the message RE – Required, but may be empty – sender must be able to process (collect/store, display/print etc) this data element and needs to send data, if information is available, but need not make up “null” values, if information is not available **O** - Optional - if the data is available it should be passed
May Rpt	Indicator whether the response to the data element may repeat. “Yes” in the field indicates that it may; otherwise, the field is not populated. Repeats require special processing.
Value Set Name	Name of the pre-coordinated value set from which the response is drawn. The value sets and coding systems are accessible via the Public Health Information Network Vocabulary Access and Distribution Services at http://phinvads.cdc.gov/vads/SearchVocab.action
Message Mapping Methodology Section	
Message Context	Specific HL7 segment and field mapping for the element.

HL7 Data Type	HL7 data type used by PHIN to express the variable.
HL7 Usage	Use of the field for PHIN. Indicates if the field is required, optional, or conditional in a segment. The only values that appear in the Message Mapping are: • **R** – Required. Must always be populated • **O** – Optional. May optionally be populated.
HL7 Rpt	Indicator whether the response to the data element may repeat. "Yes" in the field indicates that it may; otherwise, the field is not populated. Repeats require special processing.

6.2 DATA ELEMENTS OF INTEREST FOR UNSOLICITED RESULTS

The CDC Influenza Epidemiologists have defined the elements listed in the following table as Data Elements of Interest.

The PHLIP Data Elements of Interest are cross-referenced below to the HL7 context in which the element would be expressed in the unsolicited result message. Please note that all of the Data Elements of Interest for the unsolicited result are included, although each site may opt not to send a particular data element that is not a required data element.

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
DEM197	Local patient ID	The local ID of the patient/entity.	Text	R			PID-3 Patient Identifier List (Note that the variable ID and label do not appear in the message.)	CX	R	
DEM115	Birth Date	Reported date of birth of patient.	Date	RE			PID-7 Date/Time of Birth (Note that the variable ID and label do not appear in the message.)	TS	O	
DEM113	Patient's sex	Patient's current sex.	Code	O		Administrative Sex	PID-8 Administrative Sex (Note that the variable ID and label do not appear in the message.)	IS	O	
DEM162	Patient Address State	Patient's address state.	Code	RE		State	PID-11.4 Patient Address - State (Note that the variable ID and label do not appear in the message.)	ST	O	
DEM163	Patient Address Zip Code	Patient's address zip code.	Text	RE			PID-11.5 Patient Address - Postal Code (Note that the variable ID and label do not appear in the message.)	ST	O	
DEM165	Patient Address County	County of residence of the subject.	Code	RE		County	PID-11.9 Patient Address – County or OBX.5 Observation Value	IS	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
LAB505	Submitting Laboratory Name	Name of organization collecting specimen	Text	O			OBR-10 Collector Identifier (Note that the variable ID and label do not appear in the message.)	XCN	O	
LAB128	Submitting Physician Name	Ordering Provider	Text	O			OBR-16 Ordering Provider (Note that the variable ID and label do not appear in the message.)	XCN	O	
LAB143	Laboratory ID	Laboratory ID of the public health lab sending the result	OID	R			MSH-4.2 Sending Facility-Universal ID component (Note that the variable ID and label do not appear in the message.) MSH-4.3 Universal ID Type. Literal value: 'ISO'	HD	R	
LAB163	Collection Date	Date clinical specimen was collected	Date	C			OBR-7 Observation Date/Time (Note that the variable ID and label do not appear in the message.) Conditionality Rule: If Receive Date is not populated, Collection Date must be present.	TS	R	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
LAB334	Receive Date	Date specimen was received at public health laboratory	Date	C			OBR-14 Specimen Received Date/Time (Note that the variable ID and label do not appear in the message.) Conditionality Rule: If Collection Date is not populated, Receive Date must be present	TS	O	
LAB165	Specimen Source	Source of Specimen	Code	R		Specimen Source (PHLIP)	OBR-15 Specimen Source (Note that the variable ID and label do not appear in the message.)	CM	O	
LAB101	Test Performed-Code	Test code as known by the laboratory	Code	R		Resulted Lab Test Name (PHLIP Flu) or PHLIP Questions (Flu)	OBX-3 Observation Identifier (Note that the variable ID and label do not appear in the message.)	CE	R	
LAB114	Numeric Result Value	Test result in numeric format	Nu-meric	C			OBX-5 Observation Value	SN	O	
LAB192	Coded Result Value	Test result as coded value	Code	C		Lab Test Result (PHLIP Flu)	OBX-5 Observation Value	CE	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
LAB108	Test Date	Date specimen/ isolate was tested	Date	O			OBX-14 Date/Time of Observation (Note that the variable ID and label do not appear in the message.) *Note: This is a deviation from HL7 2.3.1 where this field is the Collection Date/Time.*	TS	O	
LAB202	Specimen ID	Unique specimen/ accession/ aliquot ID assigned by laboratory-	Code	R			Observation/OBX Segment with this variable ID and label. OBX-2 = CX OBX-3 = LAB202^Unique Specimen ID^PHINQUESTION OBX-5 = Specimen ID^^^Assigning Authority Name&Assigning Authority ID&Assigning Authority ID Type	CX	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
21612-7	Reported Patient Age	Patient's age as reported in an application at the source	Numeric with Units	RE			Observation/OBX Segment with this variable ID and label. OBX-2 = SN OBX-3 = 21612-7^ Age Patient Qn Reported^LN OBX-5 = Age number OBX-6 = Age units	SN	O	
FLU002	Vaccinated	Was the patient vaccinated for Influenza?	Code	O		Yes No Unknown (YNU)	Observation/OBX Segment with this variable ID and label OBX-2 = CE OBX-3 = FLU002^ Was the patient vaccinated for influenza?^ PHINQUESTION OBX-5 = Y/N Identifier^Text^HL70136 Or UNK^unknown^ NULLFL	CE	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
FLU001	Antiviral Medication	Was the patient receiving influenza antiviral medication?	Code	O		Yes No Unknown (YNU)	Observation/OBX Segment with this variable ID and label OBX-2 = CE OBX-3 = FLU001^Was the patient receiving influenza antiviral medication?^PHINQUESTION OBX-5 = Y/N^Identifier^Text^HL70136 Or UNK^unknown^ NULLFL	CE	O	
LAB514	Outbreak Related	Was the specimen outbreak related?	Code	O		Yes No Unknown (YNU)	Observation/OBX Segment with this variable ID and label OBX-2 = CE OBX-3 = LAB514^ Was this specimen related to an outbreak?^PHINQUESTION OBX-5 = Y/N^Identifier^Text^HL70136 Or UNK^unknown^ NULLFL	CE	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
LAB330	Type of Facility	Did the specimen come from an outpatient, inpatient or long-term care facility?	Code	O		Patient Location Status at Specimen Collection	Observation/OBX Segment with this variable ID and label OBX-2 = CE OBX-3 = LAB330^ Patient location status at specimen collection (e.g., outpatient, inpatient, long-term care).^PHINQUESTION OBX-5 = I/O/ Identifier^Text^HL70004 Or 282E00000X^Long Term Care Hospital^ HCPT	CE	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
PHLIP01	Travel Outside the US	Did the patient travel outside the U.S. within 10 days of illness onset?	Code	O		Yes No Unknown (YNU)	Observation/OBX Segment with this variable ID and label OBX-2 = CE OBX-3 = PHLIP01^Did the patient travel outside the U.S. within 10 days of illness onset?^PHINQUESTION OBX-5 = Y/N^Identifier^Text^HL70136 Or UNK^unknown^ NULLFL	CE	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
TRAVEL05	Destination (s) Traveled To	International destination(s)	Code	O		Country	Observation/OBX Segment with this variable ID and label OBX-2 = CE OBX-3 = TRAVEL05^ International destination(s) ^PHINQUESTION OBX-5 = Country Identifier^Text^ISO3166-1^Local Identifier^Local Text^Name of Coding System Business Rule: Only applicable if PHLIP01 was “Yes”.	CE	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
LAB515	Isolate Sent to CDC	Is Isolate being sent to CDC?	Code	O		Yes No Unknown (YNU)	Observation/OBX Segment with this variable ID and label OBX-2 = CE OBX-3 = LAB515^Was isolate sent to CDC?^PHINQUESTION OBX-5 = Y/N^Identifier^Text^HL70136 Or UNK^unknown^ NULLFL	CE	O	
11368-8	Illness Onset Date	Date and time of illness onset	Date	O			Observation/OBX Segment with this variable ID and label OBX-2 = TS OBX-3 = 11368-8^ILLNESS/INJURY ONSET DATE/TIME^LN OBX-5 = Date/time of illness onset = TS	TS	O	

Program Specific Data Elements for Unsolicited Results							Mapping Methodology			
Variable ID	**Label**	**Description**	**Data Type**	**Prog. Req/ Opt**	**May Rpt**	**Value Set Name**	**Message Context**	**HL7 Data Type**	**HL7 Usage**	**HL7 Rpt**
LAB517	Isolate ID Sent to CDC	Laboratory ID assigned to the isolate sent to the CDC	Code	O			Observation/OBX Segment with this variable ID and label OBX-2 = CX OBX-3 = LAB517^Identifier assigned by laboratory to the isolate sent to CDC^PHINQUESTION OBX-5 = Isolate ID^^^Assigning Authority Name&Assigning Authority ID&Assigning Authority ID Type	CX	O	
PHLIP02	Passage History	History of Culture Medium	Text	O			Observation/OBX segment with this variable ID and label OBX-2 = TX OBX-3 = PHLIP02^History of culture medium ^PHINQUESTION OBX-5 = Passage History Text Description	TX	O	

7 SAMPLE MESSAGE

7.1 STORYBOARD

Dr. Marcus Welby, Jr., sees Jared Doe, Jr., a 30-year-old male, during an office visit. Jared Doe presents symptoms of fever, cough, sore throat and muscle aches, all consistent with a diagnosis of influenza. While examining the patient, Dr. Welby discovers that Mr. Doe has been traveling outside of the United States recently, specifically Italy, West Africa, and Bangkok. Dr. Welby decides to order an Influenza Identification Test from his local public health department to determine the type of influenza virus the patient has acquired.

A sputum sample is taken from the patient, and an electronic order for the testing is placed through Dr. Welby's EHR application, a Northeast Medical Center ordering application. The Northeast Medical Center ordering application transmits the order to the Virginia State STARLIMS application for processing. Dr. Welby sends the patient home, prescribing bed rest, plenty of fluids and an anti-inflammatory, such as ibuprofen or aspirin.

7.1.1 SAMPLE

```
MSH|^~\&|VA STARLIMS Stage^2.16.840.1.114222.4.3.3.2.2.1^ISO|VA PHL
Richmond^2.16.840.1.114222.4.1.9977^ISO|US WHO Collab
LabSys^2.16.840.1.114222.4.3.3.7^ISO|CDC EPI Surv
Branch^2.16.840.1.114222.4.1.10416^ISO|200707071830||ORU^R01|200707070897|P|2.3.1
|||||||||PHLIP_ORU_v1.0.2^PHIN_Profile_ID^2.16.840.1.114222.4.10.3^ISO<cr>

PID|1||105431122VA^^^VA STARLIMS_Stage&2.16.840.1.114222.4.3.3.2.2.1&ISO^MR^VA PHL
Richmond&2.16.840.1.114222.4.1.9977&ISO||Doe^Jared^Q^Jr^^BBA^L||19760909|M||2106-
3^White^CDCREC~2028-9^Asian^CDCREC|2166 Wells
Dr^AptB^Richmond^51^23235^US^H||||||||||2186-5^Not Hispanic or Latino^CDCREC^N^Not
Hispanic^L|||||||N<cr>

ORC|RE|NE5400123^NE Med System^2.16.840.1.114222.75.9.1.2.1^ISO|F67993405^VA STARLIMS
Stage^2.16.840.1.114222.4.3.3.2.2.1^ISO||CM|||||||||||||||Northeast Medical
Center|1600 Hospital Drive^Ste
350^Richmond^51^23235^US^M|^WPN^PH^^^804^6486154^320~^NET^X.400^jsmith@neastmed.com
<cr>

OBR|1|NE5400123^NE Med System^2.16.840.1.114222.75.9.1.2.1^ISO|F67993405^VA STARLIMS
Stage^2.16.840.1.114222.4.3.3.2.2.1^ISO|PLT40^Epidemiologically Important Information -
Influenza^PLT|||200706270930|||||||200706271530|SPT&Sputum&
HL70070&SPU&Sputum&L|^Welby^Marcus^J^Jr^Dr^MD|||||||||F<cr>

OBX|1|SN|21612-7^Age Patient Qn Reported^LN||^30|a^year^UCUM|||||F<cr>

OBX|2|CE|FLU002^Was the patient vaccinated for
Influenza?^PHINQUESTION||Y^Yes^HL70136||||||F<cr>

OBX|3|CE|FLU001^Was the patient receiving influenza antiviral
medication?^PHINQUESTION||N^No^HL70136||||||F<cr>

OBX|4|CE|LAB514^Was this specimen related to an outbreak?^PHINQUESTION||Y^Yes^
HL70136||||||F<cr>
```

```
OBX|5|CE|LAB330^Patient location status at specimen collection (e.g., outpatient,
inpatient, long-term care)^PHINQUESTION||O^Outpatient^HL70489||||||F<cr>

OBX|6|CE|PHLIP01^Did the patient travel outside the U.S. within 10 days of illness
onset?^PHINQUESTION||Y^Yes^HL70136||||||F<cr>

OBX|7|CE|TRAVEL05^International destination(s)^PHINQUESTION||IT^Italy^ISO3166-
1~^^^WTAF^West Africa^L~^^^BANT^Bangkok^L||||||F<cr>

OBX|8|CE|LAB515^Is Isolate being sent to CDC?^PHINQUESTION||Y^Yes^ HL70136||||||F<cr>

OBX|9|TS|11368-8^ILLNESS/INJURY ONSET DATE/TIME^LN||20070622||||||F<cr>

OBX|10|CX|LAB517^Identifier assigned by laboratory to the isolate sent to
CDC^PHINQUESTION||A16170^^^VA
STARLIMS_Stage&2.16.840.1.114222.4.3.3.2.2.1&ISO||||||F<cr>

OBX|11|TX|PHLIP02^History of culture medium^PHINQUESTION||E1 One Time in Egg||||||F<cr>

OBX|12|IS|DEM165^Patient Address County^PHINQUESTION||Prince William||||||F<cr>

OBR|2|NE5400123^NE Med System^2.16.840.1.114222.75.9.1.2.1^ISO|F67993405^VA STARLIMS
Stage^2.16.840.1.114222.4.3.3.2.2.1^ISO|PLT77^Influenza Virus Detection and
Identification^PLT|||200706270930|||||||200706271530|SPT&Sputum&HL70070&CSW&Cheek
Swab&L|^Welby^Marcus^J^Jr^Dr^MD|||||||||F<cr>

OBX|1|CX|LAB202^Unique Specimen ID^PHINQUESTION||VA12345^^^VA STARLIMS
Stage&2.16.840.1.114222.4.3.3.2.2.1&ISO||||||F<cr>

OBX|2|CE|22827-0^FluAV subtype XXX PCR^LN||PLR67^Influenza A H5 asian lineage
detected^PLR|||A|||F|||200707011422<cr>
```

8 MISCELLANEOUS

8.1 APPLICATION & ORGANIZATIONAL OIDS

List of current organizational and application OIDs for use in this project can be found in the Production documents folder on sharepoint:

Lab messaging OIDs- Facs, Apps, PHINMS.xlsx

<http://tinyurl.com/2bmym62>

8.2 LINK TO HL7 TABLE 396 – CODING SYSTEMS

HL7 Table 0396

<http://www.hl7.org/Special/committees/vocab/table_0396/index.cfm>

8.3 LINK TO PHINVADS

PHIN Vocabulary Access and Distribution System

<http://phinvads.cdc.gov/vads/SearchVocab.action>