



**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

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Centers for Disease Control and Prevention

INFLUENZA TEST RESULT REPORTING BY PUBLIC HEALTH LABORATORIES

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 |
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| 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 |
| 8/22/08 | 1.0.2 | In data elements of interest table changed program requirements for DEM162 (Patient Address State) from R to RE |
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| 8/12/09 | 1.0.2 | Changes per meeting with V+M and New States groups: 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 |

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| Date | Version | Description |
|---------|---------|--|
| | | 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 collector identifier |

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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: Flu season starts on September 1st and goes from week 40 to week 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

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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

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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.

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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.

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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 | <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • [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 <i>n</i> times. • [1..n] Segment must appear at least once, and may repeat up to <i>n</i> 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 <i>m</i> and at most <i>n</i> 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:

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| 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. |

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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. |
| { | <i>OBSERVATION Begin</i> | 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. |
| } | <i>OBSERVATION End</i> | | | |
| } | <i>ORDER_OBSERVATION End</i> | | | |

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.

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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 | <p>PHIN maximum length of the element. Length of an element is calculated using the following rules:</p> <p>Field length = (Sum of all supported component lengths) + (component number of the last supported component) – 1.</p> <p>Component length = (Sum of all supported sub-component lengths) + (sub-component number of the last supported component) – 1.</p> <p>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.</p> |
| DT | Data type used by PHIN for HL7 element. |
| Usage | <p>Indicator whether a data element is required, optional, or conditional in a message. Legal values are:</p> <ul style="list-style-type: none"> • 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. • RE² 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. <p>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</p> |

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).

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| TABLE 5-3. SEGMENT PROFILE ATTRIBUTES | |
|--|---|
| ABBREVIATION | DEFINITION |
| | <i>of optional components. If a component is being populated, then the required sub-components of that component must be populated.</i> |
| Cardinality | <p>Minimum and maximum number of times the segment may appear.</p> <ul style="list-style-type: none"> • [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 <i>n</i> times. • [1..n] Segment must appear at least once, and may repeat up to <i>n</i> 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 <i>m</i> and at most <i>n</i> 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. |

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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' |

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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. |
| 9 | 7 | CM | R | [1..1] | | Message Type | Literal value: 'ORU^R01'. |

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| TABLE 5-4. MESSAGE HEADER (MSH) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|---|-----|-----|-------|-------------|-----------------------------------|----------------------------|--|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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' |
| 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' |

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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 | Field used to convey all types of patient/person identifiers. This includes social security number, driver's license number, medical record numbers, etc. |
| 3.1 | 30 | ST | R | [1..1] | | Patient ID | Identifier from the ordering facility. The local unique id is required for PHLIP. <i>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.</i> |
| 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'. |

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| TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|---|-----|-----|-------|-------------|--|----------------------------|---|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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 | Note that if a patient name is not available, make the 1 st repeat of PID-5 empty. The 2 nd repeat should contain an "S" (code for pseudonym) in the Name Type Code component (~^^^^^S) |
| 5.1 | 50 | ST | RE | [0..1] | | Last Name | |
| 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. |

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TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE

| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
|------|-----|----|-------|-------------|---|-----------------------|--|
| 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. |
| 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. |

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TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE

| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
|------|-----|-----|-------|-------------|---------------------------------|---------------------------------|--|
| 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 1 st repeat should contain the patient's primary address. <i>Note: If the state is not sent in the message, the receiver should default the sending system's state in PID-11.4.</i> |
| 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. |
| 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 | |

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| TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|---|-----|----|-------|-------------|--|------------------------------|--|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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. |
| 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. |

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| TABLE 5-5. PATIENT IDENTIFICATION (PID) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|---|-----|----|-------|-------------|----------------------------------|---------------------------------|--|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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 | |

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| 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 |
| 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. |
| 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. |

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| 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 |
| 3.4 | 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. <i>Note: If the state is not sent in the message, the receiver should default the sending system's state in NK1-4.4</i> |
| 4.1 | 100 | ST | O | [0..1] | | Street Address | |
| 4.2 | 100 | ST | O | [0..1] | | Other Designation | |
| 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. |

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| 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 |
| 4.5 | 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. |

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| TABLE 5-7. COMMON ORDER (ORC) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|---|-----|----|-------|-------------|------------------------------|---------------------|--|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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. <i>Note: The same value is populated in ORC.2 and OBR.2.</i> |
| 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. <i>Note: The same value is populated in ORC.3 and OBR.3.</i> |
| 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'. |
| 5 | 2 | ID | RE | [0..1] | Order Status (HL7) table# 38 | Order Status | Status of an order. |

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| TABLE 5-7. COMMON ORDER (ORC) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|---|-----|-----|-------|-------------|---------------------------------|------------------------------|--|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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. <i>Note: If the state is not sent in the message, the receiver should default the sending system's state in ORC-22.4.</i> |
| 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 | |
| 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 |

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

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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. <i>Note: The same value is populated in ORC.2 and OBR.2.</i> |
| 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. <i>Note: The same value is populated in ORC.3 and OBR.3.</i> |
| 3.1 | 30 | ST | R | [1..1] | | Entity Identifier | |
| 3.2 | 20 | IS | RE | [0..1] | | Namespace ID | |

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| TABLE 5-8. OBSERVATION REQUEST (OBR) 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'. |
| 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. |
| 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. |

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| TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|--|-----|-----|-------|-------------|----------------|---------------------------------|--|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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 | |
| 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. |

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| TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|--|------|----|-------|-------------|---------------------------------|------------------------------|---|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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. |
| 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. |

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| TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|--|-----|----|-------|-------------|---------------------------------|---------------------------------|--|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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 1 st 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. |
| 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. |

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| TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|--|-----|-----|-------|-------------|---|------------------------------------|--|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 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' |
| 16.10 | 20 | ID | RE | [0..1] | Name Type (HL7) table# 200 | Name Type Code | |

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| TABLE 5-8. OBSERVATION REQUEST (OBR) SEGMENT PROFILE - ORU^R01 USAGE | | | | | | | |
|--|-----|-----|-------|-------------|---|---------------------------------------|---|
| SEQ | LEN | DT | USAGE | CARDINALITY | VALUE SET NAME | ELEMENT NAME | DESCRIPTION |
| 17 | 211 | XTN | RE | [0..*] | | Order Callback Phone Number | Phone number that can be called to obtain additional clarification regarding the order. <i>Note: The receiver must minimally support the 1st repeat when populating this field.</i> 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=resetNpaReportMode1 |
| 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. |

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| 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 | <p>Status of results for this order.</p> <p>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.</p> <p>OBR-25 (Result Status): The status of the entire report is marked as "C-Corrected" in OBR-25.</p> <p>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.</p> |
| 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 | <p>Standardized code.</p> <p>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.</p> |

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| 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." |

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| 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'. |

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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. |

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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. |

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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. |

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| 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 HL7 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 |

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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. |

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| 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. <i>Note: PHLIP only supports 1 specimen per message.</i> |
| 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. |
| | | | | | | | |

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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 | <p>Rule of conditionality: This data element is required unless OBX.11 = 'X' or 'N'.</p> <p>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 ($1^{^1/2}$ or $1^{^1^2}$), inequalities (<10), or categorical results ($2^{^+}$). The units for the structured numeric value should be reported in OBX-6.</p> |
| 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 | <p>Rule of conditionality: This data element is required unless OBX.11 = 'X' or 'N'.</p> <p>Test result in numeric format.</p> |
| 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. |

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| 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). |

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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 | RE | [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 "NM" or "SN." |
| 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. |

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| 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. |

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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 | <p>Status of the observation result.</p> <p>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.</p> <p>OBR-25 (Result Status): The status of the entire report is marked as "C-Corrected" in OBR-25.</p> <p>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.</p> <p>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.</p> <p>OBX-11 = "X" - Results cannot be obtained for this observation</p> |

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| 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. <i>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.</i> |
| 17 | 354 | CE | RE | [0..1] | | Observation Method | Identifier of the method used to find the result. Note: For PHLIP, the 1 st 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. |

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| 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. |

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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. |

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| | |
|----------------------|---|
| 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: <ul style="list-style-type: none">• 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.

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| 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 | |

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| 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 | |

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| 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 | O | | | OBX-5 Observation Value | NM | O | |
| LAB192 | Coded Result Value | Test result as coded value | Code | O | | Lab Test Result (PHLIP Flu) | OBX-5 Observation Value | CE | O | |

INFLUENZA TEST RESULT REPORTING BY PUBLIC HEALTH LABORATORIES

| 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.) <i>Note: This is a deviation from HL7 2.3.1 where this field is the Collection Date/Time.</i> | 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 | |

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| 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 | Nu- meric 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? | 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 | |

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| 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 | |

INFLUENZA TEST RESULT REPORTING BY PUBLIC HEALTH LABORATORIES

| 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 | |

INFLUENZA TEST RESULT REPORTING BY PUBLIC HEALTH LABORATORIES

| 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 | |

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| 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 | |

INFLUENZA TEST RESULT REPORTING BY PUBLIC HEALTH LABORATORIES

| 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 | |

INFLUENZA TEST RESULT REPORTING BY PUBLIC HEALTH LABORATORIES

| 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 | |

INFLUENZA TEST RESULT REPORTING BY PUBLIC HEALTH LABORATORIES

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|TX|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 & 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^Influenza Virus A subtype PCR on clin spec^LN||PLR5^Influenza A (H5)^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 latest mapping workbook in the Production documents folder on sharepoint:http://www.aphlweb.org/aphl_departments/Strategic_Initiatives_and_Research/Informatics_Program/Projects/PHLIP/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2faphl%5fdepartments%2fStrategic%5fInitiatives%5fand%5fResearch%2fInformatics%5fProgram%2fProjects%2fPHLIP%2fShared%20Documents%2fPHLIP%20Influenza%20Test%20Result%20Reporting%20Message%20Specification%20for%20Prod%201%2e0&FolderCTID=&View=%7bB7D020E8%2dF26E%2d4187%2d905A%2dEC4116F04E9F%7d

8.2 LINK TO PHINVADS

[PHIN Vocabulary Access and Distribution System](#)

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