Office Practicum

HL7 Specification

Last Modified on 07/07/2022 10:44 am EDT

Connectivity Options

We currently offer two connection options:

- **File drop**: This is offered only for our Client-server practices.

  a. To establish a connection, we advise that the lab works with the practice IT company. We can provide you with the path to drop the files. Usually :\gdb_common\OP Labs[insert lab facility name]\hl7.

- **TCP/IP via VPN**: This is offered only for our Cloud practices.

  a. Our VPN Connectivity form will be provided.
  b. Port Selection can be assigned by us or the lab. If it is assigned by the outside vendor we will need to confirm this port is not already in use.

General Information

- Office Practicum uses standard hl7 2.3.1 and 2.5.1 message formatting.
- Messages should be sent as multi-message files or single message files with unique file names.
- We prefer to have a file extension of ".hl7".

Performing Lab Information

- The preferred method of sending this information is in an NTE segment following an OBX. If you need to display CLIA information then just add one more NTE segment in the end, for example:

NTE|1||Test Performed at:||NTE|2||Office Practicum Lab, 5 Walnut Grove Drive, Horsham; PA 19044|

NTE|3||CLIA #:00A123456||

- Or it can be sent in OBR 21.2 - 21.6.

Test Patient Demographics

For testing, we prefer to use one of the following test patients.

- Mary Testpatient, DOB 5/16/1998, Female, Patient ID 99
- John Testpatient, DOB 10/02/2008, Male, Patient ID 100

Textual Reports (Radiology, Transcriptions, Visit Summaries, etc.)

> 📌 **Note**: Transcription may be sent with each line in its own NTE segment, or as repeated OBX-5 values with escape characters for formatting.

PDF

PDFs can be sent in one of two ways.

- 2 of the same files- One file with the .HL7 file extension and the second file with .PDF file extension.
- An encoded Base64 PDF can be sent in the HL7 file. This must be sent following the format listed below. The encoded PDF must be present in OBX 5.

For example:

```
ORC|RE|ZZ32458979^LAB|DA0999997^LAB||||||201006290000|||1111111111^UROPATHOLOGY^T^^^^^N

OBR|3|ZZ32458979^LAB|DA0999997|PDFReport1^PDF  Report^DIANON|||20100625000000|||||||||TUAEF01^UROPA
THOLOGY^T^^^^^L||||||20100629123820|||F

OBX|1|ED|PDFReport1^PDF  Report^L||DIANON^Image^PDF^Base64^JVBERi0xLjINJeLjz9MNCjEgMCBvYmoNPDwg
DS9DcmVhdG9yIChQREZCdWlsZCBGb3Ig
```

Specification Details for HL7 2.3.1

MSH

Encoding characters	Please utilize |^~\&
MSH-04.1	Sending Facility
MSH-06.1	Receiving Facility will be the lab-issued practice ID or Account Number. Please use one unique ID per practice location, if possible.
MSH-07.1	Date/Time of Message
MSH-09.1	Message Type = ORU
MSH-09.2	Trigger event
MSH-10	Message Control ID (Unique value)

PID

PID-02.1	External ID

PID-03.1	Internal ID
PID-05	Pt. Name
PID-07	DOB
PID-08	Gender

PV1

PV1-7	Attending Physician • 7.1: NPI # • 7.2: Provider Last Name • 7.3: Provide First Name • 7.4: Provider middle name (if available) • 7.5: NPI

ORC

ORC-02.1	Placer Order Number.ID, Order ID (Office Practicum will label this with our next available ID when the field is blank).
ORC-05	Order Status, visible status for OP user.
ORC-12	Ordering Provider • 12.1: Ordering Provider.ID (NPI#) • 12.2: Ordering Provider Last Name • 12.3: Ordering Provider First Name • 12.4: Ordering Provider middle name (if available) • 12.5: NPI

OBR

OBR-03.1	Filler Order Number.ID, specimen ID (unique ID)

OBR-04	Universal Service Identifier (Test ID) If sending LOINC only, the total field needs to be 3 only in OBR-4 like the example below. 04.1-LOINC code 04.2-Description 04.3-ID Type of LN For example, 57020-0^UA W/MICRO-RFX CULT^LN If sending local test id only, the total fields need to be 3 only in OBR-4 like the example below. 04.1-Local code 04.2-Description 04.3-ID Type of L For example, K010^UA W/MICRO-RFX CULT^L If sending both LOINC and Local test id, the total fields need to be 6 only in OBR-4 like the example below. 04.1-LOINC code 04.2-Description 04.3-LN 04.4-Universal Service Identifier (Test ID) 04.5-Description 04.6-L For example, 57020-0^UA W/MICRO-RFX CULT^LN^K010^UA W/MICRO-RFX CULT^L
OBR-07.1	Observation (Sample Drawn)Date/Time: Collection Date
OBR-14	Specimen Received Date/Time
OBR-16	Ordering Provider • 16.1: Ordering Provider ID (NPI#) • 16.2: Ordering Provider last name • 16.3: Ordering Provider first name • 16.4: Ordering Provider middle name (if available) • 16.5: NPI
OBR-21	Performing Lab Information can be sent in this field • 21.2: Lab Name • 21.3: Lab Address • 21.4: Lab City • 21.5: Lab State • 21.6: Lab zip code
OBR- 22.1	Results Rpt Date/Time

OBR-25.1	Result Status
OBR-28	Copy to Provider • 28.1: NPI # • 28.2: Provider Last Name • 28.3: Provide First Name • 28.4: Provider middle name (if available) • 28.5: NPI

OBX

OBX-01	Set ID
OBX-02	Value Type
OBX-03	Observation Identifier ID If sending LOINC only, the total field needs to be 3 only in OBX-3 like the example below. 03.1-LOINC code 03.2-Description 03.3-ID Type of LN For example: 5778-6^Color^LN If sending Local Test ID only, the total fields need to be 3 only in OBX-3 like the example below. 03.1-Local code 03.2-Description 03.3-ID Type of L For example: K6000^Color^L If sending both LOINC and Local Test ID, the total fields need to be 6 only in OBX-3 like the example below. 03.1-LOINC code 03.2-Description 03.3-ID Type of LN 03.4-Local code 03.5-Description 03.6-ID Type of L For example: 5778-6^Color^LN^K6000^Color^L
OBX-05	Observation Value
OBX-06	Units

OBX-07	Reference Range
OBX-08	• Abnormal Flag • Sending entity must have the ability to translate to HL7 Standard codes if the following are not used in outbound messages from internal systems: • < = Below absolute low-off instrument scale • > = Above absolute high-off instrument scale • A = Abnormal (applies to non-numeric results) • AA = Very abnormal (applies to non-numeric units, analogous to panic limits for numeric units) • B = Better--use when direction not relevant • D = Significant change down • H = Above high normal • HH = Above upper panic limits • I = Intermediate (microbiology sensitivities only) • L = Below low normal • LL = Below lower panic limits • MS = Moderately sensitive (microbiology sensitivities only) • N = Normal (applies to non-numeric results) • null = No range defined, or normal ranges don't apply • R = Resistant (microbiology sensitivities only) • S = Sensitive (microbiology sensitivities only) • U = Significant change up • VS = Very sensitive (microbiology sensitivities only) • W = Worse--use when direction not relevant
OBX-11	Observation Result Status
OBX-14	(Physiologically relevant) Date/Time of Observation • In the case of tests performed on specimens, the relevant date-time is the specimen's collection date-time. • In the case of observations taken directly on the patient (e.g., X-ray images, history, and physical), the observation date-time is the date-time that the observation was performed.

NTE

NTE (after OBX)	• Printable note following the result of preceding OBX. • Notes that need to display in front of the EMR User during result review, or that need to print are typically sent here.