

**Lab Orders Integration**



**Netsmart**

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## LABS OVERVIEW

Lab orders and results are sent over the MLLP/TCP or SFTP using HL7 version 2.3.1. The accepted Lab Order codes can be found here, [Order Codes](#), and the accepted AOE codes can be found here, [AOE Codes](#). It is possible to embed PDFs in the HL7 message. We will manage and update any compendiums. All orders made in our CareRecords will go through to OrderConnect, and then on to the lab vendors.

## ORM MESSAGE STRUCTURE

Segment	Segment Name	Comments
MSH	Message Header	Required
PID	Patient Identification	Required
{[NTE]}	Notes and Comments	Optional, may repeat
PV1	Patient Visit	Required
{[ IN1 ]}	Insurance	Optional, may repeat
{[GT1]}	Guarantor	Optional, may repeat
{[DG1]}	Diagnosis	Optional, may repeat
ORC	Common Order	Required
{		
OBR	Observation Report	Required, may repeat
{[NTE]}	Notes and Comments	Optional, may repeat
{[DG1]}	Diagnosis	Optional, may repeat
{[OBX]}	Observation Result (Ask at order entry questions)	Optional, may repeat
}		

## SEGMENT LAYOUTS – COLUMN HEADINGS

This section defines HL7 data segments supported in a results interface from a non-Netsmart system to the Netsmart v2.3 format.

Heading	Contents	Values
Seq.	HL7 Field Sequence	Begins with '01' for each segment.
Name	HL7 Field Name	Defined by HL7.
R/O	Field/Component	R - Required field C - Conditional O - Optional
Comment	Field Usage Comments	

**NOTE:** If a field is not included, it is not supported. An application enhancement would be required to add the additional data and would need to be part of a sanctioned product release.

If a field is marked as required and cannot be provided by the data provider, a formal HL7 configuration discussion will have to take place between Netsmart and the client because this will result in adverse effects being encountered within the product.

## CONTROL SEGMENTS

**MSH** – The Message Header segment defines the characteristics of the message and indicates the following:

- Sending Application
- Receiving Application
- Encoding Characters used as Delimiters
- Message Type being Transmitted (Specific HL7 message type and event triggering the message.)
  - The Type must be 'ORM' and sent by the source system.
  - The Event must be '001' and sent by the source system.

**NOTE:** The MSH segment in the ACK (Acknowledgement) response will show the Sender and Receiver information in reverse (i.e. sender will be receiver and vice versa.)

The Encoding Characters are used to separate data field components, repeating data elements, and text control characters. They should be printable characters that will never be used in transmitted data, and are as follows:

- Field Separator: |
- Component Separator: ^
- Repetition Separator: ~
- Escape: \
- Sub-Component: &

MSH Seq.	Name	R/O	Comments
01	Field separator	R	Field separator. Value required is " " – ASCII(124)
02	Encoding Character	R	Used to separate data field components, repeating data elements, and text control characters. Must be printable characters that will never be included in transmitted data. Required values: Pos 1: Component Separator '^' - ASCII(94) Pos 2: Repetition Separator '~' - ASCII(126) Pos 3: Escape '\', ASCII(92) Pos 4: Sub-component '&' - ASCII(38).
03	Sending Application	R	This is the unique string value assigned by the HIE for the Order Placer Vendor Product
03.1	Namespace ID	R	
03.2	Universal ID	C	
03.3	Universal ID Type	C	
04	Sending Facility	R	This is the unique string value assigned by the HIE for the Order Placer Facility
04.1	Namespace ID	R	
04.2	Universal ID	C	
04.3	Universal ID Type	C	
05	Receive Application	R	This is the unique string value assigned by the HIE for the Order Placer Facility
05.1	Namespace ID	R	
05.2	Universal ID	C	
05.3	Universal ID Type	C	

MSH Seq.	Name	R/O	Comments
06	Receiving Facility	R	
06.1	Namespace ID	R	This is the unique string value assigned by the HIE for the known Filler Facility
06.2	Universal ID	C	Used when the HIE has defined the OID requirements. This OID will be a unique value for the known Filler Facility
06.3	Universal ID Type	C	Value is "ISO" when a Universal ID is in scope.
07	Date/Time of Message	R	System date and time the message was formatted in the sending placer system.
09	Message Type	R	Specific HL7 message type and event triggering the message.
09.1	Type	R	Value must = 'ORM' and must be sent by the source system
09.2	Event	R	Value must = 'O01' and must be sent by the source system
10	Message Control ID	C	Unique. Initiator generated. Responder returns sender value in ACK message in MSA:2. With acknowledgment messages, MSH:10 value may be identical to original sender value or may be a new unique value assigned by acknowledging system.  Requests the client to append date/time to the message control ID if it is not unique prior to sending the message.
11	Processing ID	O	'P' = Production 'T' = Test
11.1	Processing ID	O	
12	Version ID	R	HL7 version. Value = '2.3'.

Listed below is the set of concepts that need to have a unique HIE domain set of values.

Field #	Name	Purpose
MSH:3.1	Sending Application.Namespace ID	Used to determine the specific set of transformer methods to be performed by Vendor Product Interface to normalize to HL7 2.3.
MSH:4.1	Sending Facility.Namespace ID	Used to determine the Placer Facility for subsequent routing of the filler result as well as identity of the Placer Facility in the filler system.
MSH:5.1	Receiving Application.Namespace ID	Used for: <ul style="list-style-type: none"> <li>• Possible routing to the Placer Order message</li> <li>• Some reference lab systems to determine routing to either a Patient Service Center or Central LIS system queue.</li> </ul>
MSH:6.1	Receiving Facility.Namespace ID	Used for basic routing within the Order Super Node to determine which filler system will receive the Placer Order.

## PERSON SEGMENTS

**PID** – Patient demographics and the encounter associated with the message are identified in this **required** segment. The Patient Identifier List section (PID:3) supports multiple repetitions, as well as the Patient Name List (PID:5), but the first must be the primary or legal name. Please **note** that only 1 ID per ID Type is allowed, and SSN (PID:19) has been retained for backwards compatibility only (it should be included in the Identifier List- PID:3). This section can also include a RR retirement number.

PID Seq.	Name	R/O	Comments
01	Set ID- PID	R	

PID Seq.	Name	R/O	Comments
03	Patient Identifier List	R	<p>Supports multiple repetitions (CX List). Only 1 ID per ID Type allowed. The first must contain the Placer Facility Assigned MRN.</p> <p>Should a unique ID be required to be created by the Orders Super Node, a unique identity will be included in the list of Patient ID's.</p> <p>Should a unique Visit ID be required to be created by the Orders Super Node, a unique identity will be included in the list of Patient ID's (PID:3) with an Identifier type of "VN" for Visit number.</p>
03.1	Patient ID	R	
03.4	Assigning Authority	R	
03.4.1	Namespace ID	R	<p>This is the unique string value assigned by the HIE.</p> <p>When it is the Placer Facility Assigned MRN, this should be the Order Placer Facility value.</p>
03.4.2	Universal ID	C	Used when the HIE has defined the OID requirements.
03.4.3	Universal ID Type	C	Value is "ISO" when a Universal ID is in scope.
03.5	Identifier Type	R	<p>Refer to HL7 Table 0203 - Identifier type.</p> <ul style="list-style-type: none"> <li>When a number that is not necessarily unique within an Assigning Authority exists, the value must be "MR" for Medical record number.</li> <li>When a number that is unique to a patient within an Assigning Authority exists, the value must be 'PI' for Patient Internal identifier.</li> </ul>



PID Seq.	Name	R/O	Comments														
05	Patient Name List	R	Supports multiple repetitions. First repetition must be the primary or legal name. Only 1 ID per ID Type allowed.  Required if multiple names are sent. Refer to HL7 Table 0200 - Name Type.														
05.1	Family Name	R															
05.2	Given Name	O															
05.3	Second and Further Given Names or Initials Thereof	O															
05.4	Suffix	O															
05.5	Prefix	O															
05.6	Degree	O															
05.7	Name Type Code	C															
06	Mother's Maiden Name	O															
06.1	Family Name	R															
07	Date of Birth	R															
08	Gender	R	<p>Must contain one of the following values: User-defined Table 0001 - Administrative Sex</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>F</td> <td>Female</td> </tr> <tr> <td>M</td> <td>Male</td> </tr> <tr> <td>O</td> <td>Other</td> </tr> <tr> <td>U</td> <td>Unknown</td> </tr> </tbody> </table>	Value	Description	F	Female	M	Male	O	Other	U	Unknown				
Value	Description																
F	Female																
M	Male																
O	Other																
U	Unknown																
10	Race	C	<p>Use: Race is required for certain testing procedures. If maternal serum screening testing will be supported through the interface, this field is required. Suggested User-defined Table 0005 - Race</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1002-5</td> <td>American Indian or Alaska Native</td> </tr> <tr> <td>2028-9</td> <td>Asian</td> </tr> <tr> <td>2054-5</td> <td>Black or African American</td> </tr> <tr> <td>2076-8</td> <td>Native Hawaiian or Other Pacific Islander</td> </tr> <tr> <td>2106-3</td> <td>White</td> </tr> <tr> <td>2131-1</td> <td>Other Race</td> </tr> </tbody> </table>	Value	Description	1002-5	American Indian or Alaska Native	2028-9	Asian	2054-5	Black or African American	2076-8	Native Hawaiian or Other Pacific Islander	2106-3	White	2131-1	Other Race
Value	Description																
1002-5	American Indian or Alaska Native																
2028-9	Asian																
2054-5	Black or African American																
2076-8	Native Hawaiian or Other Pacific Islander																
2106-3	White																
2131-1	Other Race																

PID Seq.	Name	R/O	Comments
11	Patient Address	O	
11.1	Street Address ( Address Line 1)	O	
11.2	Other Designation ( Address Line 2)	O	
11.3	City	O	
11.4	State	O	
11.5	ZIP Code	O	
11.6	Country	O	
11.7	Type	O	
11.9	County/Parish	O	
13	Home Phone Number	O	
14	Business Phone Number	O	
18	Patient Account Number	C	This is conditional based on the Placer Order Facility system requirements.
18.1	Patient Account Number	C	If required by the Placer System, then one Patient Account ID must be included. The first must contain the Placer Facility Assigned Account or Visit ID. Should a unique Visit ID be required to be created by the Orders Super Node, a unique identity will be included in the list of Patient ID's (PID:3) with an Identifier type of "VN" for Visit number.
18.4	Assigning Authority	R	
18.4.1	Namespace ID	R	This is the unique string value assigned by the HIE. When it is the Placer Facility Assigned Visit ID, this should be the Order Placer Facility value.
18.4.2	Universal ID	C	Used when the HIE has defined the OID requirements.
18.4.3	Universal ID Type	C	Value is "ISO" when a Universal ID is in scope.
18.5	Identifier Type	R	Refer to HL7 Table 0203 - Identifier type. <ul style="list-style-type: none"> <li>When a unique identifier to an account within the Assigning Authority exists, the value must be "AN" for Account number</li> </ul>

PID Seq.	Name	R/O	Comments
19	SSN – Patient	O	From V2.3.1 onward, this field has been retained for backward compatibility only. It is recommended to use PID-3 - Patient Identifier List for all patient identifiers. However, in order to maintain backward compatibility, this field should also be populated. When used for backward compatibility, this field contains the patient's social security number. This number may also be an RR retirement number.

**PV1 – Visit / Encounter information (required)**

PV1 Seq.	Name	R/O	Comments
01	Set ID- PV1	R	Starts at 1; increments by 1.
02	Patient Class	C	If required for the Placer Order System in the filler Result. 'I' – Inpatient
03	Patient Location	C	If required for the Placer Order System in the filler Result
03.1	Point of Service Location	R	
03.2	Patient Room	O	
03.3	Patient Bed	O	
03.4	Facility ID	O	
03.7	Building	O	
03.8	Floor	O	
07	Attending Doctor	C	If required by the Placer or Filler System
07.1	Attending Doctor ID	R	
07.2	Last Name	R	
07.3	First Name	O	
07.4	Middle Name	O	
07.5	Prefix	O	
07.6	Suffix	O	
07.7	Degree	O	

PV1 Seq.	Name	R/O	Comments								
07.8	Source Table	R	<p>Must contain one of the following values: User-defined Table 0297 – CN ID source is used as the HL7 identifier for the user-defined table of values for this component. Used to delineate the first component.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>UPIN</td> <td>UPIN (required for certain types of billing)</td> </tr> <tr> <td>PRN</td> <td>Local Provider Physician's ID</td> </tr> <tr> <td>NPI</td> <td>NPI</td> </tr> </tbody> </table>	Value	Description	UPIN	UPIN (required for certain types of billing)	PRN	Local Provider Physician's ID	NPI	NPI
Value	Description										
UPIN	UPIN (required for certain types of billing)										
PRN	Local Provider Physician's ID										
NPI	NPI										
08	Referring Doctor	C	If required or optional by the Placer or Filler System								
08.1	Referring Doctor ID	R									
08.2	Last Name	R									
08.3	First Name	O									
08.4	Middle Name	O									
08.5	Prefix	O									
08.6	Suffix	O									
08.7	Degree	O									
08.8	Source Table	R	See PV1:7.8 for requirements								
09	Consulting Doctor List	C	If required or optional by the Placer or Filler System								
09.1	Consulting Doctor ID	R									
09.2	Last Name	R									
09.3	First Name	O									
09.4	Middle Name	O									
09.5	Prefix	O									
09.6	Suffix	O									
09.7	Degree	O									
09.8	Source Table	R	See PV1:7.8 for requirements								

PV1 Seq.	Name	R/O	Comments												
16	VIP Indicator	O	<p>If Required by Placer Order System for secure filtering.</p> <p>Definition: This field identifies the type of VIP. Refer to User-defined Table 0099 - VIP Indicator for suggested values.</p> <p>User-defined Table 0099 - VIP Indicator</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td></td> <td>no suggested values</td> <td></td> </tr> </tbody> </table>	Value	Description	Comment		no suggested values							
Value	Description	Comment													
	no suggested values														
17	Admitting Doctor	C	<p>If required or optional by the Placer or Filler System</p>												
17.1	Admitting Doctor ID	R													
17.2	Last Name	R													
17.3	First Name	O													
17.4	Middle Name	O													
17.5	Prefix	O													
17.6	Suffix	O													
17.7	Degree	O													
17.8	Source Table	R		See PV1:7.8 for requirements											
20	Financial Class	R	<p>Definition: This field contains the financial classes assigned to the patient for the purpose of identifying sources of reimbursement. Refer to User-defined Table 0064 - Financial Class for suggested values</p> <p>User-defined Table 0064 - Financial Class</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>Client Bill</td> <td></td> </tr> <tr> <td>P</td> <td>Patient Bill</td> <td></td> </tr> <tr> <td>T</td> <td>Third Party Bill</td> <td></td> </tr> </tbody> </table>	Value	Description	Comment	C	Client Bill		P	Patient Bill		T	Third Party Bill	
Value	Description	Comment													
C	Client Bill														
P	Patient Bill														
T	Third Party Bill														

PV1 Seq.	Name	R/O	Comments
52	Other Healthcare Providers	O	
52.1	Admitting Doctor ID	R	
52.2	Last Name	R	
52.3	First Name	O	
52.4	Middle Name	O	
52.5	Prefix	O	
52.6	Suffix	O	
52.7	Degree	O	
52.8	Source Table	R	See PV1:7.8 for requirements

**IN1** – Insurance Policy Coverage information necessary to produce pro-rated patient and insurance bills (Conditional for Filler Billing by Bill Type Requirements.) The Plan Type (IN1:15) will NOT repeat, another IN1 segment will be sent for each plan being billed (for backwards compatibility only.)

IN1 Seq.	Name	R/O	Comments
01	Set ID- IN1	R	Set ID begins at 1 and increments by 1
03	Insurance Company ID	C	Required for certain bill types
03.1	ID Number	R	
03.3	Assigning Authority	R	Required to identify the Source of the coded insurances
04	Insurance Company Name	R	
05	Insurance Company Address	R	
05.1	Street Address	R	
05.2	Other Designation	O	
05.3	City	R	
05.4	State or Province	R	
05.5	ZIP or Postal Code	R	
08	Group Number	C	Private Insurance and HMO Billing. Required for some carriers.
11	Insured's Group Employer Name	C	Private Insurance and HMO Billing. Required for some carriers.

IN1 Seq.	Name	R/O	Comments										
15	Plan Type	C	<p>Designation of the insurance type that this IN1 segment supports; also identifies the policy number contained in IN1-36. Plan Type will not repeat. If more than one was billed, one IN1 segment will be sent for each plan. For backwards compatibility only because of new billing logic that determines the plan type.</p> <p>User-defined Table 0086 - Plan ID</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>MD</td> <td>Indicates field IN1-36 is a Medicaid number</td> </tr> <tr> <td>MC</td> <td>Indicates field IN1-36 is a Medicare number</td> </tr> <tr> <td>HM</td> <td>Indicates field IN1-36 is a HMO insurance number</td> </tr> <tr> <td>PI</td> <td>Indicates field IN1-36 is a private insurance number</td> </tr> </tbody> </table>	Value	Comment	MD	Indicates field IN1-36 is a Medicaid number	MC	Indicates field IN1-36 is a Medicare number	HM	Indicates field IN1-36 is a HMO insurance number	PI	Indicates field IN1-36 is a private insurance number
Value	Comment												
MD	Indicates field IN1-36 is a Medicaid number												
MC	Indicates field IN1-36 is a Medicare number												
HM	Indicates field IN1-36 is a HMO insurance number												
PI	Indicates field IN1-36 is a private insurance number												
16	Name of Insured	R											
16.1	Last Name	R											
16.2	First Name	O											
16.3	Middle Name	O											
16.4	Prefix	O											
16.5	Suffix	O											

IN1 Seq.	Name	R/O	Comments																																																																		
17	Insured's Relationship to Patient	R	<p>1=self, 2=spouse, 8=dependent            Deprecated:            User-defined Table 0063 - Relationship</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>SEL</td><td>Self</td></tr> <tr><td>SPO</td><td>Spouse</td></tr> <tr><td>DOM</td><td>Life partner</td></tr> <tr><td>CHD</td><td>Child</td></tr> <tr><td>GCH</td><td>Grandchild</td></tr> <tr><td>NCH</td><td>Natural child</td></tr> <tr><td>SCH</td><td>Stepchild</td></tr> <tr><td>FCH</td><td>Foster child</td></tr> <tr><td>DEP</td><td>Handicapped dependent</td></tr> <tr><td>WRD</td><td>Ward of court</td></tr> <tr><td>PAR</td><td>Parent</td></tr> <tr><td>MTH</td><td>Mother</td></tr> <tr><td>FTH</td><td>Father</td></tr> <tr><td>CGV</td><td>Care giver</td></tr> <tr><td>GRD</td><td>Guardian</td></tr> <tr><td>GRP</td><td>Grandparent</td></tr> <tr><td>EXF</td><td>Extended family</td></tr> <tr><td>SIB</td><td>Sibling</td></tr> <tr><td>BRO</td><td>Brother</td></tr> <tr><td>SIS</td><td>Sister</td></tr> <tr><td>FND</td><td>Friend</td></tr> <tr><td>OAD</td><td>Other adult</td></tr> <tr><td>EME</td><td>Employee</td></tr> <tr><td>EMR</td><td>Employer</td></tr> <tr><td>ASC</td><td>Associate</td></tr> <tr><td>EMC</td><td>Emergency contact</td></tr> <tr><td>OWN</td><td>Owner</td></tr> <tr><td>TRA</td><td>Trainer</td></tr> <tr><td>MGR</td><td>Manager</td></tr> <tr><td>NON</td><td>None</td></tr> <tr><td>UNK</td><td>Unknown</td></tr> <tr><td>OTH</td><td>Other</td></tr> </tbody> </table>	Value	Description	SEL	Self	SPO	Spouse	DOM	Life partner	CHD	Child	GCH	Grandchild	NCH	Natural child	SCH	Stepchild	FCH	Foster child	DEP	Handicapped dependent	WRD	Ward of court	PAR	Parent	MTH	Mother	FTH	Father	CGV	Care giver	GRD	Guardian	GRP	Grandparent	EXF	Extended family	SIB	Sibling	BRO	Brother	SIS	Sister	FND	Friend	OAD	Other adult	EME	Employee	EMR	Employer	ASC	Associate	EMC	Emergency contact	OWN	Owner	TRA	Trainer	MGR	Manager	NON	None	UNK	Unknown	OTH	Other
Value	Description																																																																				
SEL	Self																																																																				
SPO	Spouse																																																																				
DOM	Life partner																																																																				
CHD	Child																																																																				
GCH	Grandchild																																																																				
NCH	Natural child																																																																				
SCH	Stepchild																																																																				
FCH	Foster child																																																																				
DEP	Handicapped dependent																																																																				
WRD	Ward of court																																																																				
PAR	Parent																																																																				
MTH	Mother																																																																				
FTH	Father																																																																				
CGV	Care giver																																																																				
GRD	Guardian																																																																				
GRP	Grandparent																																																																				
EXF	Extended family																																																																				
SIB	Sibling																																																																				
BRO	Brother																																																																				
SIS	Sister																																																																				
FND	Friend																																																																				
OAD	Other adult																																																																				
EME	Employee																																																																				
EMR	Employer																																																																				
ASC	Associate																																																																				
EMC	Emergency contact																																																																				
OWN	Owner																																																																				
TRA	Trainer																																																																				
MGR	Manager																																																																				
NON	None																																																																				
UNK	Unknown																																																																				
OTH	Other																																																																				



IN1 Seq.	Name	R/O	Comments
19	Insured's Address	O	
36	Policy Number	C	
47	Coverage Type	C	I=Insurance, P=Patient, C=Client bill

**GT1 – Guarantor information (Conditional for Filler Billing by Bill Type Requirements)**

GT1 Seq.	Name	R/O	Comments
01	Set ID- GT1	R	Set ID begins at 1; increments by 1.
03	Guarantor Name	R	
03.1	Last Name	R	
03.2	First Name	O	
03.3	Middle Name	O	
03.4	Prefix	O	
03.5	Suffix	O	
05	Guarantor Address	C	Required for Third Party Billing.
05.1	Street Address ( Address Line 1)	R	
05.2	Other Designation ( Address Line 2)	O	
05.3	City	R	
05.4	State	R	
05.5	ZIP Code	R	
06	Guarantor Phone Number – Home	C	Required for Third Party Billing.
08	Guarantor Date of Birth	O	
09	Guarantor Sex	O	
11	Guarantor Relationship	C	Deprecated: Use INI-17 Required for Third Party Billing.
16	Guarantor Employer Name	O	

**DG1 – Diagnosis information of various types (required for third party billing.)** Currently, the ICD9 code is required in this segment and the description (DG:4) has been retained for backwards compatibility only.

DG1 Seq.	Name	R/O	Comments
01	Set ID- DG1	R	
02	Diagnosis Coding Method	R	Currently requires the value of "I9"

DG1 Seq.	Name	R/O	Comments
03	Diagnosis Code	R	Proper ICD9 is required
03.1	Identifier	R	Proper ICD9 is required
03.2	Text	C	See DG1:4
04	Diagnosis Description	C	As of Version 2.3, this field has been retained for backwards compatibility only. Use the components of DG:1-3 - Diagnosis Code - DG1 field instead of this field. When used for backwards compatibility, DG:1-4 – This field contains a description that best describes the diagnosis.

## ORDER SEGMENTS

### ORC – Common Order (required)

ORC Seq.	Name	R/O	Comments
01	Order Control	R	Value = "NW" for New Order.
02	Placer Order Number	R	The Placer system's Order Number. Same value as OBR:2 Placer Order Number. See OBR:2 for further discussion.
02.1	Entity Identifier	R	
02.2	Namespace ID	R	
02.3	Universal ID	C	Used when the HIE has defined the OID requirements.
02.4	Universal ID Type	C	Value is "ISO" when a Universal ID is in scope.
04	Placer Group Number	C	
04.1	Entity Identifier	R	
04.2	Namespace ID	R	
04.3	Universal ID	C	Used when the HIE has defined the OID requirements.
04.4	Universal ID Type	C	Value is "ISO" when a Universal ID is in scope.

OBR Seq.	Name	R/O	Comments
12	Ordering Provide	C	If sent, must be the same as OBR:16
12.1	Doctor ID	R	
12.2	Last Name	R	
12.3	First Name	O	
12.4	Middle Name	O	
12.5	Prefix	O	
12.6	Suffix	O	
12.7	Degree	O	
12.8	Source Table	R	
14	Call Back Phone Number	O	May not be accepted by most filler systems.

**OBR – Order Detail (required)** - The value of Filler Field 1 (OBR:20) must be “TS” for Test-Specific Identifiers or “RO” for Requisition-Only Identifiers. This will act as a flag to allow receiving systems to immediately determine which identification model will be used in the received message.

OBR Seq.	Name	R/O	Comments
01	Set ID- OBR	R	Set ID begins at 1 and increments by 1.
02	Placer Order Number	R	This element is a unique identifier for an order in a particular ordering facility. The Namespace ID contains the Sending Facility's ID of the placing application. A given institution or group of intercommunicating institutions should establish a unique list of facilities that may be potential placers and fillers and assign unique Sending application IDs.
02.1	Entity Identifier	R	
02.2	Namespace ID	R	The Namespace ID contains the Sending Facility's ID of the placing application. A given institution or group of intercommunicating institutions should establish a unique list of facilities that may be potential placers and fillers and assign unique Sending Facility IDs.
02.3	Universal ID	C	Used when the HIE has defined the OID requirements.
02.4	Universal ID Type	C	Value is “ISO” when a Universal ID is in scope.

OBR Seq.	Name	R/O	Comments								
04	Universal Service ID	R	<p>This element contains the identifier code for the requested observation/test/battery. This can be based on local and/or "universal" codes. We recommend the "universal" procedure identifier.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>99zzz</td> <td>Local general code, where zzz is the alphanumeric characters of the facility ID</td> </tr> <tr> <td>C4</td> <td>CPT-4</td> </tr> <tr> <td>LN</td> <td>Logical Observation Identifier Names and Codes (LOINC)</td> </tr> </tbody> </table>	Value	Description	99zzz	Local general code, where zzz is the alphanumeric characters of the facility ID	C4	CPT-4	LN	Logical Observation Identifier Names and Codes (LOINC)
Value	Description										
99zzz	Local general code, where zzz is the alphanumeric characters of the facility ID										
C4	CPT-4										
LN	Logical Observation Identifier Names and Codes (LOINC)										
04.1	Test Code	R									
04.2	Test Description	R									
04.3	Coding System	R									
04.4	Alternate Test Code	C									
04.5	Alternate Test Description	C									
04.6	Alternate Coding System	C	See OBR:4.3 for allowable values								
07	Observation Date	C	<p>This element is the clinically relevant date/time of the observation. In the case of observations taken directly from a subject, it is the actual date and time the observation was obtained. In the case of a specimen-associated study, this element shall represent the date and time the specimen was collected or obtained. (This is a results-only element, except when the placer or a third party has already drawn the specimen.)</p>								
09	Collection Volume	O	Optional - used when specimen is collected.								
09.1	Quantity	R									
09.2	Units	R									

OBR Seq.	Name	R/O	Comments										
11	Specimen Action Code	C	<p>Valued as "O" or "L" when specimen has been collected. See table below.</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Add ordered test to the existing specimen</td> </tr> <tr> <td>G</td> <td>Generated order; reflex order</td> </tr> <tr> <td>L</td> <td>Lab obtained specimen from patient</td> </tr> <tr> <td>O</td> <td>Specimen obtained by service other than Lab</td> </tr> </tbody> </table>	Value	Description	A	Add ordered test to the existing specimen	G	Generated order; reflex order	L	Lab obtained specimen from patient	O	Specimen obtained by service other than Lab
Value	Description												
A	Add ordered test to the existing specimen												
G	Generated order; reflex order												
L	Lab obtained specimen from patient												
O	Specimen obtained by service other than Lab												
15	Specimen Source	C	Specimen source is conditional based on the draw requirements of the test. It is often not recorded until the draw has been completed.										
15.1	Source Code	O											
15.1.1	Code	O											
15.1.2	Description	O											
15.4	Body Site	O											
15.4.1	Code	O											
15.4.2	Description	O											
16	Ordering Physician	R	See PV1:7.8 for requirements										
16.1	Doctor ID	R											
16.2	Last Name	R											
16.3	First Name	O											
16.4	Middle Name	O											
16.5	Prefix	O											
16.6	Suffix	O											
16.7	Degree	O											
16.8	Source Table	R											
17	Order Call Back Phone Number	O											

OBR Seq.	Name	R/O	Comments
18	Placer Field 1	C	This is reserved by the Order Super Node to insert a unique ID for the ordered test.
18.1	Entity Identifier	R	Unique HIE internally created Order ID.
18.2	Namespace ID	R	The value for the HIE system.
18.3	Universal ID	C	Used when the HIE has defined the OID requirements.
18.4	Universal ID Type	C	Value is "ISO" when a Universal ID is in scope.
19	Placer Field 2	C	The unique value a Filler System assigns to an Order to be used to post the order.
19.1	Entity Identifier	R	Unique filler internal Order ID.
19.2	Namespace ID	R	The value for the filler facility system.
19.3	Universal ID	C	Used when the HIE has defined the OID requirements.
19.4	Universal ID Type	C	Value is "ISO" when a Universal ID is in scope.
20	Filler Field 1	R	<p>Values must be one of :</p> <ul style="list-style-type: none"> <li>• "TS" for Test-Specific Identifiers</li> <li>• "RO" for Requisition-Only Identifiers.</li> </ul> <p>The specific model that the sending placer or Filler uses in an Order or Result message will be identified by a flag placed in OBR:20 Filler Field 1.</p> <p>When a single requisition identifier is to be used for all tests ("RO" Identification), the value of OBR:20 will be "RO".</p> <p>When each test has its own unique identifier ("TS" Identification), the value of OBR:20 will be "TS". This flag will allow receiving systems to determine immediately which test-order identification model has been used in the received message.</p>
21	Filler Field 2	O	
27	Quantity Timing	O	
27.6	Priority	O	

**NTE** – Order Comments (optional) - These can be placed under different segments to define the scope of the order comment. A Requisition order comment would be placed in the PID or PV1 segment, while a comment for the individual test ordered would be placed in the OBX segment.

NTE Seq.	Name	R/O	Comments
01	Set ID – NTE	R	
02	Source of Comment	R	Must be values with “C”
03	Comment	R	

**OBX** – Observation/Result (optional) – this is where Ask at Order Entry (AOE) questions will be captured. It is intended to cover all types of patient observation reports except pharmacy. The Value Type (OBX:2) can be “NM” for numeric or “ST” for string.

OBX Seq.	Name	R/O	Comments
01	Set ID- OBX	R	
02	Value Type	O	Allowable Fields: NM - Numeric ST – String
03	Observation Identifier	R	See OBR:4 for coding requirements
03.1	Test Code	R	
03.2	Test Code Description	R	
03.3	Coding Scheme	R	
03.4	Alternate Test Code	C	
03.5	Alternate Code Description	C	
03.6	Alternate Coding Scheme	C	
05	Observation Value	R	Contains an answer to an AOE question.

## METHODS OF CONNECTION

- MLLP/TCP
- SFTP

## INFORMATION NEEDED TO CONFIGURE CONNECTION

- 3rd Party SSL Certificate
- 3rd Party Registry and Repository Endpoints (Test and Production)
- 3rd Party PIX Endpoints (Test and Production)
- 3rd Party OIDs (Test and Production)

## CURRENT LAB CONNECTIONS

- Change Healthcare (formerly Emdeon)
- CORHIO
- Detroit Bio Medical
- Finlay
- Half Penny
- Health Bridge
- LabCorp
- Life Point
- PCL Alverno
- Primex
- Quest
- Sterling



Date	Modification	Modified By
1/9/2017	Initial Draft	Kayla Rowton

For questions, e-mail [CConnect@ntst.com](mailto:CConnect@ntst.com)