

# KIPU<sup>®</sup>

Lab HL7 Specifications

# Table of Contents

<b>ORM – ORDER MESSAGES .....</b>	<b>3</b>
MSH – MESSAGE HEADER SEGMENT .....	3
PID – PATIENT IDENTIFICATION SEGMENT .....	3
IN1 – INSURANCE SEGMENT .....	4
ORC – COMMON ORDER SEGMENT .....	5
OBR – OBSERVATION REQUEST SEGMENT .....	5
OBX – OBSERVATION/RESULTS SEGMENT.....	6
NTE – NOTES AND COMMENTS SEGMENT.....	7
DG1 – DIAGNOSIS SEGMENT .....	7
<b>ORU - RESULT MESSAGES .....</b>	<b>8</b>
MSH – MESSAGE HEADER SEGMENT .....	8
PID – PATIENT IDENTIFICATION SEGMENT .....	8
ORC – COMMON ORDER SEGMENT .....	9
OBR – OBSERVATION REQUEST SEGMENT .....	9
OBX – OBSERVATION/RESULTS SEGMENT.....	10
NTE – NOTES AND COMMENTS SEGMENT.....	10
ZPS – VENDOR INFORMATION .....	11
<b>ORU EMBEDDED PDF – BASE 64.....</b>	<b>11</b>
OBR – OBSERVATION REQUEST SEGMENT .....	11
OBX – OBSERVATION/RESULTS SEGMENT.....	12
<b>HL7 TABLES.....</b>	<b>12</b>
SPECIMEN SOURCE - HL7 TABLE 0070 .....	12
MARITAL STATUS - HL7 TABLE 0002 .....	15
GENDER - HL7 TABLE 0001.....	15
RACE - HL7 TABLE 0005.....	15
RESULTS STATUS - HL7 TABLE 0123 .....	15
ABNORMAL FLAG - HL7 TABLE 0078 .....	16
OBSERVATION RESULTS STATUS - HL7 TABLE 0085 .....	16
<b>HL7 EXAMPLES.....</b>	<b>17</b>
EXAMPLE ORM .....	17
EXAMPLE ORU .....	17

## ORM – Order Messages

### KIPU HL7 Order Lab Specification – HL7 v.2.3

Below are the specifications for the HL7 ordering system. All segments that have been greyed out will not be sent via the HL7 file. KIPU will sent all information as documented at the facility at the time the requisitions is processed. If any of the bold segments below are missing, this may be because the facility did not document this information in KIPU.

### MSH – Message Header Segment

Field #	Field Name	Format	Notes
<b>0</b>	Record Type	MSH	
<b>1</b>	Field Separator		
<b>2</b>	Encoding Characters	^^\&	
<b>3</b>	Sending Application	KIPURECORDS	
<b>4</b>	Sending Facility	String	Facility Location ID (Will need to be returned in ORU as MSH6)
<b>5</b>	Receiving Application	String	LIS Name
<b>6</b>	Receiving Facility	String	Lab Name
<b>7</b>	Date / Time of Message	YYYYMMDDHHmmss	
8	Security		
<b>9</b>	Message Type	ORM^O01	
<b>10</b>	Message Control ID	String	Unique Message ID
<b>11</b>	Processing ID	"P"	Static Value
<b>12</b>	Version ID	"2.3"	Static Value
13	Sequence Number		
14	Continuation Pointer		
15	Accept Acknowledgement Type		
16	Application Acknowledgement Type		

MSH|^~\&|KIPURECORDS|Sending Facility ID|Receiving App|Receiving Facility| YYYYMMDDHHmmss ||ORM^O01|Message ID|P|2.3

### PID – Patient Identification Segment

Field #	Field Name	Format	Notes
<b>0</b>	Record Type	PID	
<b>1</b>	Set ID - Patient ID	1	
<b>2</b>	Patient ID	String	Patient Medical Record Number (Unique per interface only)
3	Patient ID		
4	Alternate Patient ID		
<b>5</b>	Patient Name	Last Name^First Name^Middle Name	
6	Mother's Maiden Name		
<b>7</b>	Date of Birth	YYYYMMDD	
<b>8</b>	Gender	HL7 Table 0001	HL7 Table 0001 (See Tables Starting on Page 12)
9	Patient Alias		
<b>10</b>	Race	HL7 Table 0005	HL7 Table 0005 (See Tables Starting on Page 12)

11	Patient Address	Address 1^Address 2^City^State^Zip	
12	County Code		
13	Phone Number - Home	String	
14	Phone Number - Business		
15	Primary Language		
16	Marital Status	HL7 Table 0002	HL7 Table 0002 (See Tables Starting on Page 12)
17	Religion		
18	Patient Account Number	String	Patient Medical Record Number (Unique per interface only)
19	SSN Number - Patient	String	

PID|1|Patinet ID|Patient ID||Last Name^First Name^Middle Name||YYYYMMDD|Gender||Race|Address 1^Address 2^City^State^Zip||Home Phone|Bussiness Phone||Marital Status||Patient ID|Social Security Number

## IN1 – Insurance Segment

Field #	Field Name	Format	Notes
0	Record Type	IN1	
1	Set ID - Insurance	1	
2	Insurance Plan ID		
3	Insurance Company ID	String	
4	Insurance Company Name	String	Sent as Documented by Facility
5	Insurance Company Address	Address 1^Address 2^City^State^Zip	Sent as Documented by Facility
6	Insurance Co. Contact Ppers		
7	Insurance Co Phone Number	String	Sent as Documented by Facility
8	Group Number	String	Sent as Documented by Facility
9	Group Name		
10	Insured's group employer ID		
11	Insured's Group Emp Name	String	Sent as Documented by Facility
12	Plan Effective Date		
13	Plan Expiration Date		
14	Authorization Information		
15	Plan Type	String	Sent as Documented by Facility
16	Name of Insured	Last Name^First Name	
17	Insured's Relationship to Patient	String	Sent as Documented by Facility
18	Insured's Date of Birth	YYMMDD	Sent as Documented by Facility
19	Insured's Address	Address 1^Address 2^City^State^Zip	Sent as Documented by Facility
20	Assignment of Benefits		
21	Coordination of Benefits		
22	Coordination of Ben. Priority		
23	Notice of Admission Code		
24	Notice of Admission Date		
25	Rpt of Eligibility Code		
26	Rpt of Eligibility Date		
27	Release Information Code		
28	Pre-Admit Cert		
29	Verification Date/Time		
30	Verification By		
31	Type of Agreement Code		
32	Billing Status		
33	Lifetime Reserve Days		
34	Delay before lifetime reserve days		
35	Company Plan Code		
36	Policy Number	String	Sent as Documented by Facility
37	Policy Deductible	String	Sent as Documented by Facility
38	Policy Limit - Amount		
39	Policy Limit - Days		
40	Room Rate - Semi-Private		
41	Room Rate - Private		
42	Insured's Employment Status		
43	Insured's Sex		
44	Insured's Employer Address		
45	Verification Status		

46	Prior Insurance Plan ID		
47	Coverage Type		
48	Handicap		
49	Insured's ID Number		

IN1|1||Insurance Company ID|Insurance Company Name|Insurance Company Address||Insurance Co Phone Number|Group Number|||Insured's Group Emp Name|||Plan Type|Name of Insured|Insured's Relationship to Patient|Insured's Date of Birth| Insured's Address |||Policy Number|Policy Deductible|||

## ORC – Common Order Segment

Field #	Field Name	Format	Notes
0	Record Type	ORC	
1	Order Control	NW	
2	Placer Order Number	String	Barcode Number on Specimen
3	Filler Order Number		
4	Placer Group Number		
5	Order Status		
6	Response Flag		
7	Quantity/Timing		
8	Parent Order	String	Facility Location
9	Date/Time of Transaction	YYYYMMDDHHmmss	
10	Entered By		
11	Verified By		
12	Ordering Provider	NPI^Last Name^First Name^Middle Name	
13	Enterer's Location	^^Facility Location & Sending Facility	
14	Call Back Phone Number		
15	Order Effective Date/Time		
16	Order Control Code Reason		
17	Entering Organization		
18	Entering Device		
19	Action By		

ORC|NW|Placer Order Number|||Parent Order|YYYYMMDDHHmmss||NPI^Last Name^First Name^Middle Name|^^^Facility Name & Sending Facility|

## OBR – Observation Request Segment

Field #	Field Name	Format	Notes
0	Record Type	OBR	
1	Set ID - Observation Request	#	
2	Placer Order Number	String	Barcode Number on Specimen
3	Filler Order Number		
4	Universal Service Identifier	Order Code^Order Description	Provided by Lab's Compendium
5	Priority	R	Current Platform does not support
6	Requested Date/Time		
7	Observation Date/Time	YYYYMMDDHHmmss	Collection Date (Will need to be returned in ORU OBR7)
8	Observation End Date/Time		
9	Collection Volume		
10	Collector Identifier		
11	Specimen Action Code		
12	Danger Code		
13	Relevant Clinical Information		
14	Specimen Received Date/Time		

15	Specimen Source	HL7 Table 0070	HL7 Table 0070 (See Tables Starting on Page 12)
16	Ordering Provider	NPI^Last Name^First Name^Middle Name	
17	Order Callback Phone Number		
18	Placer Field 1		
19	Placer Field 2		
20	Filler Field 1		
21	Filler Field 2		
22	Results Rpt/Status Chng - Date/Time		
23	Charge To Practice		
24	Diagnostic Service Section ID		
25	Result Status		
26	Parent Result		
27	Quantity/Timing		
28	Result Copies To		
29	Parent Number		
30	Transportation Mode		
31	Reason For Study		
32	Principal Result Interpreter		
33	Assistant Result Interpreter		
34	Technician		
35	Transcriptionist		
36	Scheduled Date/Time		
37	Number Of Sample Containers		
38	Transport Logistics Of Collected Sample		
39	Collector's Comment		
40	Transport Arrangement Responsibility		
41	Transport Arranged		
42	Escort Required		
43	Planned Patient Transport Comment		

OBR|1|Placer Order Number||Order Code^Order Description|R|| YYYYMMDDHHmss ||||| |Specimen Source|NPI^Last Name^First Name^Middle Name

## OBX – Observation/Results Segment

Field #	Field Name	Format	Notes
0	Record Type	OBX	
1	Set ID - OBX	#	
2	Value Type	ST	
3	Observation Identifier	Code^Description	
4	Observation Sub-ID		
5	Observation Value	String	
6	Units		
7	References Range		
8	Abnormal Flags		
9	Probability		
10	Nature of Abnormal Test		
11	Observ Result Status		
12	Date Last Obs Normal Values		
13	User Defined Access Checks		
14	Date/Time of the Observation		
15	Producer's ID		
16	Responsible Observer		
17	Observation Method		

OBX|1|ST|Code^Description||String

## NTE – Notes and Comments Segment

KIPU will send all Medications and Medical Necessity via NTE segments. Please see examples below NTE specs.

Field #	Field Name	Format	Notes
0	Record Type	NTE	
1	Set ID - Notes and Comments	#	
2	Source of Comment	P	
3	Comment	String	

**Medications:** NTE|1|P|MEDICATIONS: Gabapentin,Xanax,Buprenorphine

**Medical Necessity:** NTE|2|P|25 year old male Client presenting with F15.20 Amphetamine-type substance use disorder, Severe, F13.20 Sedative, hypnotic, or anxiolytic use disorder, Severe, F12.20 Cannabis use disorder, Severe, Z56.9 Unspecified problems related to employment, F10.20 Alcohol use disorder, Severe In early Remission, F11.20 Opioid use disorder, Severe In sustained Remission, Z91.49 Other personal history of psychological trauma, F41.1 Generalized anxiety disorder, F43.8 Other specified trauma- and stressor-related disorder, Z63.4 Uncomplicated bereavement, F90.0 Attention-deficit/hyperactivity disorder, and Predominantly inattentive presentation. Urine drug testing is necessary for diagnostic, clinical, and therapeutic purposes, to detect the use of prescription medications and illegal substances of concern for the purpose of assessment and treatment and to monitor compliance with the medication protocol of the Program. Client will be tested as per the selected frequency as part routine monitoring, or for attendance to group, return from pass, randomly, or under suspicion of relapse, according to this facility's policies and procedures.

## DG1 – Diagnosis Segment

Field #	Field Name	Format	Notes
0	Record Type	DG1	
1	Set ID - Diagnosis	#	
2	Diagnosis Coding Method		
3	Diagnosis Code	Code^Description^Code Type	F14.129^Cocaine abuse with intoxication, unspecified^ICD10
4	Diagnosis Description		
5	Diagnosis Date/Time		
6	Diagnosis Type		
7	Major Diagnostic Category		
8	Diagnostic Related Group		
9	DRG Approval Indicator		
10	DRG Grouper Review Code		
11	Outlier Type		
12	Outlier Days		
13	Outlier Cost		
14	Grouper Version and Type		
15	Diagnosis Priority		
16	Diagnosing Clinician		
17	Diagnosis Classification		
18	Confidential Indicator		
19	Attestation Date/Time		

DG1|1||Code^Description^Code Type

## ORU - Result Messages

Below are the specifications KIPU will follow when importing a result. All information that is not greyed out in tables below are required, if the format does not follow the specification below, the result may not import into KIPU and the lab will receive an ERROR in KIPU Labs.

KIPU does not interpret results and will import information as reported in the HL7 file.

## MSH – Message Header Segment

Field #	Field Name	Format	Notes
0	Record Type (Required)	MSH	
1	Field Separator (Required)		
2	Encoding Characters	^~\&	
3	Sending Application (Required)	String	LIS Name
4	Sending Facility (Required)	String	Lab Name
5	Receiving Application (Required)	KIPURECORDS	
6	Receiving Facility (Required)	String	Facility Location ID (Return MSH4 value from ORM)
7	Date / Time of Message (Required)	YYYYMMDDHHmmss	Date when message was created
8	Security		
9	Message Type (Required)	ORM^O01	
10	Message Control ID (Required)	String	Unique Message ID
11	Processing ID (Required)	P	
12	Version ID (Required)	2.3	
13	Sequence Number		
14	Continuation Pointer		
15	Accept Acknowledgement Type		
16	Application Acknowledgement Type		

MSH|^~\&|LIS Name|Sending Facility ID|KIPURECORDS|Receiving Facility| YYYYMMDDHHmmss ||ORM^O01|Unique Message ID|P|2.3

## PID – Patient Identification Segment

Field #	Field Name	Format	Notes
0	Record Type (Required)	PID	
1	Set ID - Patient ID (Required)	1	
2	Patient ID	String	Patient Medical Record Number (Sent in ORM PID2)
3	Patient ID	String	Labs Patient ID (Sent in ORM PID3)
4	Alternate Patient ID		
5	Patient Name (Required)	Last Name^First Name^Middle Name	
6	Mother's Maiden Name		
7	Date of Birth (Required)	YYYYMMDD	
8	Gender (Required)	HL7 Table 0001	HL7 Table 0001 (See Tables Starting on Page 12)
9	Patient Alias		
10	Race	HL7 Table 0005	HL7 Table 0005 (See Tables Starting on Page 12)
11	Patient Address	Address 1^Address 2^City^State^Zip	
12	County Code		
13	Phone Number - Home	String	
14	Phone Number - Business	String	
15	Primary Language		
16	Marital Status	HL7 Table 0002	HL7 Table 0002 (See Tables Starting on Page 12)
17	Religion		
18	Patient Account Number	String	Patient Medical Record Number (Sent in ORM PID2)
19	SSN Number - Patient	String	

PID|1|Patinet ID|Patient ID||Last Name^First Name^Middle Name||YYYYMMDD|Gender||Race|Address 1^Address 2^City^State^Zip||Home Phone|Bussness Phone||Marital Status||Patient ID|Social Security Number



## ORC – Common Order Segment

Field #	Field Name	Format	Notes
0	Record Type (Required)	ORC	
1	Order Control (Required)	NW	
2	Placer Order Number (Required)	String	Barcode Number on Specimen
3	Filler Order Number (Required)	String	Lab's Accession Number
4	Placer Group Number		
5	Order Status		
6	Response Flag		
7	Quantity/Timing		
8	Parent Order	String	Facility Location
9	Date/Time of Transaction (Required)	YYYYMMDDHHmmss	
10	Entered By		
11	Verified By		
12	Ordering Provider (Required)	NPI^Last Name^First Name^Middle Name	
13	Enterer's Location	Facility Location & Sending Facility	
14	Call Back Phone Number		
15	Order Effective Date/Time		
16	Order Control Code Reason		
17	Entering Organization		
18	Entering Device		
19	Action By		

ORC|NW|Placer Order Number|Filler Order Number|||Parent Order|YYYYMMDDHHmmss||NPI^Last Name^First Name^Middle Name|^^^Facility Name & Sending Facility|

## OBR – Observation Request Segment

Field #	Field Name	Format	Notes
0	Record Type (Required)	OBR	
1	Set ID - Observation Request (Required)	#	
2	Placer Order Number (Required)	String	Barcode Number on Specimen
3	Filler Order Number (Required)	String	Lab's Accession Number
4	Universal Service Identifier (Required)	Order Code^Order Description	Provided by Lab's Compendium
5	Priority	R	Current Platform does not support
6	Requested Date/Time		
7	Observation Date/Time (Required)	YYYYMMDDHHmmss	Collection Date (Sent in ORM OBR7)
8	Observation End Date/Time		
9	Collection Volume		
10	Collector Identifier		
11	Specimen Action Code		
12	Danger Code		
13	Relevant Clinical Information		
14	Specimen Received Date/Time (Required)	YYYYMMDDHHmmss	Date Lab Received Specimen
15	Specimen Source (Required)	HL7 Table 0070	HL7 Table 0070 (See Tables Starting on Page 12)
16	Ordering Provider (Required)	NPI^Last Name^First Name^Middle Name	
17	Order Callback Phone Number		
18	Placer Field 1		
19	Placer Field 2		
20	Filler Field 1		
21	Filler Field 2		
22	Results Rpt/Status Chng - Date/Time (Required)	YYYYMMDDHHmmss	Date Results is completed
23	Charge To Practice		
24	Diagnostic Service Section ID		
25	Result Status (Required)	HL7 Table 0123	HL7 Table 0123 (See Tables Starting on Page 12)

26	Parent Result		
27	Quantity/Timing		
28	Result Copies To		
29	Parent Number		
30	Transportation Mode		
31	Reason For Study		
32	Principal Result Interpreter		
33	Assistant Result Interpreter		
34	Technician		
35	Transcriptionist		
36	Scheduled Date/Time		
37	Number Of Sample Containers		
38	Transport Logistics Of Collected Sample		
39	Collector's Comment		
40	Transport Arrangement Responsibility		
41	Transport Arranged		
42	Escort Required		
43	Planned Patient Transport Comment		

OBR|1|Placer Order Number|Filler Order Number|Order Code^Order Description|R||YYYYMMDDHHmmss|||||Received Date|Specimen Source|NPI^Last Name^First Name^Middle Name|||||YYYYMMDDHHmmss|||Result Status|

## OBX – Observation/Results Segment

Field #	Field Name	Format	Notes
0	Record Type (Required)	OBX	
1	Set ID – OBX (Required)	#	
2	Value Type (Required)	ST	
3	Observation Identifier (Required)	Code^Description	
4	Observation Sub-ID		
5	Observation Value (Required)	String	
6	Units (Required)		Ex: ng/mL
7	References Range (Required)		Cutoff or Reference Range
8	Abnormal Flags (Required)	HL7 Table 0078	HL7 Table 0078 (See Tables Starting on Page 12)
9	Probability		
10	Nature of Abnormal Test		
11	Observation Result Status (Required)	HL7 Table 0085	HL7 Table 0085 (See Tables Starting on Page 12)
12	Date Last Obs Normal Values		
13	User Defined Access Checks		
14	Date/Time of the Observation (Required)	YYYYMMDDHHmmss	
15	Producer's ID (Required)	Clia^Lab Name	
16	Responsible Observer		
17	Observation Method		

OBX|1|ST|Code^Description||String|Units|Cutoff|Table 0078|||Table 0085|||YYYYMMDDHHmmss|Clia^Lab Name|

## NTE – Notes and Comments Segment

KIPU will only import NTEs that come under an OBR or OBX segments.

Field #	Field Name	Format	Notes
0	Record Type (Required)	NTE	
1	Set ID - Notes and Comments (Required)	#	
2	Source of Comment (Required)	P	
3	Comment (Required)	String	

NTE|1|P|String

## ZPS – Vendor Information

Field #	Field Name	Format	Notes
0	Record Type (Required)	ZPS	
1	Set ID (Required)	1	
2			
3	Lab Name (Required)	String Value	
4	Lab Address (Required)	Street1^Street2^City^State^Zip^Country	
5	Lab Phone (Required)	String Value	
6			
7	Lab Director Info (Required)	Title^Last_Name^ First_Name^Degree	
8			
9	Lab Clia Number (Required)	String Value	

ZPS|1||Lab\_Name|Street1^Street2^City^State^Zip^Country|Lab\_Phone||Title^Last\_Name^ First\_Name^Degree||Lab\_Clia\_Number

## ORU Embedded PDF – Base 64

The embedded PDF must be sent with an OBR and OBX value following the specs below.

## OBR – Observation Request Segment

Field #	Field Name	Format	Notes
0	Record Type (Required)	OBR	
1	Set ID - Observation Request (Required)	#	Following OBR count
2	Placer Order Number (Required)	String	Barcode Number on Specimen
3	Filler Order Number (Required)	String	Lab's Accession Number
4	Universal Service Identifier (Required)	"Base64^Embedded PDF"	Static
5	Priority	R	Current Platform does not support
6	Requested Date/Time		
7	Observation Date/Time (Required)	YYYYMMDDHHmmss	Collection Date (Sent in ORM OBR7)
8	Observation End Date/Time		
9	Collection Volume		
10	Collector Identifier		
11	Specimen Action Code		
12	Danger Code		
13	Relevant Clinical Information		
14	Specimen Received Date/Time (Required)	YYYYMMDDHHmmss	Date Lab Received Specimen
15	Specimen Source (Required)	HL7 Table 0070	HL7 Table 0070 (See Tables Starting on Page 12)
16	Ordering Provider (Required)	NPI^Last Name^First Name^Middle Name	
17	Order Callback Phone Number		
18	Placer Field 1		
19	Placer Field 2		
20	Filler Field 1		
21	Filler Field 2		
22	Results Rpt/Status Chng - Date/Time (Required)	YYYYMMDDHHmmss	Date Results is completed
23	Charge To Practice		
24	Diagnostic Service Section ID		
25	Result Status (Required)	HL7 Table 0123	HL7 Table 0123 (See Tables Starting on Page 12)
26	Parent Result		
27	Quantity/Timing		
28	Result Copies To		

29	Parent Number		
30	Transportation Mode		
31	Reason For Study		
32	Principal Result Interpreter		
33	Assistant Result Interpreter		
34	Technician		
35	Transcriptionist		
36	Scheduled Date/Time		
37	Number Of Sample Containers		
38	Transport Logistics Of Collected Sample		
39	Collector's Comment		
40	Transport Arrangement Responsibility		
41	Transport Arranged		
42	Escort Required		
43	Planned Patient Transport Comment		

OBR|#|Placer Order Number|Filler Order Number|Base64^Embedded PDF|R||YYYYMMDDHHmmss|||||Received Date|Specimen Source|NPI^Last Name^First Name^Middle Name|||||YYYYMMDDHHmmss|||Result Status|

## OBX – Observation/Results Segment

Field #	Field Name	Format	Notes
0	Record Type (Required)	OBX	
1	Set ID – OBX (Required)	#	
2	Value Type (Required)	“ED”	Static
3	Observation Identifier (Required)	“PDF”	Static
4	Observation Sub-ID (Required)	“Base64”	Static
5	Observation Value (Required)		Base64 encoding
6	Units (Required)		
7	References Range (Required)		
8	Abnormal Flags (Required)		
9	Probability		
10	Nature of Abnormal Test		
11	Observation Result Status (Required)		
12	Date Last Obs Normal Values		
13	User Defined Access Checks		
14	Date/Time of the Observation (Required)		
15	Producer's ID		
16	Responsible Observer		
17	Observation Method		

OBX|1|ED|PDF|Base64|Base64 encoding|

## HL7 Tables

### Specimen Source - HL7 Table 0070

Specimen Source - HL7 Table 0070	
Value	Description
ABS	Abscess
AMN	Amniotic fluid
ASP	Aspirate
BPH	Basophils

<b>BIFL</b>	Bile fluid
<b>BLDA</b>	Blood arterial
<b>BBL</b>	Blood bag
<b>BLDC</b>	Blood capillary
<b>BPU</b>	Blood product unit
<b>BLDV</b>	Blood venous
<b>BON</b>	Bone
<b>BRTH</b>	Breath (use EXHLD)
<b>BRO</b>	Bronchial
<b>BRN</b>	Burn
<b>CALC</b>	Calculus (=Stone)
<b>CDM</b>	Cardiac muscle
<b>CNL</b>	Cannula
<b>CTP</b>	Catheter tip
<b>CSF</b>	Cerebral spinal fluid
<b>CVM</b>	Cervical mucus
<b>CVX</b>	Cervix
<b>COL</b>	Colostrum
<b>BLDCO</b>	Cord blood
<b>CNJT</b>	Conjunctiva
<b>CUR</b>	Curettage
<b>CYST</b>	Cyst
<b>DIAF</b>	Dialysis fluid
<b>DOSE</b>	Dose med or substance
<b>DRN</b>	Drain
<b>DUFL</b>	Duodenal fluid
<b>EAR</b>	Ear
<b>EARW</b>	Ear wax (cerumen)
<b>ELT</b>	Electrode
<b>ENDC</b>	Endocardium
<b>ENDM</b>	Endometrium
<b>EOS</b>	Eosinophils
<b>RBC</b>	Erythrocytes
<b>EYE</b>	Eye
<b>EXG</b>	Exhaled gas (=breath)
<b>FIB</b>	Fibroblasts
<b>FLT</b>	Filter
<b>FIST</b>	Fistula
<b>FLU</b>	Body fluid, unsp
<b>GAS</b>	Gas
<b>GAST</b>	Gastric fluid/contents
<b>GEN</b>	Genital
<b>GENC</b>	Genital cervix
<b>GENL</b>	Genital lochia
<b>GENV</b>	Genital vaginal
<b>HAR</b>	Hair
<b>IHG</b>	Inhaled Gas
<b>IT</b>	Intubation tube
<b>ISLT</b>	Isolate
<b>LAM</b>	Lamella
<b>WBC</b>	Leukocytes
<b>LN</b>	Line
<b>LNA</b>	Line arterial
<b>LNV</b>	Line venous
<b>LIQ</b>	Liquid NOS
<b>LYM</b>	Lymphocytes
<b>MAC</b>	Macrophages
<b>MAR</b>	Marrow
<b>MEC</b>	Meconium
<b>MBLD</b>	Menstrual blood
<b>MLK</b>	Milk
<b>MILK</b>	Breast milk
<b>NAIL</b>	Nail

NOS	Nose (nasal passage)
ORH	Other
PAFL	Pancreatic fluid
PAT	Patient
PRT	Peritoneal fluid /ascites
PLC	Placenta
PLAS	Plasma
PLB	Plasma bag
PLR	Pleural fluid (thoracentesis fld)
PMN	Polymorphonuclear neutrophils
PPP	Platelet poor plasma
PRP	Platelet rich plasma
PUS	Pus
RT	Route of medicine
SAL	Saliva
SMN	Seminal fluid
SER	Serum
SKN	Skin
SKM	Skeletal muscle
SPRM	Spermatozoa
SPT	Sputum
SPTC	Sputum - coughed
SPTT	Sputum - tracheal aspirate
STON	Stone (use CALC)
STL	Stool = Fecal
SWT	Sweat
SNV	Synovial fluid (Joint fluid)
TEAR	Tears
THRT	Throat
THRB	Thrombocyte (platelet)
TISS	Tissue
TISG	Tissue gall bladder
TLGI	Tissue large intestine
TLNG	Tissue lung
TISPL	Tissue placenta
TSMI	Tissue small intestine
TISU	Tissue ulcer
TUB	Tube NOS
ULC	Ulcer
UMB	Umbilical blood
UMED	Unknown medicine
URTH	Urethra
UR	Urine
URC	Urine clean catch
URT	Urine catheter
URNS	Urine sediment
USUB	Unknown substance
VITF	Vitreous Fluid
VOM	Vomitus
BLD	Whole blood
BDY	Whole body
WAT	Water
WICK	Wick
WND	Wound
WNDA	Wound abscess
WNDE	Wound exudate
WNDD	Wound drainage
XXX	To be specified in another part of the message

## Marital Status - HL7 Table 0002

---

Marital Status - HL7 Table 0002	
Value	Description
A	Separated
D	Divorced
M	Married
S	Single
W	Widowed

## Gender - HL7 Table 0001

---

Gender - HL7 Table 0001	
Value	Description
F	Female
M	Male
O	Other
U	Unknown

## Race - HL7 Table 0005

---

Race - HL7 Table 0005	
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

## Results Status - HL7 Table 0123

---

Results Status - HL7 Table 0123	
Value	Description
A	Some, but not all, results are available
C	Correction to results
F	Final results; results stored and verified; can only be changed with a corrected result
I	No results available; specimen received, procedure incomplete
O	Order received; specimen not yet received
P	Preliminary: A verified early result is available, final results not yet obtained
R	Results stored; not yet verified
S	No results available; procedure scheduled, but not done
X	No results available; Order canceled
Y	No order on record for this test
Z	No record of this patient

## Abnormal Flag - HL7 Table 0078

---

Abnormal Flag - HL7 Table 0078	
Value	Description
<	Below absolute low
>	Above absolute high
A	Abnormal
AA	Very abnormal
B	Better
D	Significant down
H	Above normal
HH	Above panic
I	Intermediate
L	Below low normal
LL	Below low panic
MS	Moderately susceptible
N	Normal
null	No range
R	Resistant
S	Susceptible
U	Significant up
VS	Very susceptible
W	Worse

## Observation Results Status - HL7 Table 0085

---

HL7 Table 0085	
Value	Description
F	Final
C	Corrected
I	Pending
P	Preliminary
R	Entered
S	Partial
X	Can't Obtain



## HL7 Examples

---

### Example ORM

---

MSH|^~\&|KIPURECORDS|Oceans Treatment Center|Awesome LIS|Right Meow Labs|201804110400||ORM^O01|2229405982398709875023|P|2.3  
PID|1|2018-201|6235712||Tester^Lester^Jack||19750517|M||2131-1|123 main street^Apt 1001^Miami^FL^33100||3051231234|3057896789||D||2018-201|827765224  
IN1|1||123827|Florida Blue|P.O. BOC 1798^^Jacksonville^FL^32231||18009555692|B8877|||Joessubs|||PPO|Tester^Ester|Mother|1952|||JSHY82736487|Policy Deductible N/A|||ORC|NW|K1234567|||Oceans Treatment Center|201804110400||1827362738^Gonzalez^Adam^Jose|Oceans Treatment Center|OBR|1|K1234567||10000^Screen Test|R||20180401103100|||UR|1827362738^Gonzalez^Adam^Jose|||NTE|1|P|Medications Bupropion Hbr Er, Ibuprofen, Prazosin Hcl, Paroxetine Hcl, Hydroxyzine Pamoate, Genvoya  
NTE|2|P|Statement of Medical Necessity: 42 year old male Client presenting with F15.20 Amphetamine-type substance use disorder, Severe, F33.2 Major depressive disorder, Recurrent episode, Severe, F41.1 Generalized anxiety disorder, F10.20 Alcohol use disorder, and Severe. Prescribed medications are Prazosin Hcl, Bupropion Hbr Er, Escitalopram Oxalate, and Genvoya. Pt has admitted to Breathe due to relapse of crystal meth and alcohol. Pt will required an initial drug test by cup to get a baseline.  
DG1|1||F15.20^Amphetamine-type substance use disorder, Severe^ICD10  
DG1|2||F33.2^Major depressive disorder, Recurrent episode, Severe^ICD10  
DG1|3||F41.1^Generalized anxiety disorder^ICD10  
DG1|4||F10.20^Alcohol use disorder, Severe^ICD10  
OBR|2|K1234567||5000000^Confirmation Test|R||20180401103100|||UR|1827362738^Gonzalez^Adam^Jose|||NTE|1|P|Medications Bupropion Hbr Er, Ibuprofen, Prazosin Hcl, Paroxetine Hcl, Hydroxyzine Pamoate, Genvoya  
NTE|2|P|Statement of Medical Necessity: 42 year old male Client presenting with F15.20 Amphetamine-type substance use disorder, Severe, F33.2 Major depressive disorder, Recurrent episode, Severe, F41.1 Generalized anxiety disorder, F10.20 Alcohol use disorder, and Severe. Prescribed medications are Prazosin Hcl, Bupropion Hbr Er, Escitalopram Oxalate, and Genvoya. Pt has admitted to Breathe due to relapse of crystal meth and alcohol. Pt will required an initial drug test by cup to get a baseline.  
DG1|1||F15.20^Amphetamine-type substance use disorder, Severe^ICD10  
DG1|2||F33.2^Major depressive disorder, Recurrent episode, Severe^ICD10  
DG1|3||F41.1^Generalized anxiety disorder^ICD10  
DG1|4||F10.20^Alcohol use disorder, Severe^ICD10  
OBX|1|ST|POCT\_AMP^POCT\_AMP||N  
OBX|2|ST|POCT\_BAR^POCT\_BAR||N  
OBX|3|ST|POCT\_BUP^POCT\_BUP||N  
OBX|4|ST|POCT\_BZO^POCT\_BZO||N  
OBX|5|ST|POCT\_COC^POCT\_COC||N  
OBX|6|ST|POCT\_ETOH^POCT\_ETOH||N  
OBX|7|ST|POCT\_MDMA^POCT\_MDMA||N  
OBX|8|ST|POCT\_MET^POCT\_MET||N  
OBX|9|ST|POCT\_MTD^POCT\_MTD||N  
OBX|10|ST|POCT\_OPI^POCT\_OPI||P  
OBX|11|ST|POCT\_OXY^POCT\_OXY||N  
OBX|12|ST|POCT\_PCP^POCT\_PCP||N  
OBX|13|ST|POCT\_PPX^POCT\_PPX||N  
OBX|14|ST|POCT\_TCA^POCT\_TCA||N  
OBX|15|ST|POCT\_THC^POCT\_THC||N

### Example ORU

---

MSH|^~\&|Awesome LIS|Right Meow Labs|KIPURECORDS|Oceans Treatment Center|201804110400||ORM^O01|38294059823075894750798432750|P|2.3  
PID|1|2018-201|6235712||Tester^Lester^Jack||19750517|M||2131-1|123 main street^Apt 1001^Miami^FL^33100||3051231234|3057896789||D||2018-201|827765224  
ORC|NW|K1234567|89127389|||Oceans Treatment Center|201804110400||1827362738^Gonzalez^Adam^Jose|Oceans Treatment Center|OBR|1|K1234567|89127389|10000^Screen Test|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||20180403103100||F|OBX|1|ST|10001^Propoxyphene||Negative|ng/mL||N||F||20180403103100|18D7463274^Right Meow Labs|OBX|2|ST|10002^Methadone||Negative|ng/mL||N||F||20180403103100|18D7463274^Right Meow Labs|OBX|3|ST|10003^Amphetamines||Negative|ng/mL||N||F||20180403103100|18D7463274^Right Meow Labs|

OBX|4|ST|10004^Oxycodone||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|5|ST|10005^PCP||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|6|ST|10006^Cocaine||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|7|ST|10007^Opiates||Positive|ng/mL||A||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|8|ST|10008^THC||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|9|ST|10009^Benzodiazepines||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|10|ST|10010^Barbiturates||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|11|ST|10011^EtG||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|12|ST|10012^TCA||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|13|ST|10013^MDMA||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|14|ST|10014^Buprenorphine||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBX|15|ST|10015^Methamphetamine||Negative|ng/mL||N||F|||20180403103100|18D7463274^Right Meow Labs|  
OBR|2|K1234567|89127389|20000^Heroin  
Metabolite|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||20180403103100||F||  
OBX|1|ST|20001^6-MAM||0|ng/mL|25 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBR|3|K1234567|89127389|30000^Opioids & Opiate  
Analog|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||20180403103100||F||  
OBX|1|ST|30001^Dextrorphan||0|ng/mL|25 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|2|ST|30002^Naloxone||0|ng/mL|10 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|3|ST|30003^Naltrexone||0|ng/mL|10 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|4|ST|30004^Mitragnyne||0|ng/mL|25 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|5|ST|30005^Dextromethorphan||0|ng/mL|25 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|6|ST|30006^U-47700||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBR|4|K1234567|89127389|40000^Benzodiazepines|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^Adam^Jose||  
|||20180403103100||F||  
OBX|1|NM|40001^Lorazepam||237|ng/mL|50 ng/mL|A||F|||18D7463274^Right Meow Labs|  
NTE|1|P|Outcome is Inconsistent  
OBX|2|ST|40002^Etizolam||0|ng/mL|15 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|3|ST|40003^Flunitrazepam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|4|ST|40004^Nordiazepam||0|ng/mL|40 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|5|ST|40005^Temazepam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|6|ST|40006^Flurazepam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|7|ST|40007^Oxazepam||0|ng/mL|40 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|8|ST|40008^Alprazolam||10|ng/mL|20 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|9|ST|40009^2-Hydroxyethylflurazepam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|10|ST|40010^Midazolam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|11|ST|40011^7-Aminoclonazepam||0|ng/mL|100 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|12|ST|40012^Triazolam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|13|ST|40013^Diazepam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|14|ST|40014^a-Hydroxytriazolam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|15|ST|40015^a-Hydroxyalprazolam||0|ng/mL|20 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|16|ST|40016^a-Hydroxymidazolam||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|17|ST|40017^Clonazepam||0|ng/mL|40 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBR|5|K1234567|89127389|50000^Methylenedioxyamphetamines|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^  
Adam^Jose|||20180403103100||F||  
OBX|1|ST|50001^MDMA||0|ng/mL|100 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|2|ST|50002^MDA||0|ng/mL|100 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBR|6|K1234567|89127389|60000^Alcohol  
Biomarkers|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||20180403103100||F||  
OBX|1|ST|60001^Ethyl Glucuronide||0|ng/mL|500 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|2|ST|60002^Ethyl Sulfate||0|ng/mL|200 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBR|7|K1234567|89127389|70000^Amphetamines|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^Adam^Jose||  
||20180403103100||F||  
OBX|1|ST|70001^Amphetamine||0|ng/mL|100 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|2|ST|70002^Methamphetamine||0|ng/mL|100 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBR|8|K1234567|89127389|80000^Buprenorphine|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^Adam^Jose||  
||20180403103100||F||  
OBX|1|NM|80001^Norbuprenorphine||72|ng/mL|20 ng/mL|A||F|||18D7463274^Right Meow Labs|  
NTE|1|P|Outcome is Inconsistent  
OBX|2|NM|80002^Buprenorphine||25|ng/mL|10 ng/mL|A||F|||18D7463274^Right Meow Labs|  
NTE|1|P|Outcome is Inconsistent  
OBR|9|K1234567|89127389|90000^Oxycodone|R||20180401103100|||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||  
20180403103100||F||  
OBX|1|ST|90001^Oxycodone||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|2|ST|90002^Noroxycodone||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|  
OBX|3|ST|90003^Oxymorphone||0|ng/mL|50 ng/mL|N||F|||18D7463274^Right Meow Labs|

OBR|10|K1234567|89127389|100000^Cocaine|R||20180401103100|||||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||||2  
0180403103100||F||  
OBX|1|NM|100001^Benzoylcegonine||109|ng/mL|50 ng/mL|A||F||18D7463274^Right Meow Labs|  
NTE|1|P|Detection Window 1-2 days.  
OBR|11|K1234567|89127389|110000^Opiates|R||20180401103100|||||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||||2  
0180403103100||F||  
OBX|1|ST|110001^Morphine||0|ng/mL|50 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|2|ST|110002^Norhydrocodone||0|ng/mL|50 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|3|ST|110003^Hydrocodone||0|ng/mL|50 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|4|ST|110004^Dihydrocodeine||0|ng/mL|50 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|5|ST|110005^Codeine||11|ng/mL|50 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|6|ST|110006^Hydromorphone||0|ng/mL|50 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBR|12|K1234567|89127389|120000^Cannabinoids,  
Natural|R||20180401103100|||||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||||20180403103100||F||  
OBX|1|NM|120001^THC-COOH||21|ng/mL|15 ng/mL|A||F||18D7463274^Right Meow Labs|  
NTE|1|P|Detection Window for single use up to 4 days.  
OBR|13|K1234567|89127389|130000^Skeletal Muscle  
Relaxants|R||20180401103100|||||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||||20180403103100||F||  
OBX|1|ST|130001^Carisoprodol||0|ng/mL|100 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|2|ST|130002^Cyclobenzaprine||0|ng/mL|50 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|3|ST|130003^Meprobamate||0|ng/mL|200 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBR|14|K1234567|89127389|140000^Fentanyl|R||20180401103100|||||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||||  
20180403103100||F||  
OBX|1|ST|140001^Norfentanyl||0|ng/mL|8 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|2|ST|140002^Fentanyl||0|ng/mL|2 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBX|3|ST|140003^Carfentanil||0|ng/mL|2 ng/mL|N||F||18D7463274^Right Meow Labs|  
OBR|15|K1234567|89127389|150000^Validity Test  
Panel|R||20180401103100|||||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||||20180403103100||F||  
OBX|1|NM|150001^Oxidants||0.0||0 - 200 |N||F||18D7463274^Right Meow Labs|  
OBX|2|NM|150002^Specific Gravity||1.01||1.003 - 1.035 |N||F||18D7463274^Right Meow Labs|  
OBX|3|NM|150003^Creatinine||67.1|mg/dL|20 - 200 mg/dL|N||F||18D7463274^Right Meow Labs|  
OBX|4|NM|150004^pH||5.6||4.7 - 7.8 |N||F||18D7463274^Right Meow Labs|  
OBR|16|K1234567|89127389|Base64^Embedded  
PDF|R||20180419103100|||||20180402103100|UR|1827362738^Gonzalez^Adam^Jose|||||20180403103100||F||  
OBX|1|ED|PDF|Base64|hasdgfkjhagksdjh....  
ZPS|1||Right Meow Labs|222 Posana Dr^Unit 700^Davie^FL^33300|(561)349-5911||MD^McJunior^Peter^PhD||22K3030899