

ndd Medical Technologies HL7 Mapping Document - Standard Interface for Orders (ORM)

MSH

Description	Field(s)	Example/Comment	Max Segment Length	Required/Recommended/Optional/Not Supported
Message Type	MSH-9.1, 9.2	ORM^001	7	Required

PID

Description	Field(s)	Example/Comment	Max Segment Length	Required/Optional/Not Supported
Patient ID	PID-3.1	2229061	50	Required
Patient Last Name	PID-5.1		50	Recommended
Patient First Name	PID-5.2		50	Recommended
DOB (Date of Birth)	PID-7	YYYYmmDD	14	Required
Gender	PID-8	M or F	1	Required

PV1

Description	Field(s)	Example/Comment	Max Segment Length	Required/Optional/Not Supported
Referred By	PV1-8.1, 8.2, 8.3	NPI^LASTNAME^FIRSTN AME	255	Optional

ORC

Description	Field(s)	Example/Comment	Max Segment Length	Required/Optional/Not Supported
Order Control	ORC-1	NW	2	Required
Order Create Date/Time	ORC-9	YYYYmmDDhhMMss	14	Optional

OBR

Description	Field(s)	Example/Comment	Max Segment Length	Required/Optional/Not Supported
Order ID	OBR-2.1		255	Required
Test Type** (Universal Service ID)	OBR-4.1		50	Recommended
Requested Date/Time	OBR-6	YYYYmmDDhhMM	14	Optional
Order Comment (Relevant Clinical Info)	OBR-13.1	This is an order comment	255	Optional
Ordered By	OBR-16.1, 16.2, 16.3	NPI^LASTNAME^FIRSTN AME	255	Optional

** Test Types: need to enter corresponding CPT Codes in the Incoming HL7, as follows:

- 94010 for FVC
- 94375 for FVL
- 94150 for SVC
- 94200 for MVV
- 94729 for DLCO
- 94727 for FRC

You can send us any Test Type code and we can map to the six that we use to set up the patient record in ndd software.

Sample ORM

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MSH|^~\&|SENDING APPLICATION|SENDING FACILITY|NDD|RECEIVING FACILITY|20140419173314|1148|ORM^001|497|D|2.3|
PID|1||20892||APPLESEEDTEST^JOHN^A^MR.^|19661201|M|||||
PV1|||||1173^MATTHEWS^JAMES^A^||||||
ORC|NW|987654|76543|||^20140419170014^|20140419173314|8888^LAST^FIRST^|1173^MATTHEWS^JAMES^A^|1133^222^|(618)222-1122||
OBR|1|363463|1858|94375^FVL^|20140419173314|||||Order Comment||1173^MATTHEWS^JAMES^A^|F|^20140418170014^|
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nnd Medical Technologies HL7 Mapping Document - Standard Interface for Results (ORU)

MSH

Description	Field(s)	Example/Comments	Value [vendor] needs
Encoding Characters	MSH-02	^~\&	
Sending Application	MSH-03	EasyWarePro	
Sending Facility	MSH-04	Sending Facility Name	
Receiving Application	MSH-05	Receiving Application Name	
Receiving Facility	MSH-06	Receiving Facility Name	
Date/Time of Message	MSH-07	YYYYmmDDhhMMss	
Message Type	MSH-09.1, 09.2	ORU^R01	
Message Control ID	MSH-10	YYYYmmDDhhMMss	
Processing ID	MSH-11	P	
		Valid values include:	
		P = Production	
		T = Training	
		D = Debug (Development)	
Version ID	MSH-12	2.5	
Accept Acknowledgement Condition	MSH-15	AL	
App Acknowledgement Type	MSH-16	NE	

PID

Description	Field(s)	Example/Comments	Value [vendor] needs
Set ID	PID-01	1	
Patient ID	PID-03.1	9999999	
Patient Last Name	PID-05.1		
Patient First Name	PID-05.2		
DOB	PID-07	YYYYmmDD	
Gender	PID-08	M or F	
Patient Account Number	PID-18	123456789	

ORC

Description	Field(s)	Example/Comments	Value [vendor] needs
Order ID	ORC-02	9999999	
Device Serial Number	ORC-03.1	999999	
Test Date	ORC-03.2	YYYYmmDDhhMMss	

OBR

Description	Field(s)	Example/Comments	Value [vendor] needs
Set ID	OBR-01	1	
Order ID	OBR-02	9999999	
Device Serial Number	OBR-03.1	999999	
Test Date	OBR-03.2	YYYYmmDDhhMMss	
Universal Service ID (Test Type)	OBR-04.1, 04.2	IDNUMBER^TESTTYPE	
Observation Date (Test Time)	OBR-7.1	YYYYmmDDhhMMss	
Ordering Provider	OBR-16.1, 16.2, 16.3	NPI^LASTNAME^FIRSTNAME	
Time Of Message	OBR-22	YYYYmmDDhhMMss	
Result Status	OBR-25	P	
		Valid values include:	
		C = Correction to results	
		F = Final results	
		P = Preliminary results	
Technician First Name	OBR-34		

NTE

Description	Field(s)	Example/Comments	Value [vendor] needs
Source of Comment	NTE-02	P = Orderer (placer)	
Test Comment	NTE-03	This is a comment placed by the placer.	

OBX (Discrete Data)

Description	Field(s)	Example/Comments	Value [vendor] needs
Set ID (Counter)	OBX-01	1	
Value Type	OBX-02	NM	
		Valid values include: ST = String data NM = Numeric data TX = Text data	
Observation Identifier (LOINC) <i>*if available*</i>	OBX-03.1, 03.2, 03.3	LOINC Code^Description^Coding System	
Observation Value (result)	OBX-05	x.xx	
Units	OBX-06	L (Liters)	
Observation Range	OBX-07	>x.xx	
Observation Results Status	OBX-11	F (Final)	
		Valid values include: F = Final P = Preliminary C = Correction	

OBX (Summary Report PDF)

Description	Field(s)	Example/Comments	Value [vendor] needs
Set ID (Counter)	OBX-01	1	
Value Type	OBX-02	NM	
		Valid values include: RP = Report	
Observation Identifier (LOINC)	OBX-03.1, 03.2, 03.3	^^	
Observation Value (result)	OBX-05.1, 5.2, 5.3, 5.4, 5.5	FILEPATH OF THE REPORT ^^AP^PDF	

OBX (Summary Report Base64 Embedded*)

Description	Field(s)	Example/Comments	Value [vendor] needs
Set ID (Counter)	OBX-01	1	
Value Type	OBX-02	NM	
		Valid values include: ED = Embedded Document	
Observation Identifier (LOINC)	OBX-03.1, 03.2, 03.3	^Report^	
Observation Value (result)	OBX-05.1, 5.2, 5.3, 5.4, 5.5	^AP^PDF^Base64^CONTENT OF THE EMBEDDED DOCUMENT	

*Embedded document will be split into multiple OBX segments with each segment length having a max of 65536 for OBX-5.5

Sample ORU message

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MSH|^~\&|EasyWarePro|DemoLab|DemoApp|DemoFacility|20200511102903||ORU^R01|2020051110290351|D|2.5|||AL|NE
PID|1||20892||APPLESEEDTEST^JOHN^^^|19661201|M|||||11480003|||
ORC||363463|243485^20200506100638494
OBR|1|363463|243485^20200506100638494|94010^FVC|||202005061006|||||1173^MATTHEWS^JAMES|||||20200511102903||P|||||&&
|||
NTE||P|
OBX|1|NM|19870-5^FVC^LN||4.76|L|>4.97|L||P|
OBX|2|NM|20150-9^FEV1^LN||3.82|L|>3.92|L||P|
OBX|3|NM|19926-5^FEV1/FVC^LN||0.802||>0.693|||P|
OBX|4|NM|19927-3^FEF 25-75%^LN||3.57|L/s|>2.54|||P|
OBX|5|NM|33452-4^PEF^LN||447|L/min|>514|L||P|
OBX|6|NM|65819-5^FET^LN||4.0|s|||P|
OBX|7|ED|^Report||^AP^PDF^Base64^EMBEDDED DATA TEXT GOES HERE|||||
OBX|8|ED|^Report||^AP^PDF^Base64^EMBEDDED DATA TEXT GOES HERE|||||
OBX|9|ED|^Report||^AP^PDF^Base64^EMBEDDED DATA TEXT GOES HERE|||||

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