



Maryland Department of Health
Electronic Lab Reporting (ELR) Specifications

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<https://health.maryland.gov/phpa/OIDEOR/CIDSOR/pages/Home.aspx>

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I. Introduction

The Maryland HL7 Specifications Guide outlines the technical and structural standards required for the electronic transmission of laboratory data to the Maryland Department of Health (MDH). It is intended to support laboratories, hospitals, and health information technology vendors in implementing HL7 version 2.5.1 messages for public health reporting in accordance with Maryland state regulations and national standards.

This guide complements the HL7 Version 2.5.1 Implementation Guide for Electronic Laboratory Reporting to Public Health (US Realm), Release 1, developed by the Centers for Disease Control and Prevention (CDC) and Health Level Seven International (HL7). While the national implementation guide provides general specifications, this Maryland-specific guide outlines additional local requirements, constraints, and validation expectations necessary for successful onboarding and continued data exchange with MDH.

Topics covered in this document include:

- Message structure and segment usage
- Required and optional data elements
- Local code system mappings and value sets
- Maryland-specific business rules and validation criteria
- Guidance on message testing, submission, and maintenance

The goal of this guide is to ensure completeness, accuracy, and consistency in laboratory data reporting, which is critical for effective disease surveillance and timely public health response.

For questions or assistance, please contact the MDH ELR team at mdh.elronboarding@maryland.gov.

II. Message Elements and Usage

a. HL7 Elements

Segment	Name	Description
MSH	Message Header	The Message Header Segment (MSH) contains information describing how to parse and process the message. This includes identification of message delimiters, sender, receiver, message type, timestamp, etc.
SFT	Software Segment	The software segment provides information about the sending application or other applications that manipulate the message before the receiving application processes the message.
PID	Patient Identification	The Patient Identification Segment (PID) is used to provide basic demographics regarding the subject of the testing.
NK1	Next of Kin	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.
ORC	Common Order	The Common Order Segment (ORC) 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, what action to take regarding the order, etc.
OBR	Observation Request	The Observation Request Segment (OBR) is used to capture information about one test being performed on the specimen. Most importantly, the OBR identifies the type of testing to be performed on the specimen and ties that information to the order for the testing.
OBX	Observation/Result	The Observation/Result Segment (OBX) contains information regarding a single observation related to a single test (OBR) or specimen (SPM). This includes identification of the specific type of observation, the result for the observation, when the observation was made, etc.
SPM	Specimen Information	The Specimen Information Segment (SPM) describes the characteristics of a single sample. The SPM segment carries information regarding the type of specimen, where and how it was collected, who collected it and some basic characteristics of the specimen.
NTE	Notes and Comments	The Notes and Comments Segment (NTE) is used to convey additional comments regarding the associated segment. The NTE segment is not intended for automatic processing.

b. Element Usage

Abbreviation	Usage description
R	Required. Must be populated.
RE	Required, but can be empty
O	Optional
C	Conditional
CE	Conditional, but can be empty

c. Data Types

Concept Code	Concept Name
CE	Coded Entry
CNN	Composite ID Number and Name Simplified
CQ	Composite Quantity with Units
CX	Extended Composite ID With Check Digit
DR	Date/Time Range
DT	Date
DTM	Date/Time
ED	Encapsulated Data
EI	Entity Identifier
EIP	Entity Identifier Pair
ERL	Error Location
FC	Financial Class
FN	Family Name
FT	Formatted Text (Display)
HD	Hierarchic Designator
ID	Coded Values for HL7 Tables
IS	Coded value for User-Defined Tables
MSG	Message Type
NDL	Name with Date and Location
NM	Numeric
PL	Person Location
PRL	Parent Result Link
PT	Processing Type
RP	Reference Pointer
SAD	Street Address
SI	Sequence ID
SN	Structured Numeric
ST	String
TM	Time
TS	Time Stamp (Date & Time)
TX	Text Data (Display)
VID	Version Identifier
XAD	Extended Address
XCN	Extended Composite ID Number and Name
XON	Extended Composite Name and ID Number for Organizations
XPN	Extended Person Name
XTN	Extended telecommunications number

III. HL7 Specifications

a. MSH

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Field Separator	1	ST	1	R		
Encoding Characters	2	ST	4	R		^~\&
Sending Application	3	HD	180	R		EPIC^1.22.333.4.55555.6 6.7.8^ISO
Namespace ID	3.1	IS	20	RE	LIS or EHR app name	Epic
Universal ID	3.2	ST	199	R	OID	1.22.333.4.55555.66.7.8
Universal ID Type	3.3	ID	6	R	PHVS_UniversalIdType_ELRL	ISO
Sending Facility	4	HD	180	R		Lab^05D0909090^CLIA
Namespace ID	4.1	IS	20	RE	Hospital/Lab Name	Lab
Universal ID	4.2	ST	199	R	Hospital/Lab CLIA number	05D0909090
Universal ID Type	4.3	ID	6	R	PHVS_UniversalIdType_ELRL	CLIA
Receiving Application	5	HD	180	R		MDNBS^2.16.840.1.114 222.4.3.2.2.1.159.1^ISO
Namespace ID	5.1	IS	20	RE		MDNBS
Universal ID	5.2	ST	199	R	OID	2.16.840.1.114222.4.3.2. 2.1.159.1
Universal ID Type	5.3	ID	6	R	PHVS_UniversalIdType_ELRL	ISO
Receiving Facility	6	HD	180	R		MDH^2.16.840.1.114222 .4.1.10058^ISO
Namespace ID	6.1	IS	20	RE		MDH
Universal ID	6.2	ST	199	R	OID	2.16.840.1.114222.4.1.10 058
Universal ID Type	6.3	ID	6	R	PHVS_UniversalIdType_ELRL	ISO
Date/Time of Message	7	TS	26	R		YYYYMMDD[HHMM[SS]]
Message Type	9	MSG	15	R		ORU^R01^ORU_R01
Message Type ID	9.1	ID	3	R	PHVS_MessageType_HL7_2x	ORU
Trigger Event ID	9.2	ID	3	R		R01
Message Structure ID	9.3	ID	7	R	PHVS_MessageStructure_HL7_2x	ORU_R01
Message Control ID	10	ST	199	R	Generated by sending application	YYYYMMDDhhmmss+random number
Processing ID	11	PT	3	R	Used to decide whether to process the message as defined in HL7 Application (level 7) Processing rules.	

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Processing ID	11.1	ID	1	R	PHVS_ProcessingID_HL7_2x	P for Production, " D " for Debug, or " T " for Training
Version ID	12	VID	60	R		2.5.1
Accept Acknowledgment Type	15	ID	2	CE	PHVS_AcceptApplicationAcknowledgmentConditions_HL7	
Application Acknowledgment Type	16	ID	2	CE	PHVS_AcceptApplicationAcknowledgmentConditions_HL7	
Message Profile Identifier	21	EI	427	R		PHLabReport-NoAck^ELR_Receiver^2.16.840.1.113883.9.11^ISO
Entity Identifier	21.1	ST	199	R		PHLabReport-NoAck
Namespace ID	21.2	IS	20	RE		HL7
Universal ID	21.3	ST	199	R		2.16.840.1.113883.9.11
Universal ID Type	21.4	ID	6	R	PHVS_UniversalIdType_ELR	ISO

b. SFT

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Software Vendor Organization	1	XON	50	R	LIS or EHR app vendor	Level Seven Healthcare, Inc. L ^{^^^} Lab&2.16.840.1.113883.19.4.6&ISO ^{^XX^{^^^}1234}
Software Certified Version or Release Number	2	ST	15	R		1.0
Software Product Name	3	ST	20	R	LIS or EHR app name	Lab Systems
Software Binary ID	4	ST	20	R		
Software Install Date	6	TS	14	RE		

c. PID

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Set ID – PID	1	SI	4	R		1
Patient Identifier List	3	CX	250	R	Required; AIDS/STD program areas require both MR and last 4 digits of SSN	36363636^^^MPI&2.16.840.1.113883.19.3.2.1&ISO^MR^A&2.16.840.1.113883.19.3.2.1&ISO~444333333^^^&2.16.840.1.113883.4.1^ISO^SS
ID Number	3.1	ST	15	R		36363636
Assigning Authority	3.4	HD		R	Entity that assigns the ID	MPI&2.16.840.1.113883.19.3.2.1&ISO
Namespace ID	3.4.1	IS	20	RE	Name of assigning authority	MPI
Universal ID	3.4.2	ST	199	R	Can be a CLIA or ISO number	2.16.840.1.113883.19.3.2.1
Universal ID Type	3.4.3	ID	6	R	PHVS_UniversalIdType_ELRL	CLIA or ISO
Identifier Type Code	3.5	ID	5	R	PHVS_IdentifierType_CDC	MR, PN, APT, SS, DL, AN, PI
Assigning Facility	3.6	HD		R		A&2.16.840.1.113883.19.3.2.1&ISO
Namespace ID	3.6.1	IS	20	RE		A
Universal ID	3.6.2	ST	199	R	Can be an OID or CLIA number	2.16.840.1.113883.19.3.2.1
Universal ID Type	3.6.3	ID	6	R	PHVS_UniversalIdType_ELRL	CLIA or ISO
Patient Name	5	XPN	250	R		Doe^John^Q^^^^L
Family Name	5.1	FN		R		
Given Name	5.2	ST	30	R		John
Second and Further Given Names or Initials Thereof	5.3	ST	30	RE		
Suffix (e.g. JR or III)	5.4	ST	20	RE		
Prefix (e.g. DR)	5.5	ST	20	RE		
Name Type Code	5.7	ID	5	R	PHVS_NameType_HL7_2x	L
Professional Suffix	5.14	ST	199	RE	PHVS_DegreeLicenseCertificate_HL7_2x	
Mother's Maiden Name	6	XPN	250	RE	Same data type elements as PID-5 Patient Name	
Patient Date/Time of Birth	7	TS	26	RE		YYYY[MM[DD[HH[MM[SS[.S[S[S[S]]]]]]]]][+/-ZZZZ]
Administrative Sex	8	IS	20	RE	PHVS_AdministrativeSex_HL7_2x	Example: M

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Race	10	CWE	250	RE		2106-3^White^CDCREC^^^^2.5.1
Identifier	10.1	ST	20	RE	PHVS_RaceCategory_CDC	2106-3
Text	10.2	ST	199	CE		White
Name of Coding System	10.3	ID	12	CE		CDCREC
Patient Address	11	XAD	250	RE		1234 Anystreet Ave^Apt101^Anytown^MD^21201^^H
Street Address	11.1	SAD	100	RE	3 subcomponents	1234 Anystreet Ave
Street or Mailing Address	11.1.1	ST	120	RE		1234
Street Name	11.1.2	ST	50	O		Anystreet Ave
Dwelling Number	11.1.3	ST	12	O		
Other Designation	11.2	ST	120	RE		Apt 101
City	11.3	ST	50	RE		Anytown
State or Province	11.4	ST	50	RE	PHVS_State_FIPS_5-2	MD
Zip or Postal Code	11.5	ST	12	RE	Patient residence zip code	21201
Country	11.6	ID	3	RE	PHVS_Country_ISO_3166-1	
Address Type	11.7	ID	3	RE	HL70190 PHVS_AddressType_HL7_2x	H=Home
County	11.9	IS	20	RE	PHVS_County_FIPS_6-4	
Phone Number - Home	13	XTN	250	RE		^PRN^PH^John.Doe@test.com^1^410^5551234
Telecommunication Use Code	13.2	ID	3	RE	PHVS_TelecommunicationUseCode_HL7_2x	PRN
Telecommunication Equipment Type	13.3	ID	8	RE	PHVS_TelecommunicationEquipmentType_HL7_2x	PH
Email Address	13.4	ST	199	CE		John.Doe@test.com
Country Code	13.5	NM	3	CE	Required if PID-13.7 is present; otherwise must be empty.	1 for US numbers
Area Code	13.6	NM	3	CE	3 digit area code	410
Phone Number	13.7	NM	9	CE	7 digit unformatted phone number	5551234
Phone Number - Business	14	XTN	250	RE	Same data elements as Phone Number - Home	

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Ethnic Group	22	CWE	478	RE		2186-5^Not Hispanic or Latino^CDCREC^^^^2.5.1
Identifier	22.1	ST	20	RE	PHVS_EthnicityGroup_CDC_Unk	2186-5
Text	22.2	ST	199	CE		Not Hispanic or Latino
Name of Coding System	22.3	ID	12	CE		CDCREC
Patient Death Date/Time	29	TS	26	RE	Format: YYYY[MM[DD[HH[MM[SS[.S[S[S[S]]]]]]]]][+/-ZZZZ]	YYYYMMDDhhmmss
Patient Death Indicator	30	ID	1	RE	If PID-29 is valued, then this field should be populated with 'Y' since the patient is known to be dead	Y or N
Last Update Date/Time	33	TS	26	RE	Flag for updated demographic info Format: YYYY[MM[DD[HH[MM[SS[.S[S[S[S]]]]]]]]][+/-ZZZZ]	
Last Update Facility	34	HD		CE		
Species Code	35	CWE		RE	Use in animal rabies testing - required if PID-36 (Breed) or PID-37 (Strain) is present. PHVS_Animal_CDC	

d. **NK1**

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Set ID - NK1	1	SI	4	R		
Name	2	XPN	250	CE		Doe^Jane^R^^^^L
Family Name	2.1	FN	50	RE		Doe
Given Name	2.2	ST	30	RE		Jane
Second and Further Given Names or Initials Thereof	2.3	ST	30	RE		
Suffix (e.g. JR or III)	2.4	ST	20	RE		
Prefix (e.g. DR)	2.5	ST	20	RE		
Name Type Code	2.7	ID	5	RE	PHVS NameType_HL7_2x	L
Relationship	3	CWE	250	RE	Next of Kin	MTH^Mother^HL70063
Identifier	3.1	ST	20	RE	PHVS Relationship_HL7_2x	MTH
Text	3.2	ST	199	CE		Mother
Name of Coding System	3.3	ID	12	CE		HL70063
Address	4	XAD	250	RE		1234 Anystreet Ave^Apt101^Anytown^CA^90036^^H
Street Address	4.1	SAD	120	RE	3 subcomponents	1234 Anystreet Ave
Other Designation	4.2	ST	120	RE		
City	4.3	ST	50	RE		Anytown
State or Province	4.4	ST	50	RE	PHVS State_FIPS_5-2	CA
Zip or Postal Code	4.5	ST	12	RE		
Country	4.6	ID	3	RE	PHVS Country_ISO_3166-1	
Address Type	4.7	ID	3	RE	HL70190 PHVS AddressType_HL7_2x	H=Home
County	4.9	IS	20	RE	PHVS County_FIPS_6-4	
Phone Number	5	XTN	250	RE		^PRN^PH^Jane.Doe@test.com^^805^5551234
Telecommunication Use Code	5.2	ID	3	RE	PHVS TelecommunicationUseCode_HL7_2x	PRN
Telecommunication Equipment Type	5.3	ID	8	RE	PHVS TelecommunicationEquipmentType_HL7_2x	PH
Email Address	5.4	ST	199	CE		Jane.Doe@test.com
Country Code	5.5	NM	3	CE	Required if NK1-5.7 is present; otherwise must be empty.	1
Area/City Code	5.6	NM	3	CE	3 digit area code	805

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Phone Number	5.7	NM	9	CE	7-digit unformatted phone number	5551234
Organization Name - NK1	13	XON		CE		Level Seven Healthcare, Inc.^L^^^&2.16.840.1.113883.19.4.6^ISO^XX^^1234
Organization Name	13.1	ST	50	CE	Must be present if there is no Organization Identifier in NK1-13.10	
Organization Name Type Code	13.2	IS	20	RE	PHVS_TypeOfOrganizationalNameType_HL7_2x	
Assigning Authority	13.6	HD		CE		
Identifier Type Code	13.7	ID	5	CE	PHVS_IdentifierType_CDC	ISO
Organization Identifier	13.10	ST	20	RE		
Contact Person's Name	30	XPN		CE		
Contact Person's Telephone Number	31	XTN		RE		
Contact Person's Address	32	XAD		RE		

e. **ORC**

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Order Control	1	ID	2	R		RE
Placer Order Number	2	EI		CE	Same as OBR-2	23456&EHR&2.16.840.1.113883.19.3.2.3&ISO^9700122&Lab&2.16.840.1.113883.19.3.1.6&ISO
Filler Order Number	3	EI		R	Same as OBR-3	23456^EHR^2.16.840.1.113883.19.3.2.3^ISO
Entity Identifier	3.1	ST	199	R		23456
Namespace ID	3.2	IS	20	RE	Locally managed	EHR
Universal ID	3.3	ST	199	R	Must be an OID	2.16.840.1.113883.19.3.2.3
Universal ID Type	3.4	ID	6	R	PHVS UniversalIdType_ELR	ISO
Placer Group Number	4	EI		RE	Requisition number	
Ordering Provider	12	XCN		RE	Same as OBR-16	1234^Admit^Alan^A^III^Dr^^^&2.16.840.1.113883.19.4.6^ISO^L^^^EI^&2.16.840.1.113883.19.4.6^ISO^L^^^EI^MD
ID Number	12.1	ST	15	RE		1234
Family Name	12.2	FN	50	RE		Admit
Given Name	12.3	ST	30	RE		Alan
Second and Further Given Names or Initials Thereof	12.4	ST	30	RE		A
Suffix (e.g. JR or III)	12.5	ST	20	RE		III
Prefix (e.g. DR)	12.6	ST	20	RE		Dr
Degree (e.g. MD)	12.7	IS	20	O	PHVS DegreeLicenseCertificate HL7 2x	
Assigning Authority	12.9	HD		CE	Required if ORC-12.1 is populated	
Name Type Code	12.10	ID	5	RE	PHVS NameType_HL7 2x	L
Identifier Type Code	12.13	ID	5	CE	PHVS IdentifierType_CDC	EI
Assigning Facility	12.14	HD		RE		
Professional Suffix	12.2	ST	199	RE	PHVS DegreeLicenseCertificate HL7 2x	
Call Back Phone Number	14	XTN		RE	Phone number associated with original order placer; same as OBR-17	^WPN^PH^^1^555^5552003
Telecommunication Use Code	14.2	ID	3	RE	PHVS TelecommunicationUseCode_HL7 2x	WPN

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Telecommunication Equipment Type	14.3	ID	8	RE	PHVS_TelecommunicationEquipmentType_HL7_2x	PH
Email Address	14.4	ST	199	CE		
Country Code	14.5	NM	3	CE	Required if ORC-14.7 is present; otherwise must be empty	1
Area/City Code	14.6	NM	3	CE	3-digit area code	555
Phone Number	14.7	NM	9	CE	7-digit unformatted phone number	5552003
Ordering Facility Name	21	XON	250	R	May be the same as ORC-12	Level Seven Healthcare, Inc.^L^^^^&2.16.840.1.113883.19.4.6^ISO^XX^^1234
Organization Name	21.1	ST	50	R		Level Seven Healthcare, Inc.
Organization Name Type Code	21.2	IS	20	RE	PHVS_TypeOfOrganizationalNameType_HL7_2x	L
Assigning Authority Identifier Type Code	21.6	HD		RE		
Organization Identifier	21.7	ID	5	CE	Required if ORC-12.10 is populated	ISO
Ordering Facility Address	21.10	ST	20	RE		
Street Address	22	XAD	250	R		1005 Healthcare Drive^^Ann Arbor^MI^99999^USA^B
Other Designation	22.1	SAD		RE		
City	22.2	ST	120	RE		
State or Province	22.3	ST	50	RE		
Zip or Postal Code	22.4	ST	50	RE	PHVS_State_FIPS_5-2	
Country	22.5	ST	12	RE		
Address Type	22.6	ID	3	RE	PHVS_Country_ISO_3166-1	
County/Parish Code	22.7	ID	3	RE	HL70190 PHVS_AddressType_HL7_2x	
Ordering Facility Phone Number	22.9	IS	20	RE	PHVS_County_FIPS_6-4	
Telecommunication Use Code	23	XTN	250	R		^WPN^PH^^1^555^5553001
Telecommunication Equipment Type	23.2	ID	3	RE	PHVS_TelecommunicationUseCode_HL7_2x	WPN
Telecommunication Equipment Type	23.3	ID	8	RE	PHVS_TelecommunicationEquipmentType_HL7_2x	PH

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Email Address	23.4	ST	199	CE		
Country Code	23.5	NM	3	CE	Required if ORC-23.7 is present; otherwise must be empty.	1
Area Code	23.6	NM	3	CE	3-digit area code	555
/Phone Number	23.7	NM	9	CE	7-digit unformatted phone number	5553001
Ordering Provider Address	24	XAD	250	R	Address of the provider requesting the order	4444 Healthcare Drive^Suite 123^AnnArbor^MI^99999^USA^B
Ordering Provider's Address 1	24.1	SAD	120	O	3 subcomponents	4444 Healthcare Drive
Ordering Provider's Address 2	24.2			O		Suite 123
Ordering Provider's City	24.3	ST	50	O		AnnArbor
Ordering Provider's State	24.4	ST	50	O	PHVS_State_FIPS_5-2	MI

f. **OBR**

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Set ID - OBR	1	SI	4	R		
Placer Order Number	2	EI		RE	Same as ORC-2	23456&EHR&2.16.840.1.113883.19.3.2.3&ISO^9700122&Lab&2.16.840.1.113883.19.3.1.6&ISO
Entity Identifier	2.1	ST	199	R		23456
Namespace ID	2.2	IS	20	RE	Local application ID	EHR
Universal ID	2.3	ST	199	R	Must be an OID	2.16.840.1.113883.19.3.2.3
Universal ID Type	2.4	ID	6	R	PHVS_UniversalIdType_ELRL	ISO
Filler Order Number	3	EI	22	R	Same as ORC-3; must be unique in messages containing multiple OBRs	9700123^Lab^2.16.840.1.113883.19.3.1.6^ISO
Entity Identifier	3.1	ST	199	R	CLIA number	9700123
Namespace ID	3.2	IS	20	RE	Local application ID	Lab
Universal ID	3.3	ST	199	R		2.16.840.1.113883.19.3.1.6
Universal ID Type	3.4	ID	6	R	CLIA preferred PHVS_UniversalIdType_ELRL	ISO
Universal Service Identifier	4	CWE	250	R	LOINC or Local Codes	50545-3^Bacterial susceptibility panel:-:Pt:Isolate:OrdQn:MIC^LN^^^^2.26
Identifier	4.1	ST	20	RE	LOINC code	50545-3
Text	4.2	ST	199	CE	LOINC description	Bacterial susceptibility panel:-:Pt:Isolate:OrdQn:MIC
Name of Coding System	4.3	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table0396	LN
Alternate Identifier	4.4	ST	20	RE	Local code	
Alternate Text	4.5	ST	199	CE	Local description	
Name of Alternate Coding System	4.6	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table0396	L
Observation Date/Time	7	TS	26	R	Specimen Collection Date/Time; same as OBX-14 and SPM-17.1	YYYYMMDD[HH[MM[SS[.S[S[S[S]]]]]]+/-ZZZZ]
Observation End Date/Time	8	TS	26	CE	Same as SPM-17.2	

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Relevant Clinical Information	13	ST		RE		
Ordering Provider	16	XCN	250	R	Same as ORC-12	1234^Admit^Alan^A^III^Dr^^^&2.16.840.1.113883.19.4.6^ISO^L^^^EI^&2.16.840.1.113883.19.4.6^ISO^^^^^^^MD
ID Number	16.1	ST	15	RE		1234
Family Name	16.2	FN		RE		Admit
Given Name	16.3	ST	30	RE		Alan
Second and Further Given Names or Initials Thereof	16.4	ST	30	RE		A
Suffix (e.g. JR or III)	16.5	ST	20	RE		III
Prefix (e.g. DR)	16.6	ST	20	RE		Dr
Degree (e.g. MD)	16.7	IS	20	O	PHVS_DegreeLicenseCertificate_HL7_2x	
Assigning Authority	16.9	HD		CE	Required if OBR-16.1 is populated	
Name Type Code	16.10	ID	5	RE	PHVS_NameType_HL7_2x	L
Identifier Type Code	16.13	ID	5	CE	PHVS_IdentifierType_CDC	
Assigning Facility	16.14	HD		RE		
Professional Suffix	16.21	ST	199	RE	PHVS_DegreeLicenseCertificate_HL7_2x	
Order Call Back Phone Number	17	XTN		R	Same as ORC-14	^WPN^PH^^1^555^5551005
Telecommunication Use Code	17.2	ID	3	RE	PHVS_TelecommunicationUseCode_HL7_2x	WPN
Telecommunication Equipment Type	17.3	ID	8	RE	PHVS_TelecommunicationEquipmentType_HL7_2x	PH
Email Address	17.4			CE		
Country Code	17.5	NM	3	CE	Required if OBR-17.7 is present; otherwise must be empty.	1
Area/City Code	17.6	NM	3	O	3-digit area code	555
Local Number	17.7	NM	7	O	7-digit unformatted phone number	5551005
Results Rpt/Status Chng - Date/Time	22	TS	26	R		YYYYMMDDHHMMSS.SS[...]+/-ZZZZ
Result Status	25	ID	1	R	F=Final C=Corrected P=Preliminary	F

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Parent Result	26	PRL	400	CE	If OBR-11 is valued "G" OBX parent result referred to in OBR-26. This field is valued with a pointer back to a result in the same message.	625-4&Bacteria identified:Prid:Pt:Stool:Nom:Culture&LN^1^Campylobacter jejuni
Parent Result	26.1	CWE		R	Ties back to its original OBX result under OBR 1 .	11475-1&MICROORGANISM IDENTIFIED&LN&080187&RSLT#1&L^1^&&HAEMIN&Haemophilus influenzae&L
Identifier	26.1.1	ST	20	RE		11475-1
Text	26.1.2	ST	199	CE		MICROORGANISM IDENTIFIED
Name of Coding System	26.1.3	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table0396	LN
Alternate Identifier	26.1.4	ST	20	RE		80187
Alternate Text	26.1.5	ST	199	CE		RSLT#1
Name of Alternate Coding System	26.1.6	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table0396	L
Sub ID	26.2	ST	20	RE		1
Result	26.3	TX		RE		&&HAEMIN&Haemophilus influenzae&L
Result Copies To	28	XCN	250	O		
Parent	29	EIP	200	CE	If OBR-11 is valued "G" If OBR-24 carries the value 'MB' and OBR-4 indicates the ordered test is a culture and sensitivity.	23456&EHR&2.16.840.1.113883.19.3.2.3&ISO^9700122&Lab&2.16.840.1.113883.19.3.1.6&ISO
Placer Assigned Identifier	29.1	EI		O		23456^EHR^2.16.840.1.113883.19.3.2.3^ISO
Entity Identifier	29.1.1	ST	199	R		23456
Namespace ID	29.1.2	IS	20	RE		EHR
Universal ID	29.1.3	ST	199	R		2.16.840.1.113883.19.3.2.3
Universal ID Type	29.1.4	ID	6	R	PHVS_UniversalIDType_ELR	ISO
Filler Assigned Identifier	29.2	EI		R		23456^EHR^2.16.840.1.113883.19.3.2.3^ISO

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Entity Identifier	29.2.1	ST	199	R		23456
Namespace ID	29.2.2	IS	20	RE		EHR
Universal ID	29.2.3	ST	199	R		2.16.840.1.113883.19.3.2 .3
Universal ID Type	29.2.4	ID	6	R	PHVS_UniversalIdType_ELR	ISO
Reason for Study	31	CWE	250	RE		
Principal Result Interpreter	32	NDL	200	RE		

g. **OBX**

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Value Type	2	ID	3	CE	PHVS_ValueType_EL R	
Observation Identifier	3	CWE	590	R	LOINC or Local Codes	625-4^Bacteria identified:Prid:Pt:Stool:Nom:Culture^LN^^^^2.26
Identifier	3.1	ST	20	RE	LOINC code	
Text	3.2	ST	199	CE	LOINC description	
Name of Coding System	3.3	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table03_96	
Alternate Identifier	3.4	ST	20	RE	Local code	
Alternate Text	3.5	ST	199	CE	Local description	
Name of Alternate Coding System	3.6	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table03_96	
Observation Sub-ID	4	ST	20	CE		
Observation Value	5	Varies - see IG Table 0125	65536	CE	OBX5 is required by NEDSS	66543000^Campylobacter jejuni^SCT^^^^January 2007
Identifier	5.1	ST	20	R		
Text	5.2	ST	199	RE		
Name of Coding System	5.3	ID	12	R	PHVS_CodingSystem_HL7_2x_Table03_96	
Alternate Identifier	5.4	ST	20	RE		
Alternate Text	5.5	ST	199	RE		
Name of Alternate Coding System	5.6	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table03_96	
Coding System Version ID	5.7	ST	10	RE		
Alternate Coding System Version ID	5.8	ST	10	RE		
Original Text	5.9	ST	199	RE		
Units	6	CWE	60	CE		
Identifier	6.1	ST	20	RE	PHVS_UnitsOfMeasure_CDC	
Text	6.2	ST	199	CE		
Name of Coding System	6.3	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table03_96	
References Range	7	ST	60	RE		
Abnormal Flags	8	CWE	20	CE		
Identifier	8.1	ST	20	RE	PHVS_AbnormalFlag_HL7_27	
Text	8.2	ST	199	CE		

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Name of Coding System	8.3	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table0396	
Observation Result Status	11	ID	1	R	PHVS_ObservationResultStatus_HL7_2x	
Date/Time of the Observation	14	TS		R	Specimen Collection Time; same as OBR-7 and SPM-17.1	YYYYMMDD[HH[MM[SS[.S[S[S[S]]]]]]]+/-ZZZZ]
Producer's ID	15	CWE	250	O	If populated, must be same as OBX-23	
Identifier	15.1	ST	20	RE	Lab's CLIA code	
Text	15.2	ST	199	CE	Lab's Name	
Name of Coding System	15.3	ID	12	CE	PHVS_CodingSystem_HL7_2x_Table0396	CLIA
Observation Method	17	CWE	250	RE		
Date/Time of the Analysis	19	TS	26	RE		CCYYHHMMSS
Performing Organization Name	23	XON		R		Level Seven Healthcare, Inc.^L^^^^&2.16.840.1.113883.19.4.6^ISO^X^^^1234
Organization Name	23.1	ST	50	CE		Level Seven Healthcare, Inc.
Organization Name Type Code	23.2	IS	20	RE	PHVS_TypeOfOrganizationalNameType_HL7_2x	L
Assigning Authority	23.6	HD		CE		
Identifier Type Code	23.7	ID	2.5	CE	PHVS_IdentifierType_CDC	ISO
Organization Identifier	23.10	ST	20	RE	Lab CLIA number	
Performing Organization Address	24	XAD		R		4444 Healthcare Drive^Suite 123^Ann Arbor^MI^99999^USA^B
Street Address	24.1	SAD		RE		4444 Healthcare Drive
Other Designation	24.2	ST	120	RE		Suite 123
City	24.3	ST	50	RE		AnnArbor
State or Province	24.4	ST	50	RE	PHVS_State_FIPS_5-2	MI
Zip or Postal Code	24.5	ST	12	RE		99999
Country	24.6	ID	3	RE	PHVS_Country_ISO_3166-1	USA
Address Type	24.7	ID	3	RE	HL70190 PHVS_AddressType_HL7_2x	B
County/Parish Code	24.9	IS	20	RE	PHVS_County_FIPS_6-4	

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Performing Organization Medical Director	25	XCN		RE		

h. SPM

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Set ID - SPM	1	SI	4	R		
Specimen ID	2	EIP		R	May be the same as OBR-2 and OBR-3 (NBS mapping)	23456&EHR&2.16.840.1.113883.19.3.2.3&ISO^9700122&Lab&2.16.840.1.113883.19.3.1.6&ISO
Placer Assigned Identifier	2.1	EI		O	May be the same as OBR-2	23456&EHR&2.16.840.1.113883.19.3.2.3&ISO
Entity Identifier	2.1.1	ST	199	R		23456
Namespace ID	2.1.2	IS	20	RE		EHR
Universal ID	2.1.3	ST	199	R		2.16.840.1.113883.19.3.2.3
Universal ID Type	2.1.4	ID	6	R	PHVS_UniversalIdType_ELR	ISO
Filler Assigned Identifier	2.2	EI		R	May be the same as OBR-3	9700122&Lab&2.16.840.1.113883.19.3.1.6&ISO
Entity Identifier	2.2.1	ST	199	R	Accession number	9700122
Namespace ID	2.2.2	IS	20	RE		Lab
Universal ID	2.2.3	ST	199	R		2.16.840.1.113883.19.3.1.6
Universal ID Type	2.2.4	ID	6	R	PHVS_UniversalIdType_ELR	ISO
Specimen Type	4	CWE_CRE		R	Either HL7 or SNOMED codes are acceptable (per IG but IG only points to HL7 PHIN VADS value set)	WB^Whole Blood^HL7^^^^^2.5.1
Identifier	4.1	ST	20	RE	PHVS_SpecimenType_HL7_2x	WB
Text	4.2	ST	199	C(RE/X)	Specimen source	Whole Blood
Name of Coding System	4.3	ID	12	C(R/X)	PHVS_CodingSystem_HL7_2x_Table0396	HL7
Alternate Identifier	4.4	ST		C(RE/X)	Local code	
Alternate Text	4.5	ST		C(RE/X)	Local description	
Name of Alternate Coding System	4.6	ID		C(R/X)	Local code system	
Specimen Type Modifier	5	CWE		RE	PHVS_ModifierOrQualifier_CDC	
Specimen Additives	6	CWE		RE	PHVS_AdditiveOrPreservative_HL7_2x	
Specimen Collection Method	7	CWE		RE	PHVS_SpecimenCollectionMethod_CDC	
Specimen Source Site	8	CWE_CRE		RE	Either HL7 or SNOMED codes are acceptable (per IG but IG only points to	49852007^Structure of median cubital vein (bodystructure)^SCT^^^^20080731

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
					HL7 PHIN VADS value set)	
Identifier	8.1	ST	20	RE	PHVS BodySite_HIT_SP	49852007
Text	8.2	ST	199	C(RE/X)		Structure of median cubital vein (bodystructure)
Name of Coding System	8.3	ID	12	C(R/X)	PHVS CodingSystem_HL7_2x_Table0396	SCT
Alternate Identifier	8.4	ST		C(RE/X)	Local code	
Alternate Text	8.5	ST		C(RE/X)	Local description	
Name of Alternate Coding System	8.6	ID		C(R/X)	Local code system	
Specimen Source Site Modifier	9	CWE		RE	PHVS ModifierOrQualifier_CDC	
Specimen Role	11	CWE		RE	PHVS SpecimenRole_CDC	
Specimen Collection Amount	12	CQ		RE	UCUM	
Specimen Description	14	ST		O	Can use this for 'free text' specimen source/site if unable to populate SPM-8	
Specimen Collection Date/Time	17	DR		R	Specimen Collection Time; same as OBR-7 and OBX-14	YYYYMMDD[HH[MM[SS[.S[S[S[S]]]]]]][+/-ZZZZ]
Range Start Date/Time	17.1	TS		RE		
Range End Date/Time	17.2	TS		RE		
Specimen Received Date/Time	18	TS		R		YYYYMMDD[HH[MM[SS[.S[S[S[S]]]]]]][+/-ZZZZ]
Specimen Reject Reason	21	CWE		RE	PHVS SpecimenRejectReason_HL7_2x	

i. **NTE**

Field Name	Seq	Data Type	Length	Usage	Comments and Value Sets	Examples (literal values in bold)
Set ID – NTE	1	SI		R		
Source of Comment	2	ID	1	RE	PHVS_SourceOfComment_HL7_2x	
Comment	3	FT		R	Comment	Comment goes here. It can be a very long comment.
Comment Type	4	CWE		RE	PHVS_CommentType_CDC	RE^Remark^HL70364^^^2.5.1

IV. Sample Messages

a. Culture with susceptibilities

MSH|^~\&|Epic^1.2.840.114350.1.13.364.2.7.2.695071^ISO|MERCY HOSPITAL
LAB^21D0668968^CLIA|NEDSS^2.16.840.1.114222.4.3.2.2.1.159.1^ISO|MDH^2.16.840.1.114222.4.1.1
0058^ISO|20251110110806|LABBACKGROUND|ORU^R01^ORU_R01|1V5VJPU_1G3J_0|T|2.5.1||||USA||||
PHLabReport-NoAck^ELR_Receiver^2.16.840.1.113883.9.11^ISO
SFT|Epic Systems Corporation^L^^^^ANSI&1.2.840&ISO^XX^^^1.2.840.114350|February
2025|Bridges|11.3.0.0||20250605235348
PID|1||99999999^^^^MERCY MEDICAL
CENTER&21D0668968&CLIA&1.2.840.114350.1.13.364.2.7.5.737384.0&ISO||BARKER^BOB^A^^^^L||19
000223|M||2054-5^Black or African American^CDCREC|201 W
Preston^^BALTIMORE^MD^21201^USA^H^^BALTIMORE||(123)123-
1234^PRN^CP^^1^410^7677000~||ENGLISH||||||2186-5^Not Hispanic or
Latino^CDCREC||||USA|N||20150624181247|1^1.2.840.114350.1.13.364.2.7.2.696570^ISO
ORC|RE|154556502^EPC^1.2.840.114350.1.13.364.2.7.2.798268^ISO|Acc26M00001^Beaker^1.2.840.1
14350.1.13.364.2.7.3.798268.320^ISO|25M-
311M00025^Beaker^1.2.840.114350.1.13.364.2.7.3.798268.320^ISO||||||0000000^GLUE^ELMER^^^^^
^MEB&2.16.840.1.113883.4.520&ISO^^^^NPI|(410)328-
5756^WPN^PH^^1^410^3285756|20251107102603||||Mercy Health Services SA^D^^^^MERCY
HEALTH SERVICES&1.2.840.114350.1.13.364.2.7.2.696570&ISO^XX^^^10|345 ST PAUL
PLACE^^BALTIMORE^MD^21202-2102^^B|^WPN^PH^^1^410^9999999|345 St. Paul Place^Bunting
Building^BALTIMORE^MD^21202^^C
OBR|1|154556502^EPC^1.2.840.114350.1.13.364.2.7.2.798268^ISO|25M-
311M00025^Beaker^1.2.840.114350.1.13.364.2.7.3.798268.320^ISO|630-4^Bacteria Ur
Cult^LN^URC^URINE CULTURE^L^2.78||20251107091200||||Unit Collect||||0000000^GLUE^ELMER
^^^^^^MEB&2.16.840.1.113883.4.520&ISO^^^^NPI|(410)999-
9999^WPN^PH^^1^410^||||20251110110801||Microbiology|P||||||
TQ1|1|||||20251107102700||Routine
OBX|1|CWE|630-4^Bacteria Ur Cult^LN^URINECULTMMC^URINE
CULTURE^L^2.78|1|446870005^CARBAPENEM RESISTANT KLEBSIELLA
PNEUMONIAE^SCT^KPNEUMOCRE^KLEBSIELLA PNEUMONIAE CRE^L^^^KLEBSIELLA PNEUMONIAE
CRE|ug/mL^microgram per milliliter^UCUM||A^Abnormal (applies to non-numeric
results)^HL70078||P||20251107091200||LAB8473^LAB METHOD: PHOENIX BROTH
MICRODILUTION^LNEAP||20251110110801||||MERCY MEDICAL
CENTER^D^^^^2.16.840.1.113883.4.520&ISO^XX^^^21D0668968|301 St Paul
Place^^Baltimore^MD^21202^USA^B^^24510
SPM|1|154556502&EHR&2.16.840.1.113883.19.3.2.3&ISO^25M-
311M00025&Beaker&1.2.840.114350.1.13.364.2.7.3.798268.320&ISO||UR^Urine^HL7||||ORH^Foley^HL
7||||||20251107091200|20251107102603
ORC|RE|154556502^EPC^1.2.840.114350.1.13.364.2.7.2.798268^ISO|25M-

311M00025^Beaker^1.2.840.114350.1.13.364.2.7.3.798268.320^ISO|25M-
311M00025^Beaker^1.2.840.114350.1.13.364.2.7.3.798268.320^ISO|||||||1417272963^DOLITTLE^JOH
N^^^^^MEB&2.16.840.1.113883.4.520&ISO^^^^NPI|(410)328-
5756^WPN^PH^^^410^3285756|20251107102603|||||Mercy Health Services SA^D^^^^MERCY HEALTH
SERVICES&1.2.840.114350.1.13.364.2.7.2.696570&ISO^XX^^^10|345 ST PAUL
PLACE^^BALTIMORE^MD^21202-2102^^B|^WPN^PH^^1^410^9999999|345 St. Paul Place^Bunting
Building^BALTIMORE^MD^21202^^C
OBR|2|154556502^EPC^1.2.840.114350.1.13.364.2.7.2.798268^ISO|25M-
311M00025^Beaker^1.2.840.114350.1.13.364.2.7.3.798268.320^ISO|630-4^Bacteria Ur
Cult^LN^LAB8473^LAB METHOD: PHOENIX BROTH
MICRODILUTION^L|||20251107091200|||G|||||1417272963^DOLITTLE^JOHN^^^^^MEB&2.16.840.1.11
3883.4.520&ISO^^^^NPI|(410)328-
5756^WPN^PH^^1^410^3285756|||||20251110110801||Microbiology|P|630-4&Bacteria Ur
Cult&LN&URINECULTMMC&URINE CULTURE&L&2.78^1^CARBAPENEM RESISTANT KLEBSIELLA
PNEUMONIAE|||154556502&EPC&1.2.840.114350.1.13.364.2.7.2.798268&ISO^25M-
311M00025&Beaker&1.2.840.114350.1.13.364.2.7.3.798268.320&ISO|||||||630-4^Bacteria Ur
Cult^LN^URC^URINE CULTURE^EXTEAP^2.78
OBX|1|SN|35801-0^Ertapenem Islt MIC^LN^ERTAPENEM^Ertapenem^L^2.78|1|>^1|ug/mL||R^Resistant.
Indicates for microbiology susceptibilities
only^HL70078|||P|||20251107091200|||||20251110110216|||||MERCY MEDICAL
CENTER^D^^^^2.16.840.1.113883.4.520&ISO^XX^^^21D0668968|301 St Paul
Place^^Baltimore^MD^21202^USA^B^^24510
OBX|2|SN|6652-2^Meropenem Islt
MIC^LN^MEROPENEM^Meropenem^L^2.78|1|>^8|ug/mL||R^Resistant. Indicates for microbiology
susceptibilities only^HL70078|||P|||20251107091200|||||20251110110216|||||MERCY MEDICAL
CENTER^D^^^^2.16.840.1.113883.4.520&ISO^XX^^^21D0668968|301 St Paul
Place^^Baltimore^MD^21202^USA^B^^24510

b. PCR test

MSH|^~\&|HNAM^2.16.840.1.113883.3.3022^ISO|General
Hospital^21D0869030^CLIA|NEDSS^2.16.840.1.114222.4.3.2.2.1.159.1^ISO|MDH^2.16.840.1.114222.
4.1.10058^ISO|20251128110329-
5||ORU^R01^ORU_R01|Q121479389T122690588|T|2.5.1||AL|NE||8859/1||PHLabReport-
NoAck^ELR_Receiver^2.16.840.1.113883.9.11^ISO
SFT|Corepoint Health|6.0.3|Corepoint Integration Engine 6.0|03132013-1785-6||20130701
PID|1||999999^^^GH&2.16.840.1.113883.3.3022&ISO^MR^GH&21D0869030&CLIA||Cooper^Winnie^^
^^L||19360420|F||2054-5^Black or African American^CDCREC^2^Black^HL7STDSRC^^^Black|201 W
Preston St^^Baltimore^MD^21201^^^Baltimore
city||(410)7677000^PRN^PH^^1^410^7677000^^Cellular||^^U^Unknown^HL7STDSRC^^^Unknown|
^^^CR^Christian Church^HL7STDSRC^^^Christian Church|999999^^^FIN^FIN
NBR^KEANEADT||||2186-5^Not Hispanic or Latino^CDCREC^2^Non-Hispanic^HL7STDSRC^^^Non-
Hispanic|||0
ORC|RE|2005100608^REQNUMBER^2.16.840.1.113883.3.3022^ISO|102588625^HNAM_ORDERID^2.1
6.840.1.113883.3.3022^ISO|||||||1083312234^Brown^Bobby^^^GH&2.16.840.1.113883.3.3022&IS
O^L^^^DN||6411100^WPN^PH^^1^410^7677000|||||General
Hospital^L^^^GH&2.16.840.1.113883.3.3022&ISO^^^21D0869030|201 W
Preston^^Baltimore^MD^21201^USA^^^Baltimore|(410) 767-7000^WPN^PH^^1^410^7677000|
General Hospital^201 W Preston^^Baltimore^MD^21201|||||600-7^C Blood^LN^4214007^Blood
Culture^HL7STDSRC^^^Blood Culture
OBR|1|2005100608^REQNUMBER^2.16.840.1.113883.3.3022^ISO|102588625^HNAM_ORDERID^2.16.
840.1.113883.3.3022^ISO|85762-3^Biofire BCID^LN^8675309^Biofire BCID^HL7STDSRC^^^Biofire
BCID||20251127153500||42^EDUser^ED Tech^Cerner^^^PERSONNEL PRIMARY
ID^Personnel^^^Personnel Primary
ID||||20251127153500||1083312234^Brown^Bobby^^^GH&2.16.840.1.113883.3.3022&ISO^L^^^D
N|6411100^WPN^PH^^1^410^6411100|||General Hospital, 201 W Preston St, Baltimore MD 21201 -
Phone: 410-767-7000||20251128110327||General
Lab|F|&&LN^1||2005100608&REQNUMBER&2.16.840.1.113883.3.3022&ISO^102582299&HNAM_ORD
ERID&2.16.840.1.113883.3.3022&ISO|||||20251127141300|||||||600-7^C
Blood^LN^4214007^Blood Culture^HL7STDSRC^^^Blood Culture
OBX|32|CE|85778-9^HAEMOPHILUS INFLUENZAE DNA^LN^18670^Haemophilus
influenzae^L^^^HAEMOPHILUS INFLUENZAE DNA:PRTHR:PT:BLD.POS GROWTH:ORD:NON-
PROBE.AMP.TAR||260373001^Detected^SNM||Not
Detected|A||F||YY|20251127153500|^Kitty^Cindy^^^GH LAB MT^^^Personnel||20251128105018|||
General Hospital^L^^^GH&2.16.840.1.113883.3.3022&ISO|201 W
Preston^^Baltimore^MD^21201^USA|^Tooth^Tim^^^MD
SPM|1|2005100608&REQNUMBER&2.16.840.1.113883.3.3022&ISO^102588625&HNAM_ORDERID&2.1
6.840.1.113883.3.3022&ISO||BLOOD^Blood^SCT^^^Blood|||Micro Spec|ARML^Arm L^^^L|||||L U
Arm||20251127153500|20251128093300

c. Test with quantifiable result

MSH|^~\&|LABCORP^2.16.840.1.113883.3.362.90.100^ISO|LABCORP^34D0655059^CLIA|MDDOH|MD|20251129021756-0500|MD001|ORU^R01^ORU_R01|20251129021756203194|P|2.5.1||||USA||||PHLabReport-NoAck^^2.16.840.1.113883.9.11^ISO SFT|LABCORP^L^^^^LABCORP&2.16.840.1.113883.3.362.90.100&ISO^XX^^^^LABCORP|ST8|SR|1|LABCORP PID|1||9999999^^^^LABCORP&2.16.840.1.113883.3.362.90.100&ISO^PI^Labcorp Burlington&34D0655059&CLIA||RUBBLE^BARNEY||1950508|M||UNK^unknown^NULLFL^^^^20090312|201 W Preston St^^BALTIMORE^MD^21201^USA^^^^|^PRN^PH^^^410^7677000||||||||N^Not Hispanic or Latino^HL70189^^^^HL7v2.5.1 ORC|RE||32825671130^LABCORP^2.16.840.1.113883.3.362.90.100^ISO||||||^Simpson^H|^WPN^PH^^^410^9999999|||||| MDH|201 W. Preston St^^Baltimore^MD^21201^USA^B|^PH^^^410^7677000|201 W. Preston St^^Baltimore^MD^21201^USA^B OBR|1||32825671130^LABCORP^2.16.840.1.113883.3.362.90.100^ISO|11011-4^Hepatitis C virus RNA^LN^550090^HCV RNA by PCR, Qn Rfx Geno^L^2.81^1||202511240512-0500||||||^Simpson^H|^WPN^PH^^^410^7677000||||20251129021756-0500||F|||| OBX|1|SN|11011-4^Hepatitis C virus RNA^LN^550028^Hepatitis C Quantitation^L^2.81^1|^522000.0000|[IU]/mL^international unit per milliliter^UCUM^^^^20171130||||F||202511240512-0500|34D0655059^Labcorp Burlington^CLIA||0128^Nucleic acid probe with amplification^OBSMETHOD^^^^20090501||20251125192315-0500||||Labcorp Burlington^D^^^^CLIA&2.16.840.1.113883.4.7&ISO^XX^^^^34D0655059|1447 York Court^^Burlington^NC^27215 OBX|2|CWE|32286-7^Hepatitis C virus genotype^LN^550513^Hepatitis C Genotype^L^2.81^1||603413005^Hepatitis C virus subtype 1a^SCT^HC1A^1a^L^20230301^1||||F||202511240512-0500|34D0655059^Labcorp Burlington^CLIA||0128^Nucleic acid probe with amplification^OBSMETHOD^^^^20090501||20251128152106-0500||||Labcorp Burlington^D^^^^CLIA&2.16.840.1.113883.4.7&ISO^XX^^^^34D0655059|1447 York Court^^Burlington^NC^27215 NTE|1|L|1a SPM|1|^32825671130&LABCORP&2.16.840.1.113883.3.362.90.100&ISO||122592007^Acellular blood^SCT^^^^20240301||||||||||202511240512-0500|202511241442-0500||||||||

d. Test with titer result

MSH|^~\&#|BIOREFERENCE LABS^2.16.840.1.113883.3.8851^ISO|BIOREFERENCE
LABS^31D0652945^CLIA|MDDOH|MD|20251126081519-
0500||ORU^R01^ORU_R01|2539933.66180456|P|2.5.1|||NE|NE||||PHLabReport-
NoAck^^2.16.840.1.113883.9.11^ISO
SFT|BIOREFERENCE LABS^^^^^^^|1.0|ReportableOutput|Binary ID unknown||20251023
PID|1||1790359^^^BIOREFERENCE LABS&2.16.840.1.113883.3.8851&ISO^PT^BIOREFERENCE
LABS&2.16.840.1.113883.3.8851&ISO||FLINTSTONE^FRED^^^^^L||195403269|M||2054-5^Black or
African-American^HL70005|201 W Preston
St^^Baltimore^MD^21201^USA^M||^PH^^^410^7677000||||||||N|||||||
ORC|RE||103921885^BIOREFERENCE LABS^2.16.840.1.113883.3.8851^ISO||CM|||||||
SMITH^BOB||^PH^^^410^7677000||||||MDH|201 W. Preston
St^^Baltimore^MD^21201^USA^B|^PH^^^410^7677000|201 W. Preston
St^^Baltimore^MD^21201^USA^B
OBR|1||103921885^BIOREFERENCE LABS^2.16.840.1.113883.3.8851^ISO|11084-1^Reagin Ab [Titer] in
Serum^LN^0142-0^RPR^L^^v
unknown^^^^^^2.16.840.1.113883.6.1|||202511210000||||||||^^^|^PH^^^410^7677000|||||2025112516
0433-0500||F|||||||||||||||||
OBX|1|SN|11084-1^Reagin Ab [Titer] in Serum^LN^0142-0^RPR^L^^v
unknown^^^^^^2.16.840.1.113883.6.1|1|^1^:^4|{titer}^^ISO+|NON-
REACTIVE|A^Abnormal^HL70078^^^^2.7|||F|||20251125080229|||||202511250802|||BioReference
Health, LLC^^^^^BIOREFERENCE LABS&2.16.840.1.113883.3.8851&ISO^XX^^^31D0652945|481
Edward H. Ross Dr^^Elmwood Park^NJ^07407
SPM|1|^103921885&BIOREFERENCE LABS&2.16.840.1.113883.3.8851&ISO||122555007^Venous blood
specimen^SCT^BLDV^Blood venous^L||||||||||202511210000|202511220254|||||||||
OBR|2||103921885^BIOREFERENCE LABS^2.16.840.1.113883.3.8851^ISO|24110-9^Treponema
pallidum Ab [Presence] in Serum by Immunoassay^LN^0334-3^T. Pallidum Ab. (CIA)^L^^v
unknown^^^^^^2.16.840.1.113883.6.1|||202511210000||||||||^^^|^PH^^^410^7677000|||||2025112516
0433-0500||F|||||||||||||||||
OBX|1|CWE|24110-9^Treponema pallidum Ab [Presence] in Serum by Immunoassay^LN^0334-3^T.
Pallidum Ab. (CIA)^L^^v
unknown^^^^^^2.16.840.1.113883.6.1|1|10828004^Positive^SCT||NEGATIVE|A^Abnormal^HL70078^^^^
^2.7|||F|||20251125160140|||||202511251601|||||BioReference Health, LLC^^^^^BIOREFERENCE
LABS&2.16.840.1.113883.3.8851&ISO^XX^^^31D0652945|481 Edward H. Ross Dr^^Elmwood
Park^NJ^07407
SPM|1|^103921885&BIOREFERENCE LABS&2.16.840.1.113883.3.8851&ISO||122555007^Venous blood
specimen^SCT^BLDV^Blood venous^L||||||||||202511210000|202511220254|||||||||