NAACCR Standards for Cancer Registries
Volume V Version 2.2
Summary Table-Specs
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Introduction

This document provides specifications for the HL7 interface to be used between any laboratory and any central cancer registry, who are using the HL7 Version 2.3.1, based on NAACCR Standards for Cancer Registries Volume V, Pathology Laboratory Electronic Reporting Version 2.2.[http://www.naaccr.org/StandardsandRegistryOperations/VolumeV.aspx]. There are many examples included for the HL7 fields.

NOTE: The document should be used as an updated "At-a-Glance" document, and is *not* a substitute for the detailed information provided in Volume V Version 2.2 available at the above mentioned link.

NAACCR OPTIONALITY (OPT): R – required; RE – required or empty; O – optional; C – Conditional on the trigger event or on some other field(s); CE-conditional or empty; X – not used with this trigger event, may be skipped; B – left for backward compatibility with previous version of HL7. Please note: starting with HL7 Version 2.5.1 "Optionality" is being referred to as "Usage" and "Number of Repetitions allowed" is being referred to as "Cardinality" (showing the maximum number of repetitions a receiving system is required to accept and process).

1.1 HL7 Specification

[NAACCR Volume V Version 2.2., with some reference to/comparison to NAACCR Volume V Version 4.0 in the Comments field, where needed.]

1.1.1 MSH (Message Header Segment)

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP#	Expected Value/Example	Comments
1	1	ST	R		Field separator		R		|	
2	4	ST	R		Encoding characters		R		^~\&	
3	180	HD	O		Sending application		O		Example: MSH|^~\&|**HLS**|	In Volume V Version 4.0, usage for this field is RE. See *User-defined Table 0361*, for the first component.
4	180	HD	O		Sending facility	7010,7020	R		Example: |HITECK PATH LAB-ATLANTA^3D93284099^CLIA|	**Note: This is a NAACCR required field and must be populated.** It's usage is optional, according to the HL7 standard.
4.1		IS			Namespace ID	7020	R		HITECK PATH LAB-ATLANTA	
4.2		ST			Universal ID	7010	R		3D93284099	Can be CLIA number of the sending facility.
4.3		ID			Universal ID type				CLIA	
6	180	HD	O		Receiving facility		O			In Volume V Version 4.0, usage for this field is RE.
7	26	TS	O		Date/time of message	7490	R		Example: |20130301143012|	**Note: This is a NAACCR required field and must be populated.** It's usage is optional, according to the HL7 standard.

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP#	Expected Value/Example	Comments
9	7	CM	R		Message type		R		ORU^R01	In HL7 Version 2.5.1 this field has data type MSG.
10	20	ST	R		Message control ID	7500	R			System generated unique ID
11	3	PT	R		Processing ID	7510	R		P or D	"P" – for Production use "D" – for Development/Debugging use
12	60	VID	R		Version ID		R		2.3.1	
14	180	ST	O		Continuation pointer		O			In Volume V Version 4.0, usage for this field is CE. This field is not expected to be used.
17	3	ID	O		Country code		O			In Volume V Version 4.0, usage for this field is RE.
19	60	CE	O		Principal language of message		O			In Volume V Version 4.0, usage for this field is RE. Also, the length is increased to 250.
21	10	ID	O	Y	Conformance statement ID		RE	Y/3	2.2	Field is forward-adopted from HL7 Version 2.4. The field is used to show Volume V version number (i.e., 2.2). Note: In Volume V Version 4.0, the data type is EI and the max length is 427.

1.1.1.2 PID (Patient Identification Segment)

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP#	Expected Value/Example	Comments
1	4	SI	O		Set ID – Patient ID		O		1	In Volume V Version 4.0, usage for this field is R.
2	20	CX	B		Patient ID (External)		O			In Volume V Version 4.0, usage for this field is RE.
3	20	CX	R	Y	Patient ID list	2300, 2320,	R		Example: |010203040^^^^MR^STJ&123456&AHA~ 111223333^^^^SS^~ 97810430^^^^PI^ HITECK PATH LAB-ATL&3D9328409&CLIA|	Medical Record Number (MR) from the hospital data system or SSN, or Laboratory's unique Patient ID (PI) Number used by reporting lab
3.1		ST			ID Number	2300	RE		010203040	
3.2		ST			Check digit		X			
3.3		ID			Code identifying check digit schema		X			
3.4		HD			Assigning authority		O			
3.4.1		ID			Namespace ID		O			
3.4.2		ST			Universal ID		O			
3.4.3		ID			Universal ID Type		O			
3.5		IS			Identifier type code		C		MR	
3.6		HD			Assigning facility		O		STJ&123456&AHA	
3.6.1		IS			Namespace ID		O		STJ	
3.6.2		ST			Universal ID		O		123456	
3.6.3		ID			Universal ID Type		O		AHA	
PID					**Repeat**					**Repeat 3.1 through 3.6.3 for SS (Social Security Number) or PI (Patient Identifier)**
5	158	XPN	R	Y	Patient name	2230, 2240, 2250	R	Y/8	Example: |SAMPLE30^ALLAN|	Last Name^First Name^Middle Name
5.1		ST			Family name	2230	R		SAMPLE30	
5.2		ST			Given name	2240	R		ALLAN	
5.3		ST			Middle initial or Middle name	2250	RE			
5.4		ST			Suffix		O			
5.5		ST			Prefix		O			
5.6		ST			Degree		O			
5.7		ST			Name type code		O			
5.8		ID			Name representation code		O			

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP#	Expected Value/Example	Comments
7	26	TS	O		Patient Date/Time of Birth	240	RE		Example: |19530621|	Patient DOB in format YYYYMMDD
8	1	IS			Patient sex	220	RE		F or M or U	F-Female M-Male U-Unknown
9	48	XPN	O	Y	Patient alias	2280	O	Y		In Volume V Version 4.0 usage for this field is RE. Note: In Volume V Version 4.0 the length of this field is 250.
10	80	CE	O	Y	Patient race	160	O	Y	Example: |2054-5^Black or African American^CDCREC^^^|	Please use the CDC's Race/Ethnicity Code Set 1.0 Note: In Volume V Version 4.0 the length of this field is 250.
11	106	XAD	O	Y	Patient address	70,80,100,2330,7520	RE **See Note 1**		Example: |2166 Wells Dr^Apt B^Seattle^WA^98109^USA|	Format: Street Address^Address 2^City^State^ZIP^Country In Volume V Version 4.0 usage for this field is RE. Note: In Volume V Version 4.0, the length of this field is 250.
11.1		ST			Street address	2330	RE		2166 Wells Dr	
11.2		ST			Other designation		O		Apt B	
11.3		ST			City	70	RE		Seattle	
11.4		ST			State or province	80	RE		WA	
11.5		ST			Zip or postal code	100	RE		98109	
11.6		ID			Country				USA	
13	40	XTN	O	Y	Phone number-home	2360	O	Y		In Volume V Version 4.0 usage for this field is RE. Note: In Volume V Version 4.0, the length of this field is 250.
14	40	XTN	O	Y	Phone number-business		O	Y/4		In Volume V Version 4.0 usage for this field is RE. Note: In Volume V Version 4.0, the length of this field is 250.
15	60	CE	O		Primary language		O			In Volume V Version 4.0 usage for this field is RE. Note: In Vol V Version 4.0, the length of this field is 250.
16	80	CE	O		Marital status	150	RE		Example: |A|	Use suggested values for Marital Status from *User-defined Table 0002*, from Volume V Version 2.2. A-Separated D- Divorced M- Married S- Single W- Widow Note: In Volume V Version 4.0, the length of this field is 250.
17	80	CE	O		Religion	260	O			In Volume V Version 4.0, usage for this field is RE. Note: In Volume V Version 4.0, the length of this field is 250.
18	20	CX	O		Patient account number		O			In Volume V Version 4.0, usage for this field is RE. Note: In Volume V Version 4.0, the length of this field is 250.
19	16	ST	B		SSN number-patient	**See Note 1**	B		Example: |123456789|	Note: provide SSN without dashes (-).

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP#	Expected Value/Example	Comments
22	80	CE	O	Y	Ethnic group	190	RE	Y/4	Examples: |2137-8| Spaniard |2148-5| Mexican	See *User-defined Table 0189-Ethnic group* for valid values. Corresponds to NAACCR data item Spanish/Hispanic Origin [190]. Note: In Volume V Version 4.0, the length of this field is 250.
23	60	ST	O		Birth place		O			In Volume V Version 4.0, usage for this field is RE. Note: In Volume V Version 4.0, the length of this field is 250.
29	26	TS	O		Patient death date and time		O			In Volume V Version 4.0, usage for this field is RE.
30	1	ID	O		Patient death indicatior	1760	RE		N	See *HL7 Table 0136-* Valid values are Y/N (Yes/No). Note: requires conversion from HL7 values to NAACCR codes (see NAACCR Standards Volume II).
(31)	*1*	*ID*	*O*		*Identity unknown indicator*					***Note:*** *This field does not exist in HL7 Version 2.3.1, but does exist in HL7 Version 2.5.1 and therefore in Volume V Version 4.0. The usage is RE.*
(32)	*20*	*IS*	*O*	*Y*	*Identity reliability code*			*Y/3*		***Note:*** *This field does not exist in HL7 Version 2.3.1, but does exist in HL7 Version 2.5.1 and therefore in Volume V Version 4.0. The usage is RE.*
(39)	*250*	*CWE*		*Y*	*Tribal citizenship*			*Y/5*		***Note:*** *This field does not exist in HL7 Version 2.3.1, but does exist in HL7 Version 2.5.1 and therefore in Volume V Version 4.0. The usage is RE.*

Note 1: Required field, but data may not always be provided by the lab.

1.1.1.3 PV1 (Patient Visit Segment)

The PV1 segment is used by cancer reporting applications to send provider information. Not all vendor software may be able to support this segment; if not, this segment is not required.

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP#	Expected Value/Example	Comments
1	4	SI	O		Set ID-PV1		O			In Volume V Version 4.0, usage for this field is RE.
2	1	IS	R		Patient class		R		N	PV1-2 is an HL7 required field. Because there is no practical usage for this field in the cancer reporting message, the value "N" for Not Applicable shouldl be sent.
7	250	XCN	O	Y	Attending doctor	2460,2465	RE	Y/2	Example:|^Smith^John^^^Dr.^MD^^^L^^^^Daleton&11D234343&CLIA~ ^Slinky^Joe^^^Dr.^MD^^^A||~^^Bones^^^DR^PHD^^^N||1234567^Welby^M^J^Jr^Dr^^^&2.16.840.1.113883.4.6&ISO^L^^^NPI|	Corresponds to NAACCR data item Physician Managing [2460] for license number (or other local number), or NPI Physician Managing [2465] for National Provider Identifier (NPI). Note: the introduction of NPI numbers required Volume V Version 4.0 accommodate this field. Therefore, it has been forward-adopted for Volume V Version 2.2. message. The field sequences are <u>not</u> used to indicate multiple attending doctors.
8	250	XCN	O	Y	Referring doctor	2470	RE	Y/2	Example: |1234567^Conrad^Millie^^^^PHD^^^L^^^NPI~1234567^Vanilli^Manilli^^^^PHD^^^A||12188^Hippocrates^Harold^H^IV^Dr^MD^^& Provider Master.Community Health and Hospitals&L^L^9^M10^DN^&Good Health Hospital.Community Health and Hospitals&L^A|	Corresponds to NAACCR data item Physician Follow-up [2470]. The field sequences are <u>not</u> used to indicate multiple referring doctors. Please refer to *User-defined Table 0010-Physician ID*, for suggested values.
9	250	XCN	O	Y	Consulting doctor		RE	Y/2	Example: |158891^Williamson^Jackie^S^^^PHD^^^L^^^NPI~1234567^ Everyman^Adam^A^III^DR^PHD^ADT01^^L^4^M11^MR|	NAACCR recommends that this field be used to transmit consulting physician information, althougth HL7 Version 2.3.1 says that this field is only for backwards compatibility. In Volume V Version 4.0, the usage is still RE. The field sequences <u>allow for indicating multiple</u> consulting doctors. Please refer to *User-defined Table 0010-Physician ID*, for suggested values.

17	250	XCN	O	Y	Admitting doctor		RE	Y/2	Example: |^Smith^John^^^Dr.^MD^^^L^^^^Daleton&11D234343&CLIA ~^Slinky^Joe^^^Dr.^MD^^^A| |~^^Bones^^^DR^PHD^^^N| |1234567^Welby^M^J^Jr^Dr^^^&2.16.840.1.113883.4.6&ISO^L^^^NPI|	The field sequences are <u>not</u> used to indicate multiple admitting doctors. Please refer to *User-defined Table 0010-Physician ID*, for suggested values.

1.1.1.4 ORC (Common Order Segment)

There should only be one ORC segment per HL7 message where each HL7 message represents a single accession by the lab.

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR OPT	NAACCR RP#	Expected Value/Example	Comments
1	2	ID	R		Order control number		R		RE	Value "RE" in the example means observations to follow.
21	60	XON	O	Y	Ordering facility name and (if available) IHA Number	7190,7200	C	Y/4	Example: |University Hospital^ ^470381^^American Hospital Association^AHA|	Note1: In Volume V Version 4.0, the length of this field is 250. Note2: The third component (<ID number> (NM)) cannot be a CLIA; it must be numeric. In the U.S., the 'AHA' number can be used for hospitals, and/or the NPI number, which can also be used for other providers.
21.1					Organization name		R		University Hospital	
21.2					Type code		O			
21.3					ID number		RE		470381	
21.4					Check digit		X			
21.5					Code identifying check digit scheme		X			
21.6					Assigning authority		C		American Hospital Association	
21.7					Identifier type code		X		AHA	
21.8					Assigning facility		O			
21.9					Name representation code		O			
22	106	XAD	O	Y	Ordering facility address	7210, 7220, 7230, 7240,7235	RE	Y/4	Example: |2217 Rainer Way^^Renton^WA^98002^USA^M^^Black Hawk^^A|	Note: In Volume V Version 4.0, the length of this field is 250.
22.1		ST			Street address	7210	RE		2217 Rainer Way	
22.2		ST			Other designation		O			
ORC 22.3		ST			City	7220	RE		Renton	

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR OPT	NAACCR RP#	Expected Value/Example	Comments
22.4		ST			State or province	7230	RE		WA	
22.5		ST			Zip or postal code	7240	RE		98002	
22.6		ID			Country	7235	O		USA	
22.7		ID			Address type		O		M	
22.8		ST			Other geographic designation		O			
22.9		IS			County/parish code		O		Black Hawk	
22.10		IS			Census tract		O			
22.11		ID			Address representation code		O		A	
23	48	XTN	O	Y	Ordering facility phone number	7250	RE	Y/4	Volume V Version 4.0 Example: |^ASN^PH^helpline@medilab^^206^5549097| OR Volume V Version 2.2 Example: |^ASN^PH^^^206^5549097~^NET^Internet^helpline@medilab.com|	Note: In Volume V Version 4.0, the length of this field is 250. Note: Both of these structures are completely valid and legal in Volume V Versions 2.2 and 4.0, and illustrate different means of sending the same information.
23.1		TN			Telephone number		RE		(206)554-9097	Data type TN is only used for this first component in HL7 Version 2.3.1, but is ST in HL7 Version 2.5.1. The use of this component, 23.1, is discouraged in favor of 23.5, 23.6, 23.7, 23.8 and 23.9 (the structured form should be used instead). Note that the parenthesis and hyphen, used in the unstructured telephone number (23.1), must not be used in the structured components.
23.2		ID			Tele-communication use code		O			
23.3		ID			Tele-communcation equipment type		O			
23.4		ST			Email address		O			

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR OPT	NAACCR RP#	Expected Value/Example	Comments
23.5		NM			Country code		O			
23.6		NM			Area/city code		O		206	
23.7		NM			Local ph. number		O		5549097	
ORC 23.8		NM			Extension		O			
23.9		ST			Any text		O			
24	106	XAD	O	Y	Ordering Provider Address	7140, 7150, 7160, 7170, 7165	RE **See Note 2**	Y/4	Example: |115 Pike Plaza^Suite 2100^Seattle^WA^98122^USA ^^^^^A|	Note: In Volume V Version 4.0, the length of this field is 250.
24.1		ST			Street address	7140	RE		115 Pike Plaza	
24.2		ST			Other designation		O		Suite 2100	
24.3		ST			City	7150	RE		Seattle	
24.4		ST			State or province	7160	RE		WA	
24.5		ST			Zip or postal code	7170	RE		98122	
24.6		ID			Country	7165	O		USA	
24.7		ID			Address type		O			
24.8		ST			Other geographic designation		O			
24.9		IS			County/parish code		O			
24.10		IS			Census tract		O			
24.11		ID			Address representation code		O		A	
(28)		CWE	O		*Confidentiality code*		*RE*			***Note:*** *This field does not exist in HL7 Version 2.3.1, but does exist in HL7 Version 2.5.1, and therefore in Volume V Version 4.0. The usage is RE, in Volume V Version 4.0.*
(31)		CWE	O		*Parent universal service identifier*		*RE*			***Note:*** *This field does not exist in HL7 Version 2.3.1, but does exist in HL7 Version 2.5.1, and therefore in Volume V Version 4.0. The usage is CE, in Volume V Version 4.0.*

1.1.1.5 OBR (Observation Request Segment)

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP#	Expected Value/Example	Comments
1	4	SI	O		Set ID - OBR		R		|1|	This field is used as a sequence counter, where the first order would have a value of 1; the second order the value of 2; etc
2	22	EI	C		Placer Order Number		O			This is not the field for the accession number; OBR-3 is. The first component is a string, with a limit of 15 characters recommended. In Volume V Version 4.0, usage for this field is RE.
3	22	SI	C		Filler's Order Number	7090	R		Example: |97810430|	Lab's Accession Number
OBR 4	200	CE	R		Universal Service ID – identifier code for the requested observation/test	7480	R		Example: |11529-5^SURGICAL PATH REPORT^LN^^PATHOLOGY REPORT^L|	This field is the identified code for the ordered observation/test, or battery of tests. The CE data type transmits codes and the text associated with the code. It has six components arranged in two groups, as follows: Identifier(ST)^Text(ST)^Name of coding system(ST)^ Alternate identifier(ST)^Alternate text(ST)^Alternate name of coding system ID Type: LN – LOINC SNM – SNOMED L – Local
4.1		ST			Identifier	7480			11529-5	The code (in this case LOINC code "11529-5
4.2		ST			Text				SURGICAL PATH REPORT	Text explaining what the code stands for.
4.3					Name of coding system				LN	LN stands for the LOINC codings system
4.4					Alternate identifier					Not valued in this example
4.5					Alternate text				PATHOLOGY REPORT	
4.6					Alternate name of coding system				L	L stands for a 'local coding system'.
7	26	TS	C		Observation Date/Time	7320	R		Example: |200011270930|	Specimen Collection Date/Time YYYYMMDDHHMMSS or YYYYMMDDHHMM
10	60	XCN	O		Collector Identifier	2480	RE	Y	|EMPLOYEEID^PHLEBOTOMIST^PAMELA|	Identifies the person that collected the specimen. Either name or ID code, or both, may be present.

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP#	Expected Value/Example	Comments
14	26	TS	C		Specimen Received Date/Time		RE		Example: |200011270930|	Specimen Received Date/Time. The actual login time at the diagnostic service. YYYYMMDDHHMMSS or YYYYMMDDHHMM
15	300	CM	O		Specimen Source		RE		|C619&Prostate, NOS (C619) Right&ICDO3|	Data type for this field is CM. The CM data type components are: Specimen source name or code (CE)^additives(TX)^freetext(TX)^body site(CE)^site modifier(CE)^collection method modifier(CE) In Volume V Version 4.0 (due to HL7 Version 2.5.1) the data type is SPS rather than CM (in HL7 Version 2.3.1).
16	80	XCN	O		Ordering Provider Name and (if available) Identification Number		C		Example: |1234567890^Welby^M^J^Jr^Dr^^^^^^^NPI|	Ordering Provider Professional ID (here shown with NPI number), followeb by ^Provider Last Name^Provider First Name and so on.
OBR 17	40	XTN	O		Order Call Back Phone Number		O **See Note 1**		Example: |^WPN^PH^^^206^2770908^^before 5:00 pm~^ASN^PN^^^206^5620767| or |(206)277-0908|	Ordering Provider's Phone Number
25	1	ID	C		Results Status		R		|F|	F – Final
32	200				Principal Result Interpreter		R		Example: |1234567890&Welby&Marcus&&&&&NPI| **or** |123456NY&Welby&Marcus&&&&&MD|	Pathologist ID (license number <if available> with state abbreviation)&Signing Pathologist Last Name&Signing Pathologist First Name&&&&&Assigning Authority Examples of Assigning Authority: NY = New York State MD= Physician License Number UPIN = Unique Physician Identification Number NPI = National Provider Identifier

1.1.1.6 OBX (Observation Result Segment)

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP #	Expected Value/Example	Comments
1	4	SI			Set ID – OBX		R		|1|	This field contains a sequential number of related/multiple OBX segments
2	3	ID			Value Type		R			Data type that defines the format of the observation value in OBX-5. Below are examples of data types: CE – Coded Element SN – Structured Numeric NM – Numeric TX – Text (large amount) ST – String Data
3	80	CE			Identifier		R		LOINC Code^Report Section^Name of coding system Example: |22638-1^comment section^LN|	Identifies the specific test/observation method or component of a patient report reported in OBX-5 Enter appropriate LOINC Codes for specific section of a patient report. <u>Report Section | LOINC Code:</u> Clinical History | 22636-5 Nature of Specimen | 22633-2 Text Diagnosis | 33746-9 Comment Section | 22638-1 Gross Pathology | 22634-0 Microscopic Pathology | 22635-7 ICD9 | 22049-1 Coding System: LN – LOINC
4	20				Observation Sub ID		O		Single specimen example: OBX|1|TX|22633-2^nature of specimen^LN|**1**|Left Upper Lobe Lung|||||F|||20110108165755 Multiple specimen: numbering should be in this format: <OBR-1>.<sequential specimen count>. For example: 1.1 (OBR #1, specimen #1 within the accession) Multiple specimen example: see Volume V Version 4.0 (Section	Allows for related/multiple OBX segments to be linked.

Seq	Len	DT	Opt	RP#	Element Name	NAACCR Item #	NAACCR Opt	NAACCR RP #	Expected Value/Example	Comments
									D.1.3).	
5	65536		C	Y	Observation Value / Pathology Report	7400, 7410, 7420, 7430, 7440, 7450, 7460, 7470, 2600, 7080, 7340, 7350, 7360, 7370, 7380, 7390	R		Example: OBX|9|TX|22635-7^microscopic pathology^LN|2|Part #2 consists of fibrofatty tissue and single tiny lymph node free of disease. ||||||F|||20040720|PRODUCERCLIA See Example 1 at the end of this document. It shows an example of a path report submitted in Volume V Version 2.2 (based on HL7 Version 2.3.1.) Example 1 contains several examples of OBX-5.	Patient report text, containing the following components, should be structured based on this order: 1. Clinical History – at the report level 2. Nature of Specimen – at the specimen level 3. Gross Pathology (~ blocks; AP; size, shape, color) – at the specimen level 4. Microscopic Pathology (FISH; cell details) – at the specimen level 5. Text Diagnosis – at the report level 6. ICD9 code – at the report level 7. Comment Section – at the report level
6	60	CE	O		Units of measurement	7540	RE		Example: |Ug/mL^microgram/milliliter^ISO+| Age example: |mo^month^ANSI+|	Units of measurement for the observation value in OBX-5 (ISO, ANSI, or UCUM). The default value is ISO+ abbreviation. The units for age would be yr,wk,mo, d (in ANSI+ standards representation).
7	60	ST			Reference Range		O			
11	1	ID			Observation Result Status	7330	R		F	F – Final Report or C – Corrected, Amended, Addended Report Note: Example 2 at the end of this document shows what a corrected path report may look like.
14	* Date				Date/Time of Observation		O		Report signed date and time: YYYYMMDDHHMMSS	Note: This field is RE, in Volume V Version 4.0.
OBX 18-25										***Note:*** *Fields OBX-18 through OBX-25 are newly added in HL7 Version 2.5.1. They do not exist in HL7 Version 2.3.1.*

Example 1: Example of a Volume V Version 2.2 Path Report (HL7 Version 2.3.1):

MSH|^~\&|TESTLAB1|INDEPENDENT LAB SERVICES^TESTCLIA^CLIA|||201004051339||ORU^R01|201004051339|P|2.3.1
PID|1||123456789^^^^MR^General Hospital&33D9999999&CLIA|000039|McMuffin^Cookie^^^Ms.||19570706|F||W|495 East Overshoot Drive^^Delmar^NY^12054||^^^^^518^5559999|||M|||444233123
ORC|RE||||||||||||||||||||General Hospital^^33D9999999^^CLIA|857 OrderingFacility Lane^^Albany^NY^12205|^^^^^518^3334444|100 OrderingProvider St^^Albany^NY^12205
OBR|1||S91-1700|22049-1^cancer identification battery^LN|||20040720||||||||^left breast mass|NY123456^Myeolmus^John^^MD|(518)424-4243||||||||F||||||NY654321&Glance&Justin&A&MD
OBX|1|TX|22636-5^clinical history^LN||47-year old white female with (L) UOQ breast mass|||||F|||20040720|PRODUCERCLIA
OBX|2|ST|22633-2^nature of specimen^LN|1|left breast biopsy|||||F|||20040720|PRODUCERCLIA
OBX|3|ST|22633-2^nature of specimen^LN|2|apical axillary tissue|||||F|||20040720|PRODUCERCLIA
OBX|4|ST|22633-2^nature of specimen^LN|3|contents of left radical mastectomy|||||F|||20040720|PRODUCERCLIA
OBX|5|TX|22634-0^gross pathology^LN|1|Part #1 is labeled "left breast biopsy" and is received fresh after frozen section preparation. It consists of a single very firm nodularity measuring 3cm in circular diameter and 1.5cm in thickness surrounded by adherent fibrofatty tissue. On section a pale gray, slightly mottled appearance is revealed. Numerous sections are submitted for permanent processing.|||||F|||20040720|PRODUCERCLIA
OBX|6|TX|22634-0^gross pathology^LN|2|Part #2 is labeled "apical left axillary tissue" and is received fresh. It consists of two amorphous fibrofatty tissue masses without grossly discernible lymph nodes therein. Both pieces are rendered into numerous sections and submitted in their entirety for history.|||||F|||20040720|PRODUCERCLIA
OBX|7|TX|22634-0^gross pathology^LN|3|Part #3 is labeled "contents of left radical mastectomy" and is received fresh. It consists of a large ellipse of skin overlying breast tissue, the ellipse measuring 20cm in length and 14 cm in height. A freshly sutured incision extends 3cm directly lateral from the areola, corresponding to the closure for removal of part #1. Abundant amounts of fibrofatty connective tissue surround the entire beast and the deep aspect includes an 8cm length of pectoralis minor and a generous mass of overlying pectoralis major muscle. Incision from the deepest aspect of the specimen beneath the tumor mass reveals tumor extension gross to within 0.5cm of muscle. Sections are submitted according to the following code: DE- deep surgical resection margins; SU, LA, INF, ME -- full thickness radial samplings from the center of the tumor superiorly, laterally, inferiorly and medially, respectively: NI- nipple and subjacent tissue. Lymph nodes dissected free from axillary fibrofatty tissue from levels I, II, and III will be labeled accordingly.||||||F|||20040720|PRODUCERCLIA
OBX|8|TX|22635-7^microscopic pathology^LN|1|Sections of part #1 confirm frozen section diagnosis of infiltrating duct carcinoma. It is to be noted that the tumor cells show considerable pleomorphism, and mitotic figures are frequent (as many as 4 per high power field). Many foci of calcification are present within the tumor.||||||F|||20040720|PRODUCERCLIA
OBX|9|TX|22635-7^microscopic pathology^LN|2|Part #2 consists of fibrofatty tissue and single tiny lymph node free of disease. |||||F|||20040720|PRODUCERCLIA
OBX|10|TX|22635-7^microscopic pathology^LN|3|Part #3 includes 18 lymph nodes, three from Level III, two from Level II and thirteen from Level I. All lymph nodes are free of disease with the exception of one Level I lymph node, which contains several masses of metastatic carcinoma. All sections taken radially from the superficial center of the resection site fail to include tumor, indicating the tumor to have originated deep within the breast parenchyma. Similarly, there is no malignancy in the nipple region, or in the lactiferous sinuses. Sections of deep surgical margin demonstrate diffuse tumor infiltration of deep fatty tissues, however, there is not invasion of muscle. Total size of primary tumor is estimated to be 4cm in greatest dimension.||||||F|||20040720|PRODUCERCLIA
OBX|11|TX|22637-3^final diagnosis^LN||1. Infiltrating duct carcinoma, left breast. 2. Metastatic carcinoma, left axillary lymph node (1), Level I. 3. Lymph nodes, no pathologic diagnosis, left axilla, Level I (12), Level II (2), Level III (3). ||||||F|||20040720|PRODUCERCLIA
OBX|12|TX|22638-1^comments^LN||Clinical diagnosis: carcinoma of breast. Post-operative diagnosis: same.|||||F|||20040720|PRODUCERCLIA

Example 2: Example of a Volume V Version 2.2 Path Corrected Report (HL7 Version 2.3.1): Specifically, the correction to the Original Report (from previous page) is shown by putting a "C" in OBX-11. Please see the fourth, tenth and the eleventh OBX examples below which all have a "C" in the OBX-11. (Hint: the number of lymphnodes examined was corrected from 18 to 19, which then also affects the number of lymphnodes examined in Level 1.)

MSH|^~\&|TESTLAB1|INDEPENDENT LAB SERVICES^TESTCLIA^CLIA|||201004051339||ORU^R01|201004051339|P|2.3.1
PID|1||123456789^^^^MR^General Hospital&33D9999999&CLIA|000039|McMuffin^Cookie^^^Ms.||19570706|F||W|495 East Overshoot Drive^^Delmar^NY^12054||^^^^^518^5559999|||M|||444233123
ORC|RE||||||||||||||||||General Hospital^^33D9999999^^CLIA|857 OrderingFacility Lane^^Albany^NY^12205|^^^^^518^3334444|100 OrderingProvider St^^Albany^NY^12205
OBR|1||S91-1700|22049-1^cancer identification battery^LN|||20040720|||||||^left breast mass|NY123456^Myeolmus^John^^MD|(518)424-4243|||||||F||||||NY654321&Glance&Justin&A&MD
OBX|1|TX|22636-5^clinical history^LN||47-year old white female with (L) UOQ breast mass|||||F|||20040720|PRODUCERCLIA
OBX|2|ST|22633-2^nature of specimen^LN|1|left breast biopsy|||||F|||20040720|PRODUCERCLIA
OBX|3|ST|22633-2^nature of specimen^LN|2|apical axillary tissue|||||F|||20040720|PRODUCERCLIA
OBX|4|ST|22633-2^nature of specimen^LN|3|contents of left radical mastectomy|||||**C**|||20040720|PRODUCERCLIA
OBX|5|TX|22634-0^gross pathology^LN|1|Part #1 is labeled "left breast biopsy" and is received fresh after frozen section preparation. It consists of a single very firm nodularity measuring 3cm in circular diameter and 1.5cm in thickness surrounded by adherent fibrofatty tissue. On section a pale gray, slightly mottled appearance is revealed. Numerous sections are submitted for permanent processing.|||||F|||20040720|PRODUCERCLIA
OBX|6|TX|22634-0^gross pathology^LN|2|Part #2 is labeled "apical left axillary tissue" and is received fresh. It consists of two amorphous fibrofatty tissue masses without grossly discernible lymph nodes therein. Both pieces are rendered into numerous sections and submitted in their entirety for history.|||||F|||20040720|PRODUCERCLIA
OBX|7|TX|22634-0^gross pathology^LN|3|Part #3 is labeled "contents of left radical mastectomy" and is received fresh. It consists of a large ellipse of skin overlying breast tissue, the ellipse measuring 20cm in length and 14 cm in height. A freshly sutured incision extends 3cm directly lateral from the areola, corresponding to the closure for removal of part #1. Abundant amounts of fibrofatty connective tissue surround the entire beast and the deep aspect includes an 8cm length of pectoralis minor and a generous mass of overlying pectoralis major muscle. Incision from the deepest aspect of the specimen beneath the tumor mass reveals tumor extension gross to within 0.5cm of muscle. Sections are submitted according to the following code: DE- deep surgical resection margins; SU, LA, INF, ME -- full thickness radial samplings from the center of the tumor superiorly, laterally, inferiorly and medially, respectively: NI- nipple and subjacent tissue. Lymph nodes dissected free from axillary fibrofatty tissue from levels I, II, and III will be labeled accordingly.|||||F|||20040720|PRODUCERCLIA
OBX|8|TX|22635-7^microscopic pathology^LN|1|Sections of part #1 confirm frozen section diagnosis of infiltrating duct carcinoma. It is to be noted that the tumor cells show considerable pleomorphism, and mitotic figures are frequent (as many as 4 per high power field). Many foci of calcification are present within the tumor.|||||F|||20040720|PRODUCERCLIA
OBX|9|TX|22635-7^microscopic pathology^LN|2|Part #2 consists of fibrofatty tissue and single tiny lymph node free of disease. |||||F|||20040720|PRODUCERCLIA
OBX|10|TX**|**22635-7^microscopic pathology^LN|3|Part #3 includes 19 lymph nodes, three from Level III, two from Level II and fourteen from Level I. All lymph nodes are free of disease with the exception of one Level I lymph node, which contains several masses of metastatic carcinoma. All sections taken radially from the superficial center of the resection site fail to include tumor, indicating the tumor to have originated deep within the breast parenchyma. Similarly, there is no malignancy in the nipple region, or in the lactiferous sinuses. Sections of deep surgical margin demonstrate diffuse tumor infiltration of deep fatty tissues, however, there is not invasion of muscle. Total size of primary tumor is estimated to be 4cm in greatest dimension.|||||**C**|||20040720|PRODUCERCLIA
OBX|11|TX|22637-3^final diagnosis^LN||1. Infiltrating duct carcinoma, left breast. 2. Metastatic carcinoma, left axillary lymph node (1), Level I. 3. Lymph nodes, no pathologic diagnosis, left axilla, Level I (14), Level II (2), Level III (3). |||||**C**|||20040720|PRODUCERCLIA
OBX|12|TX|22638-1^comments^LN||Clinical diagnosis: carcinoma of breast. Post-operative diagnosis: same.|||||F|||20040720|PRODUCERCLIA