



170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0

Revision: 1.1
Revised: 12/11/2023

SCC Soft Computer
5400 Tech Data Dr
Clearwater, FL 33760

SCC Soft Computer® (Proprietary and Confidential)

Copyright 2023 All rights reserved. Reproduction or use of editorial or pictorial content in any manner, without the express permission of SCC, is prohibited. Information in this document is subject to change without notice and does not represent commitment on the part of Soft Computer, Inc. The software described in this document is furnished under a license and nondisclosure agreement.

Medical Device Intended Use Advisory

The Intended Use Advisory provided below is in compliance with Title 21 Chapter I Subchapter H Part 801 of the FDA's Code of Federal Regulations governing medical devices. This Part requires medical device manufacturers to define intended use. With regard to interface specifications reference 801.4 Meaning of intended uses, and 801.5 Medical devices; adequate directions for use.

The interface supporting 170.315(b)(10) Electronic Health Information (EHI) Export has been designed, installed, and configured to meet general requirements for exchange of laboratory results comprising one or more patient histories. It is imperative that you consult with SCC should you require a different form of output or require interfaces to support other needs and workflows. Use of the software for any reason other than originally specified may violate the safety, effectiveness, and design controls of this medical device, and such use could result in an increased risk to users and patients.

Our priority is to provide quality health care technology to your site while ensuring that you have the best possible experience using the tools we provide. Working together with the above advisories in mind, we can prevent potential, unintended patient care issues from occurring.

Application

This specification applies to SoftLab release 4.0 and above and related products.

Modules: SoftLab SoftMic SoftBank SoftPath

Interfaces: Result Reporting

170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0			
Document Change Control			
Revision #	Date	Author	Main changes
1.0	11/29/2023	Josh Reynolds Ray Harms	Original Specification
1.1	12/11/2023	Ray Harms	SN-type OBX segments are sent for Numeric results on release 4.0.7. Otherwise, NM-type OBX's are sent.

170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0

Export Query and Output

The EHI Result Reporting interface and associated utility for EHI Export is designed to meet two scenarios as described within 2015 Cures Update measure 170.315(b)(10) Electronic Health Information (EHI) Export:

- 1) Single Patient EHI Export - Export all EHI for a single patient at any time the user chooses.
- 2) Patient Population EHI Export - Export all EHI for a patient population

Both exports are required to:

- a) Be electronic and in a computable format
- b) Include a publicly accessible hyperlink of the export's format

Exports meeting this criteria are offered in an HL7 Standard format, an industry standard for data exchange in the form of messages. Exports are in an electronically computable format, containing a history of PHI data including clinical lab history as well as billing history. Data within such exports is limited to data maintained within SCC systems. Data residing externally within other systems is not included.

Linked data that is not natively in a computable format may also be exported. If SoftMedia is installed, and files such as PDF reports and images are linked to patient records, they will be exported as well.

Creating an Export

Single Patient Export

To export EHI for a single patient, access the export utility either by launching the **SoftLab** application, *Tools, Export Patient Health Info*. Using the export utility, a user may search for a given patient by MRN and/or name, DOB, and sex. Select a patient from the list presented below the search, and press *Process export* to execute the export.

MRN:

DOB:

Sex:



Last name:

First name:

Middle name:

	MRN	Patient Name	DOB	Sex	Address
<input type="checkbox"/>	XA00000096	TEST, PATIENT #1 Q	02-10-2003	Male	1256 Blue Crest Road, Milchester, PA 77109
<input type="checkbox"/>	MRN1001	TEST, PATIENT1	01-10-1985	Female	
<input checked="" type="checkbox"/>	MRN1002	TEST, PATIENT2	02-10-1985	Male	85 Jenkins Lane Apt 2B, Platt, NV 61429
<input type="checkbox"/>	XA00000948	TEST, PETER	01-01-2001	Male	7777 97th Way N, Plantersville, WI
<input type="checkbox"/>	XA00000894	TEST, PREVIOUS	29-04-1985	Female	

The utility will gather historic result records for the selected patient from all available modules. If linked documents are found in SoftMedia, those documents will be captured as well. Once complete, the system will package the export as a .zip file and will automatically copy the zipped export to the system's "Downloads" folder. From there it may be copied to any available network location using standard MS Windows features.

CAUTION: Please allow sufficient time for the export utility to capture data. A long patient history with a large number of historic results may require many minutes to run to completion.

Setup Note

Please note that in order for the system to create an HL7 result output, messages must be properly formatted with values in MSH[3] and MSH[4]. This is dependent on proper setup of the *Universal Identifiers* table. Each module participating in the export must be defined in the table as below.

ID	Namespace ID	Universal ID	Δ	Universal ID Type	Description
LAB	SOFTLAB	2.16.840.1.113883.3.3013.77.1		ISO	SOFTLAB application
MIC	SOFTMIC	2.16.840.1.113883.3.3013.77.2		ISO	SOFTMIC application
PAT	SOFTPATH	2.16.840.1.113883.3.3013.77.3		ISO	SOFTPATH application
BB	SOFTBANK	2.16.840.1.113883.3.3013.77.4		ISO	SOFTBANK application

Bulk Patient Export

To export EHI for a batch of patients, SCC services will be required to manage the process. An export may be filtered by patient type, clinic code, or order range, or may include the full population of patients held in SCC systems. A bulk export requires management of available resources to format output messages, create and save files, and transport the data. The "Bulk" or "Patient Population" Export also follows the specifications for message structure and content detailed herein. Please contact your SCC representative to arrange for such a procedure.

Contents of the Export

The .zip file will contain:

- HL7 result messages in plain text in a .hl7 file (as per these specifications)
 HL7 batch file syntax is: <patient mrn>_<unique sequence number>
- Any patient billing records found in SoftBill/AR in xml form. See separate specifications.
 Billing file syntax is: BILL_<patient mrn>_<export run number>
- A subfolder containing any linked documents found in SoftMedia
 Document file syntax is: <patient mrn>_<order/case/procedure number>_<document type>_<unique document ID>
- A ReadMe file containing links to the below result and billing export specifications.

https://www.softcomputer.com/regulatory-affairs/ehi-export/docs/SCC_Standard_EHI_export_rel4.0.pdf

https://www.softcomputer.com/regulatory-affairs/ehi-export/docs/SCC_EHI_export_Billing_History_rel4.0.pdf

Output formats**HL7 Result formats**

SoftLab, SoftMic, SoftBank, and SoftPath results are sent in a parseable structured format.

Structured (Discrete) Format

Individual observations are transmitted as separate OBX segments with separate fields defined for identifying the observation, its values, units, normal ranges etc. SoftLab results are sent as structured results.

SoftMic results are unique in that they involve results for Exams, Cultures, Organisms and Sensitivities, each associated with either the ordered procedure or a particular organism.

Structured (Discrete) SoftMic Results I

Exams, culture observations, organisms, organism comments and sensitivities are reported in separate OBX segments. Organisms are reported with a non-empty observation Sub-ID (OBX[4]) unique per organism. This field is used to link each organism to the sensitivity. In this configuration the sensitivity results do NOT immediately follow the corresponding organism. The receiving system will be responsible for proper grouping and displaying the sensitivity results to the end user.

SoftBank results are unique in that they involve results for Tests, Products, and Actions, each associated with different types of results. SoftBank results are sent in Discrete Format.

SoftBank Expanded Discrete Style

Results are formatted as in SoftBank Discrete Short Text style, but with additional OBX segments after each Product result OBX to expand the primary result into discrete components. Separate OBX segments are sent for Unit ABO/Rh, Unit Number, Product Type, Status, Status Date/Time. The expanded elements are distinguished from the primary result segments by use of OBX-4.

Pathology and some Genetics results are largely textual in nature. Please note, the Discrete form is complex, with a structure that is highly dependent on use of the system.

Discrete/Narrative Format

Results are formatted in a largely narrative style, within OBX segments. Separate sections may be sent under different OBX-3 test codes. OBX segments may repeat for each line of narrative text.

AR/SoftBill Billing output

Billing history, if bills were collected through SoftAR or SoftBill, is formatted as an xml output. See the below specifications for format of the output.

Billing that has been performed by another system is not exported. Charge records that were sent to other systems for billing are not exported.

If desired, the billing history may also be exported directly from SoftAR.

https://www.softcomputer.com/regulatory-affairs/ehi-export/docs/SCC_EHI_export_Billing_History_rel4.0.pdf

SoftMedia Documents

Copies of objects that are linked to results may be output along with result messages from SoftLab, SoftMic, PathDx, and Genetics modules. Such objects are files that may represent the PDF copy of a reference lab report, or an image associated with a component result. Generally, documents in SoftMedia may be of PDF, RTF, JPEG, TIFF, BMP, TXT, PNG, HTML, or XML type. Other types are also supported.

Document files may be linked to patients, stays, orders, tests, and other records in SCC. Depending on the SCC module, copies of documents linked to the ordered test, procedure, or individual component may be eligible to be output. No documents linked to the order, stay, or patient records are output.

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0	
1.1	Rules	
Document Conventions		
The conventions described below are used in tables throughout this document.		
Shading		
Contents	Meaning	
Black text, white fill.....	Item is readily available as a standard part of the interface.	
Grey text, white fill.....	Item is available, but must be specifically requested.	
Black text, grey fill.....	Item is available, but must be specifically requested.	
Grey text, grey fill.....	Item is not available, use of the element may require a separate Software Change Request.	
Column headers		
Seq = HL7 Sequence number		
Card = Cardinality, indicating minimum and maximum number of repetitions allowed for a segment.		
Type = Data type as described by HL7 standards. Data type for each element may not match HL7 recommended data types. Possible Data types used are:		
DT = Date only (CCYYMMDD format)		
ID = Coded value from HL7 list		
NM = Numeric only		
PN = Telephone number		
ST = Short Text (alphanumeric)		
TS = Time Stamp (includes date: CCYYMMDD[hhmm[ss]] format)		
TX = Long Text, single lines (comments)		
R/O = Required/Optional characteristic. Possible values are:		
R = Element is required for the interface to process the message successfully.		
O = Element is optional, and may or may not be sent.		
C = Element requirement is conditional upon other criteria. See specification for details.		
A = Always sent.		
Rules = Cross references to applicable Specific Rules on this page.		
References		
HL7 Messaging Standard Version 2.5.1, An Application Protocol for Electronic Data Exchange in Healthcare Environments, Copyright © 2007		
HL7 Version 2.5.1 Implementation Guide: S&I Framework Lab Results Interface, Release 1 – US Realm, July 2012		

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0
1.1	Rules
General Rules	
1	Outbound Interface transactions will be HL7 v2.5.1 standard messages.
2	The terms "Foreign System" and "Other System" refer to any non-SCC information system that is interfaced to SCC.
3	The term Inbound refers to data sent to SCC systems; the term Outbound refers to data sent from SCC systems.
4	Outbound messages will be communicated unidirectionally to the foreign system.
5	Segments or elements not currently detailed in the specifications may be sent without detriment to the receiving system.
6	All time values range from 0000 to 2359. The value 2400 is not used.
7	The atomic unit of each message is the ordered test. A separate message is sent for each ordered test. Discrete results may be restricted to only those component tests which have been verified/modified, or to include results previously verified on the ordered test.
8	A single outbound interface will support a single set of business rules. One interface will not support more than one set of rules.
9	The Outbound interface optionally supports utilization of HL7 Escape Sequences when populated with HL7 Encoding Characters. See Specific Rule 6. The fields that support HL7 Escape Sequences are denoted with a footnote for the specific segment.
10	SoftBank is constrained in the number of units per product order which will be sent. A maximum of 48 units per product will be sent from version 21.0 and above.
11	Data sent in SPM segments are stored in SoftLab at the specimen level in specific fields or as specimen attributes. Specimen information in SPM segments will be derived from SoftLab only.
12	In all cases where an Assigning Authority or Assigning Facility are exchanged, the NG_RN Profile requires each to be populated with EITHER a Namespace ID OR the combination of a Universal Identifier and Universal Identifier Type. Exchange of Namespace ID, Universal Identifier AND Universal Identifier Type is also supported.

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0
1.1	Rules
	Specific Rules
	Result Reporting
Rule 1	Patient MRN - may be sent with or without prefix characters. If received by ADT and stored as a suffix to the MRN, checksum characters are included.
	MRN is sent as stored, including any multisite prefix characters. <u>Note:</u> In some cases a prefix may not be defined for one site.
Rule 2	Patient MRN - can be prefixed with leading 0's.
	MRN is sent as received and stored. Value will not be modified.
Rule 3	Patient Billing Number - may be sent with or without prefix characters.
	Billing Number is sent as stored, including any multisite prefix characters. <u>Note:</u> In some cases a prefix may not be defined for one site.
Rule 4	Patient Billing Number - can be prefixed with leading 0's.
	Billing Number is sent as received and stored. Value will not be modified.
Rule 5	Telephone Numbers - may be sent in one of two different formats, either as a single string or as discrete elements.
	10-character phone numbers are separated into two elements. The area code is sent as a separate element from the local number in subfields 6 & 7 in the format ^^^^NNN^NNNNNN. Other elements such as Use Code, Equipment Type, Country code, extension, and comment may be included as well.
Rule 6	Embedded Special Characters - Characters that are used by HL7 as delimiters can be converted to "escape sequences" if included in text. Most often, these are characters " ", "^", "&", and "~" but may vary based on the agreed upon value of MSH-2. If converted, the receiving system must be capable of interpreting escape sequences such as "\ " and "\^". See also Standard Interface Functionality, Result Reporting section, "HL7 Special Characters" for more information.
	Embedded special characters found within a specific set of fields are converted to escape sequences. A comment entered as "A total of 4*10^5 objects were observed in ~950 gallons of green & red fluid" would be transmitted as: NTE A total of 4*10\S\5 objects were observed in \R\950 gallons of green \T\ red fluid
Rule 7	Text sent in NTE segments
	Each line of comment data is sent in a separate NTE segment. Multiple NTE segments may be sent. Blank lines will be removed when sending comments.
Rule 8	The basis of the result message is typically the ordered test. The ordered test is considered the Reportable Object and separate messages are usually sent for each ordered test.
	Results are sent based on the ordered test. Each ordered test is treated as individually reportable. Separate result messages are sent for each ordered test. Grouping of tests to a common SoftLab Order Number is not relevant to reporting by interface.
Rule 9	When a group test is partially resulted or when a component is corrected, the result message may contain only new results or all reportable results.
	Each result message will contain OBX segments for all components of the reportable object (see Rule 8). Results are sent in "snapshot" mode.

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0
1.1	Rules
Rule 10	Format of result element (OBX-5) and value of OBX-2 when result is numeric.
Releases 4.0.8 and above	Numeric results are sent in HL7 Numeric form, with symbols and numbers a single component (OBX-5.1) and OBX-2 = "NM". Results such as 125.3, -3.25, 65000 are sent in this form. Results such as >=16, =2.45, 10-20, <1:32, 1/2, Positive, >ten, +++, 2,3456.4 are sent as Short Text in OBX-5.1 with OBX-2 = "ST".
Release 4.0.7 only	Numeric results are sent in HL7 Structured Numeric form, with symbols and numbers in separate components (OBX-5.1 to 5.4) and OBX-2 = "SN". Results such as 125.3, >=16, =2.45, -3.25, 65000, 10-20, <1:32, 1/2 are sent in this form. Results such as Positive, >ten, +++, 2,3456.4 are sent as Short Text in OBX-5.1 with OBX-2 = "ST". <i>Required for Meaningful Use conformance.</i>
Rule 11	Test components that are verified will be sent with the result in OBX-5. Should components with no result be sent, too?
	Only verified results are sent. Components that are pending will be sent with the word "Pending" in OBX-5.
Rule 12	Blood Bank Results format
	SoftBank results will be sent in Expanded Discrete Format. This format expands on the Short Text Format by adding individual OBX segments for products and actions, repeating the product Code, product Type & Rh, Unit Number, crossmatch/issue Status, and Date/Time as individual results, each in a separate OBX segment with a unique test code. Untranslated OBX[3] test codes are: UPROD, UABO, URH, UNIT#, USTAT, and UDATE. See OBX(B) segment.
Rule 13	Micro Culture Comments
	Microbiology comments for each test are sent in a series of OBX segments, each line sent in a separate segment. The same test code may repeat for multiple OBX segments.
Rule 14	Organism identification
	Organism ID is sent in OBX(O)-5.1 and Organism Name in OBX(O)-5.2.
Rule 15	Organism cross-reference to Sensitivity OBR segment
	Organisms are cross-referenced to Sensitivity Panel results based on Isolate Number sent in OBX(M)-4 and OBR(S)-26.2.
Rule 16	Sending the Significant Occurrence flag in OBX-13 and/or Abnormal flag in OBX-8 with Micro results.
	If the Significant Occurrence flag is set for a SoftMic Generated Test or Exam, send "+" or "++" in OBX-13 of the corresponding OBX(P) or OBX(E) segment. If an organism is identified, send "+" or "++" in OBX-13 for the parent Generated Test OBX(P) or Exam OBX(E) segment. If the "+" Significant Occurrence flag is set for a SoftMic Generated Test or Exam, send "A^Abnormal", and if the "++" Significant Occurrence flag is set send "AA^Critical" in OBX-8 of the corresponding OBX(P) or OBX(E) segment indicating an Abnormal or Critical result. If an organism is identified, send "A^Abnormal" in OBX-8 for the parent Generated Test OBX(P) or Exam OBX(E) segment indicating an Abnormal result.
Rule 17	Microbiology results can be sent with suppressed isolates and antibiotics.
	Suppressed or cancelled isolates and drugs are not sent.
Rule 18	Result Text sent in OBX segments. (TX-type OBX segments)
	Each line of comment data is sent in a separate OBX segment. Multiple OBX segments may be sent.
Rule 19	Result Text sent in OBX, NTE, or DSP-Report Format (FT-type narrative results) can include rtf control characters.
	Only plain text will be sent in narrative Report-format results. No control characters will be sent.
Rule 20	Result messages can be split to multiple messages of less than a specified number of bytes per message if necessary. In this case, a Continuation Pointer is necessary. MSH[14] can be interpreted by a receiving system to determine the relative position of the message within the expected result.
	Message fragmentation and continuation pointers are not used.

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0
1.1	Rules
	Filtering Criteria
Rule 21	Patients are flagged in SCC as "updated by HIS". Messages may be filtered based on this flag. Often, outpatients are registered only in SCC and thus are not flagged as "updated by HIS". Messages may be sent for all patients and all stays, regardless of origin.
Rule 22	Transmission of results - may require a Placer Order Number to be sent. Results may be sent for any ordered test, regardless of the presence of a Placer Order Number. ORC/OBR-2 is not a required field.
	Coded element mapping and translation options
Rule 23	Patient Location Codes - each code sent identifies a single defined Ward/Clinic in SCC. Primary Location codes locally defined in SCC are sent. No translation of codes is performed.
Rule 24	Physician Codes - each code sent identifies a single defined Doctor in SCC. National Provider Index (NPI) codes are used to identify each physician. Codes are sent as defined in the NPI# field of SoftLab Doctors setup.
Rule 25	Non-staff (auxiliary) Physician Code - A single code may be agreed upon to identify walk-in doctors not defined in the setup database. Users may enter non-staff or walk-in doctors in SCC as "Auxiliary" doctors with the code "**". Such entries are sent with the code: AUX
Rule 26	Microbiology Source Codes (OBR-15.1, SPM-4) - each code sent identifies a single specimen source defined in SCC. Locally defined Micro Specimen Source codes are sent in OBR-15.1. No translation of codes is performed. Micro Specimen Source codes that are mapped to Universal Codes are sent in SPM-4
Rule 27	Priority Codes (ORC-7.6, OBR-27.6). SCC sends codes "R", "A", "S", "T". Priority codes described above are sent. No translation of codes is performed.
Rule 28	Ordered Test Codes (OBR-4) - each code sent identifies a single orderable test in SCC. Two codes can be sent in OBR-4. LOINC codes defined in the LOINC field of Test Setup will be sent as one of the test identifiers. LOINC codes are sent as the Primary ID (OBR-4.1) and Locally defined Primary Test Codes for the ordered test are sent as the Alternate Test ID (OBR-4.4).
Rule 29	Individual Result Test Codes (OBX-3) - each code sent identifies a single individual test in SCC. Two codes can be sent in OBX-3. LOINC codes defined in the LOINC field of Test Setup will be sent as one of the test identifiers. LOINC codes are sent as the Primary ID (OBX-3.1) and Locally defined Primary Test Codes for the component test are sent as the Alternate Test ID (OBX-3.4).
Rule 30	SNOMED codes sent as results - Tests defined in setup as "C"coded type tests must capture a SNOMED code as the result. The SNOMED Concept ID is entered and sent as the result and coded element in OBX-5.1
Rule 31	Abnormal Flag codes, alternate codes (OBX-8.4) - applies only for SoftLab results sent in Discrete Format. Standard HL7 codes (L, LL, H, HH, A, AA) are sent as the Alternate Code in OBX-8.4 to represent abnormal result flags.
Rule 32	Performing Site code (OBX-15) - a code identifying the testing site may be sent with each test result. The receiving system should provide a mechanism to interpret these codes to a full descriptive address. Note: More detailed performing site information is available in OBX-23 & 24. Results are sent with the SCC code of the Location for the test. Location code is derived from the performing Workstation for the test. If the Reference Lab provides a performing site code with results, that code is sent.

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0
1.1	Rules
	Communication Options
	<p>Message Format: HL7 messages are enclosed by site-configurable characters to form a packet or block. SCC expects to send and receive one HL7 message per packet or block. No header or trailer information should be added to the HL7 message. The format is as follows:</p> <p style="padding-left: 20px;"><SB>ddd<EB><CR></p> <p><SB> = START BLOCK character (1 byte). Typically, 0x0B.</p> <p>ddd = Variable number of data bytes of data. No length field is required because HL7 uses a delimiter format.</p> <p><EB> = END BLOCK character (1 byte). Typically, 0x1C.</p> <p><CR> = CARRIAGE RETURN character (1 byte). Typically, 0x0D</p>

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0						
1.1	Message Structures						
Segment	Description	Card	Rules				
	Message			Lab Results	Micro Results	BB Results	Path Results
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU
	MSH-9.2 Event Code			R01	R01	R01	R01
	ORC-1 Control Code			RE	RE	RE	RE
Common segments							
MSH	Message Header	1..1		R	R	R	R
PID	Patient Identification	1..1		R	R	R	R
{ NTE }	Notes and Comments (for Patient)	0..*	7				
NK1	Next of Kin	0..1					
PV1	Patient Visit	1..1					
{ NTE }	Notes and Comments (for Visit)	0..*	7				
{ IN1 }	Patient Insurance	0..*				////	////
Order segments							
ORC	Common Order	1..1		R	R	R	R
{ NTE }	Notes and Comments (for Order)	0..*	7				
OBR	Observation Request	1..1		R	R	R	R
{ DG1 }	Diagnosis (for Ordered Test)	0..4					
{ NTE }	Notes and Comments (for Order)	0..*	7				
{ NTE }	Notes and Comments (for Specimen)	0..*	7				
{ NTE }	Notes and Comments (Mic Culture comments)	0..*	7	////		////	////
Discrete & Report Formats							
{	--- OBSERVATION begin	1..*				////	
OBX	Observation (Component result)	1..1	18	R	////	R	R
{ NTE }	Notes and Comments (for Component result)	0..*	7		////		////
{ OBX(B) }	Observation (Blood Bank Product Detail)	0..*	12	////	////	R	////
}	--- OBSERVATION end					////	
{ SPM }	Specimen Details	1..*		R	////	R	R
Discrete SoftMic Results I							
{ OBX(P) }	Observation (Ordered Procedure)	0..*	13	////		////	////
{	--- CULTURE OBSERVATION begin	0..*		////		////	////
{	--- MICRO EXAM begin	0..*		////	R	////	////
{ OBX(E) }	Observation (Exam observations)	1..*	13	////	R	////	////
{ NTE }	Notes and comments (Previous Exam results)	0..*	7	////		////	////
}	--- MICRO EXAM end			////		////	////
{	--- ORGANISM begin	0..*		////		////	////
OBX(O)	Observation (Organism ID)	1..*	14	////		////	////
{	--- ORGANISM COMMENTS begin			////		////	////
{ OBX(Q) }	Observation (Quantitation)	0..*		////		////	////
{ NTE }	Notes and comments (Org. Quant. prev result)	0..*	7	////		////	////
{ NTE }	Notes and comments (Org. previous result)	0..*	7	////		////	////
{ OBX(OC) }	Observation (Organism comments)	0..*		////		////	////
{ NTE }	Notes and comments (Org. prev comments)	0..*	7	////		////	////
}	--- ORGANISM COMMENTS end			////		////	////

Segment	Description	Card	Rules				
	Message			Lab Results	Micro Results	BB Results	Path Results
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU
	MSH-9.2 Event Code			R01	R01	R01	R01
	ORC-1 Control Code			RE	RE	RE	RE
}	--- ORGANISM begin			////		////	////
}	--- CULTURE OBSERVATION end			////		////	////
{ SPM }	Specimen Details	1..*		////	R	////	////
{	--- SENSITIVITY PANEL begin	0..*		////		////	////
ORC(S)	Common Order	1..1		////		////	////
OBR(S)	Observation request (Micro sensitivity panel)	1..1	17	////		////	////
{	--- SENSITIVITY OBSERVATION begin	1..*		////		////	////
OBX(S)	Observation (Antibiotics)	1..1		////		////	////
{ NTE }	Notes and Comments (Antibiotic comments)	0..*	7	////		////	////
}	--- SENSITIVITY OBSERVATION end			////		////	////
}	--- SENSITIVITY PANEL end			////		////	////

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0							
1.1	Common & Order Segments							
Seq	Element	Output	Type				Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU	
	MSH-9.2 Event Code			RO1	RO1	RO1	RO1	
	ORC-1 Control Code			RE	RE	RE	RE	
	Origin			Lab	Mic	BB	Pat	
MSH Segment								
0	MSH	MSH	ID	R	R	R	R	
1	Field Separator		ST	R	R	R	R	
2	Encoding Characters	^~\&	ST	R	R	R	R	Component Separator, Repetition Character, Escape Character, Subcomponent Separator
3	Sending Application							
3.1	Namespace ID	<Originating module>	ST	A	A	A	A	SOFTLAB - messages sent from SoftLab SOFTMIC - messages sent from SoftMic SOFTBANK = messages sent from SoftBank SOFTPATH = messages sent from SoftPath
3.2	Universal ID	2.16.840.1.113883.3.3013.77.1 2.16.840.1.113883.3.3013.77.2 2.16.840.1.113883.3.3013.77.3 2.16.840.1.113883.3.3013.77.4	ST	A	A	A	A	Fixed OID values for SCC applications.
3.3	Universal ID Type	ISO	ST	A	A	A	A	ISO = International Standards Organization
4	Sending Facility							
4.1	Namespace ID	<Sending Facility NS ID>	ST					Namespace is based on <i>Sending Facility</i> in <i>Location</i> setup for Order and Result messages.
4.2	Universal ID	<Sending Facility Universal ID>	ST					ISO Number (OID) or CLIA Number
4.3	Universal ID Type	<Sending Facility UID Type>	ST					ISO = International Standards Organization; CLIA = CLIA number; L = local code
5	Receiving Application							
5.1	Namespace ID	EHIEXPORT	ST					
6	Receiving Facility							
6.1	Namespace ID	EHIEXPORT	ST					
7	Date/Time of Message	<Message date/time stamp>	TS					Includes Timezone offset indicator
9	Message Type							
9.1	Message Type	<HL7 Message Type>	ID	R	R	R	R	
9.2	Event Code	<HL7 Event Code>	ID	R	R	R	R	
9.3	Message Structure	<Message Type _ Event Code>	ID					
10	Message Control ID	<Message counter>	ST	R	R	R	R	
11	Processing ID	'P' or 'D'	ID	R	R	R	R	P = Processing
12	Version ID	2.5.1	NM					
NTE Segment								
0	NTE	NTE	ID	R	R	R	R	
1	Set ID - NTE	<counter>	NM					Increments from 1 to n for each group of segments
2	Source of Comment	P or L	ST	A	A	A	A	P = Placer is source of comment (when Tech ID = "HIS") L = Filler is source of comment (any other comment)
3	Comment Text	<comment text>	TX					Line of comment. May be blank if user enters blank lines. This field supports use of HL7 Escape sequences.
4	Comment Type							
4.1	Identifier	RE	ID	A	A	A	A	RE = Remark - all comments are characterized as remarks
4.2	Text	Remark	ST	A	A	A	A	
4.3	Name of Coding System	HL70364	ST	A	A	A	A	

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
4.7	Coding System Version ID	2.5.1	ST	A	A	A	A		
PID Segment									
0	PID	PID	ID	R	R	R	R		
1	Set ID - Patient	1	NM						
3	Patient Information								Up to 3 repetitions may be sent containing identifiers stored in SCC systems as MRN, SSN, and/or Secondary ID or MPI.
3.1	Patient Information - MRN	<Patient MRN>	ST	A	A	A	A	1, 2, 6	MRN includes any checksum characters received from HIS. MRN may be stored in SCC databases with an internal prefix. This prefix is included. This field supports use of HL7 Escape sequences.
3.4	Patient ID Assigning Authority								
3.4.1	Assigning Authority Namespace ID	<MRN AA NS ID>	ST						As received and posted with inbound ADT messages, autoposted when MRN is autogenerated, or manually entered.
3.4.2	Assigning Authority Universal ID	<MRN AA UID>	ST						ISO Number (OID) or CLIA Number
3.4.3	Assigning Authority Universal ID Type	<MRN AA UID Type>	ST						ISO = International Standards Organization; CLIA = CLIA number; L = local code
3.5	Patient ID Number Type	'MR'	ST						MR = Medical Record Number
3.6	Patient ID Assigning Facility								
3.6.1	Assigning Facility Namespace ID	<MRN AF NS ID>	ST						As received and posted with inbound ADT messages, autoposted when MRN is autogenerated, or manually entered.
3.6.2	Assigning Facility Universal ID	<MRN AF UID>	ST						ISO Number (OID) or CLIA Number
3.6.3	Assigning Facility Universal ID Type	<MRN AF UID Type>	ST						ISO = International Standards Organization; CLIA = CLIA number; L = local code
4	Alternate Patient ID	<Patient Secondary ID>	ST					6	This field supports use of HL7 Escape sequences.
	Patient Name Information								
5[1]	(1st repetition)								
5[1].1.1	Patient Family Name/Surname	<Patient Last Name>	ST	A	A	A	A		
5[1].1.2	Patient Given Name	<Patient First Name>	ST						
5[1].1.3	Patient Middle Name	<Patient Middle Name>	ST						
5[1].1.4	Patient Name Suffix	<Patient Name Suffix>	ST						Suffix can contain values such as "JR", "II", "III", etc.
5[1].1.5	Patient Name Prefix	<Patient Name Prefix>	ST						
5[1].7	Patient Name Type Code	<Patient Name Type Code>	ST						A - Alias; B - Birth; C - Adopted; D - Display; I - Licensing; L - Legal; N - Nickname; R - Registered (animals only); S - Coded Pseudo-Name; T - Tribal Name; U - Unspecified
5[1].14	Professional Suffix	<Patient Name Pro Suffix>	ST						
	Patient Name Information								
5[2]	(2nd repetition)								
5[2].1.1	Patient Family Name/Surname	<Patient Second Last Name>	ST						
5[2].2	Patient Given Name	<Patient Second First Name>	ST						
5[2].3	Patient Middle Name	<Patient Second Middle Name>	ST						
5[2].4	Patient Name Suffix	<Patient Second Name Suffix>	ST						Suffix can contain values such as "JR", "II", "III", etc.
5[2].5	Patient Name Prefix	<Patient Second Name Prefix>	ST						
5[2].7	Patient Name Type Code	<Patient Second Name Type Code>	ST						A - Alias; B - Birth; C - Adopted; D - Display; I - Licensing; L - Legal; N - Nickname; R - Registered (animals only); S - Coded Pseudo-Name; T - Tribal Name; U - Unspecified
5[2].14	Professional Suffix	<Patient Second Name Pro Suffix>	ST						
6	Mother's Maiden Name								
6.1.1	Family Name/Surname	<Mother's Maiden Last Name>	ST						
6.2	Given Name	<Mother's Maiden First Name>	ST						
6.3	Middle Name	<Mother's Maiden Middle Name>	ST						
6.4	Suffix	<Mother's Maiden Name Suffix>	ST						Suffix can contain values such as "JR", "II", "III", etc.
6.5	Prefix	<Mother's Maiden Name Prefix>	ST						
6.7	Name Type Code	<Mother's Maiden Name Type Code>	ST						M = Maiden Name

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
6.14	Professional Suffix	<Mother's Maiden Name Pro Suffix>	ST						
7	Patient Date of Birth	<Patient DOB>	TS						CCYYMMDD[hhmm] format
8	Patient Administrative Sex	<Patient Sex>	ST						M = Male; F = Female; U = Undefined
10	Patient Race								
10.1	Race Identifier	<Race code (UC)>	ST						Other Race code as defined in <i>HIS Mapping Table</i> .
10.2	Race Text	<Race Text (UC)>	ST						Race description (text) as defined in <i>HIS Mapping Table</i> .
10.3	Name of Coding System	Race Coding System Name (UC)>	ST						Name of Other coding system as defined in <i>HIS Mapping Table</i> . Should refer to an HL7 table such as "HL70005"
10.4	Alternate Identifier	<SCC Patient Race code>	ST						Primary Race code as seen in SCC systems
10.5	Alternate Text	<Race Text (UC)>	ST						Race description (text) as defined in <i>HIS Mapping Table</i> .
10.6	Name of Alternate Coding System	L	ST						L = Local code. Primary codes are locally defined codes.
10.7	Coding System Version ID	<Race Coding System Version (UC)>	ST						Version of Other coding system as defined in <i>HIS Mapping Table</i> . Should refer to an HL7 version such as "2.5.1"
10.8	Alternate Coding System Version ID	NA	ST						NA = No versioning applicable for Local codes
11[1]	Patient Address (1st repetition)								
11[1].1	Street or Mailing Address	<Patient Address #1 line 1>	ST						
11[1].2	Address line 2	<Patient Address #1 line 2>	ST						
11[1].3	City	<Patient Address #1, city>	ST						
11[1].4	State	<Patient Address #1, state>	ST						
11[1].5	Zip Code	<Patient Address #1, zip>	ST						
11[1].6	Country	<Patient Address #1, country code>	ST						
11[1].7	Address Type	<Patient Address #1 Type code>	ST						C = Current; H = Home; L = Legal; M = Mailing; P = Permanent
11[1].9	County Code	<Patient Address #1, county>	ST						
11[2]	Patient Address (2nd repetition)								
11[2].1	Street or Mailing Address	<Patient Address #2 line 1>	ST						
11[2].2	Address line 2	<Patient Address #2 line 2>	ST						
11[2].3	City	<Patient Address #2, city>	ST						
11[2].4	State	<Patient Address #2, state>	ST						
11[2].5	Zip Code	<Patient Address #2, zip>	ST						
11[2].6	Country	<Patient Address #2, country code>	ST						
11[2].7	Address Type	<Patient Address #2 Type code>	ST						C = Current; H = Home; L = Legal; M = Mailing; P = Permanent
11[2].9	County Code	<Patient Address #2, county>	ST						
13	Home Phone Number (may repeat up to 3X)	<Home Phone>						5	Primary number is listed first, e-mail is listed last. Use Codes based on database field as follows: PRN - Primary Home Phone; ORN - Other Home Phone; NET - e-Mail Equipment Types: PH - Phone; CP - Cell Phone; FX - Fax; Internet - e-Mail See Common Elements below, Phone Number for full structure
14	Business Phone Number	<Business Phone>						5	A single number is sent with the following: Use Code: WPN - Business Phone Equipment Types: PH - Phone; CP - Cell Phone; FX - Fax See Common Elements below, Phone Number for full structure
15	Primary Language	<Language Code>	ST						As stored either in SoftLab database fields: <i>patient.ptyyy[3][0]</i> and <i>patient.ptyyy[4][0]</i> or <i>patient.ptlang</i> .
16	Marital Status	<Marital Status Code>	ST						SCC codes are sent with no translation
17	Religion	<Religion Code>	ST						SCC codes are sent with no translation
18	Patient Account Number	<Billing Number>	ST	R	R	R	R	3, 4, 6	Billing Number may be stored in SCC databases with an internal prefix. This prefix is included.
19	SSN Number - Patient	<SSN, Canadian HCN>	ST						This field supports use of HL7 Escape sequences. NNNNNNNNNN format

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
22	Ethnic Group								
22.1	Ethnic Group Identifier	<Ethnic Group code (UC)>	ST						Other Ethnicity code as defined in <i>HIS Mapping Table</i> . H = Hispanic or Latino; N = Not Hispanic or Latino; U = Unknown
22.2	Ethnic Group Text	<Ethnic Group Text (UC)>	ST						Ethnic Group description (text) as defined in <i>HIS Mapping Table</i> .
22.3	Name of Ethnic Group Coding System	<Ethnic Group Coding System Name (UC)>	ST						Name of Other coding system as defined in <i>HIS Mapping Table</i> . Should refer to an HL7 table such as "HL70189"
22.4	Alternate Identifier	<SCC Ethnic Group code>	ST						Primary Ethnic Group code as seen in SCC systems
22.5	Alternate Text	<Ethnic Group Text (UC)>	ST						Ethnic Group description (text) as defined in <i>HIS Mapping Table</i> .
22.6	Name of Alternate Coding System	L	ST	A	A	A	A		L = Local code. Primary codes are locally defined codes.
22.7	Coding System Version ID	<Ethnic Group Coding System Version (UC)>	ST						Version of Other coding system as defined in <i>HIS Mapping Table</i> . Should refer to an HL7 version such as "2.5.1"
22.8	Alternate Coding System Version ID	NA	ST	A	A	A	A		NA = No versioning applicable for Local codes
29	Patient Death Date/Time	<Patient Death Date/Time>	TS						
30	Patient Death Indicator	<Deceased Flag>	ST						Y = Deceased, null otherwise
31	Identity Unknown Indicator	<Identity Flag>	ST						Y = Identity Unknown, N = Identity Known
33	Last Update Date/Time	<Last Update Date/Time>	TS						
35	Species								
35.1	Species Identifier	<Species code (UC)>	ST						Other Species code as defined in <i>HIS Mapping Table</i> : SNOMED code 337915000 = Human
35.2	Species Text	<Species Text (UC)>	ST						Species description (text) as defined in <i>HIS Mapping Table</i> .
35.3	Name of Coding System	<Species Coding System Name (UC)>	ST						Name of Other coding system as defined in <i>HIS Mapping Table</i> . Should refer to a universal table such as SNOMED (SCT)
35.4	Alternate Identifier	<SCC Species code>	ST						Primary Species code as seen in SCC systems (e.g.: H = Human)
35.5	Alternate Text	<Species Text (UC)>	ST						Species description (text) as defined in <i>HIS Mapping Table</i> .
35.6	Name of Alternate Coding System	L	ST	A	A	A	A		L = Local code. Primary codes are locally defined codes.
35.7	Coding System Version ID	<Species Coding System Version (UC)>	ST						Version of Other coding system as defined in <i>HIS Mapping Table</i> . (Note: SNOMED version is typically expressed as a date)
35.8	Alternate Coding System Version ID	NA	ST	A	A	A	A		NA = No versioning applicable for Local codes
40	Employer Address								
40.1	Employer Address line 1	<Patient Employer Address line 1>	ST						
40.2	Employer Address line 2	<Patient Employer Address line 2>	ST						
40.3	Employer City	<Patient Employer Address, city>	ST						
40.4	Employer State	<Patient Employer Address, state>	ST						
40.5	Employer Zip	<Patient Employer Address, zip>	ST						
60	Patient Chart Number	<Patient Chart Number>	ST						usually manually entered in the the Chart # field at the patient level. This field can also be accepted inbound by interface.
NK1 Segment									
0	NK1	NK1	ID	R	R	R	R		
1	Set ID - Next of Kin	1	NM	A	A	A	A		
2	Next of Kin Name								<i>Contact Person</i> is used as Next-of-Kin
2.1	Last Name	<Contact Last Name>	ST						
2.2	First Name	<Contact First Name>	ST						
2.3	Middle Name	<Contact Middle Name>	ST						
2.4	Suffix	<Contact Name Suffix>	ST						
2.5	Prefix	<Contact Name Prefix>	ST						
2.7	Name Type Code	<Contact Name Type code>	ST						A - Alias; B - Birth; C - Adopted; D - Display; I - Licensing; L - Legal; N - Nickname; R - Registered (animals only); S - Coded Pseudo-Name; T - Tribal Name; U - Unspecified
2.14	Professional Suffix	<Contact Name Pro Suffix>	ST						

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
3	Next of Kin Relationship								
3.1	Relationship Identifier	<Contact Relationship code (UC)>	ST						Other Relationship code as defined in the <i>HIS Mapping Table</i> .
3.2	Relationship Text	<Relationship Text (UC)>	ST						Relationship description (text) as defined in <i>HIS Mapping Table</i> .
3.3	Name of Coding System	<Relationship Coding System Name (UC)>	ST						Name of Other coding system as defined in the <i>HIS Mapping Table</i> . Should refer to an HL7 table such as "HL70063"
3.4	Alternate Identifier	<SCC Contact Relationship code>	ST						Primary Relationship code as seen in SCC systems
3.5	Alternate Text	<Relationship Text (UC)>	ST						Relationship description (text) as defined in <i>HIS Mapping Table</i> .
3.6	Name of Alternate Coding System	L	ST	A	A	A	A		L = Local code. Primary codes are locally defined codes.
3.7	Coding System Version ID	<Relationship Coding System Version (UC)>	ST						Version of Other coding system as defined in the <i>HIS Mapping Table</i> . Should refer to an HL7 version such as "2.5.1"
3.8	Alternate Coding System Version ID	NA	ST	A	A	A	A		NA = No versioning applicable for Local codes
4	Next of Kin Address								<i>Contact Person's</i> address is used as Next-of-Kin's address
4.1	Address line 1	<Contact Address line 1>	ST						
4.2	Address line 2	<Contact Address line 2>	ST						
4.3	City	<Contact Address City>	ST						
4.4	State	<Contact Address State>	ST						
4.5	Zip Code	<Contact Address Zip>	ST						
4.6	Country	<Contact Address Country code>	ST						
4.7	Address Type	<Contact Address Type Code>	ST						C = Current; H = Home; L = Legal; M = Mailing; P = Permanent
4.9	County Code	<Contact Address County>	ST						
5	Next of Kin Phone # <i>(May repeat up to 2X)</i>	<Contact Phone>						5	follows: PRN - Contact Phone; NET - e-Mail Equipment Types: PH - Phone; CP - Cell Phone; FX - Fax; Internet - e-Mail See Common Elements below, Phone Number for full structure
13	Contact Organization Name								Used if the "person to contact" is an organization rather than a person
13.1	Organization Name	<Contact Organization Name>	ST						As received and posted with inbound ADT messages or manually entered.
13.2	Organization Name Type Code	<Contact Organization Name Type>	ST						A = Alias name; D = Display name; L = Legal name
13.6	Contact Organization Assigning Authority								
13.6.1	Assigning Authority Namespace ID	<Contact Organization AA NS ID>	ST						As received and posted with inbound ADT messages or manually entered.
13.6.2	Assigning Authority Universal ID	<Contact Organization AA UID>	ST						As received and posted with inbound ADT messages, manually entered, or captured from Universal Identifiers table based on NS ID. Should be ISO Number (OID) or CLIA Number.
13.6.3	Assigning Authority Universal ID Type	<Contact Organization AA UID Type>	ST						As received and posted with inbound ADT messages, manually entered, or captured from Universal Identifiers table based on NS ID. ISO = International Standards Organization; CLIA = CLIA number; L = local code
13.7	Identifier Type Code	XX	ID						XX = Organization Identifier
13.10	Organization Identifier	<Contact Organization Code>	ST						As received and posted with inbound ADT messages.
PV1 Segment									
0	PV1	PV1	ID	R	R	R	R		
1	Set ID	1	NM						
2	Patient Class	<SCC Patient Type>	ST	A	A	A	A		SCC code as defined in <i>Wards/Clinics</i> setup
3	Assigned Patient Location								Name of the patient location when the order was placed.
3.1	Unit/Location/Clinic	<Patient Location Code>	ST	A	A	A	A	23	SCC coded mnemonic only.
3.2	Room	<Room>	ST						
3.3	Bed	<Bed>	ST						
4	Admission Type								

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
4	Admission Type	<Admission Type>	ST						A - Accident; E - Emergency; L - Labor and Delivery; R - Routine; N - Newborn (Birth in healthcare facility); U - Urgent; C - Elective
5	Preadmit Number	<Billing Number>	ST	A	A	A	A	3, 4, 6	Billing Number may be stored in SCC databases with an internal prefix. This prefix is included. This field supports use of HL7 Escape sequences.
7	Attending Doctor	<Attending Doctor>		A	A	A	A	24, 25	See Common Elements below, Provider Information
9	Consulting Doctor	<Consulting Doctor>						24, 25	See Common Elements below, Provider Information Consulting Doctor is not normally stored or accessed in SoftLab
10	Hospital Service	<IHSVC tag Service Code>	ST						As stored under Stay menu, Order Comm, !Tags tab - as IHSVC tagged data Strings of up to 255 characters may be stored as tagged data. Actual length is restricted only by the originating system sending such data to SCC with inbound messages.
16	VIP Indicator	<Stay Flag>	ST						Internal flags on patient stay level: A - admit stay; D - discharge stay; O - admitted as outpatient; H - posted from HIS
17	Admitting Doctor	<Admitting Doctor>						24, 25	See Common Elements below, Provider Information
18	HIS Patient Type	<HIS Patient Type>	ST						As stored in SoftLab <i>Accident Code</i> .
19	Visit Number	<IHSV tag Visit Number>	ST					6	As stored under Stay menu, Order Comm, !Tags tab - as IHSV tagged data Strings of up to 255 characters may be stored as tagged data. Actual length is restricted only by the originating system sending such data to SCC with inbound messages. This field supports use of HL7 Escape sequences.
36	Discharge Disposition	<Deceased Indicator>	ST						20 = Patient is flagged as deceased in SoftLab, null otherwise
39	Servicing Facility	<HIS Account>	ST					6	Multisite: Appropriate HIS# based on setup of Multisite HIS Acc Setup Table. This field supports use of HL7 Escape sequences.
44	Admit Date/Time	<Admit Date/Time>	TS						CCYYMMDD format As stored in the SoftLab database. If the admission time is not present then only the date will be sent.
45	Discharge Date/Time	<Discharge Date/Time>	TS						CCYYMMDD format As stored in the SoftLab database. If the discharge time is not present then only the date will be sent.
50	Alternate Visit ID	<Visit Chart Number>	ST						Chart Number (a.k.a. Account#) is a Patient ID used on a 3rd party system that is usually manually entered in <i>plab.pldiag2</i> .
IN1 Segment									
0	IN1	IN1	ID			////	////		
1	Set ID - Insurance	<Set ID/Insurance Priority>	ST			////	////		The Set ID lists the order in which insurances are listed for selection on the Patient Maintenance and Order Entry screens.
2	Insurance Plan ID	<Insurance Code>	ST			////	////		A unique ID for each insurance is used.
3	Insurance Company ID	<Insurance Code>	ST			////	////		A unique ID for each insurance is used.
8	Group Number	<Group Number>	ST			////	////		
12	Plan Effective Date	<Effective Date>	ST			////	////		
13	Plan Expiration Date	<Expiration Date>	ST			////	////		
15	Plan Type	<Family Plan Flag>	ST			////	////		Y or N
16	Insured Name					////	////		
16.1	Insured Last Name	<Insured Last Name>	ST			////	////		
16.2	Insured First Name	<Insured First Name>	ST			////	////		
16.3	Insured Middle Name	<Insured Middle>	ST			////	////		
17	Insured's Relationship To Patient	<Relation to Insured code>	ST			////	////		I = Self; S = Spouse; C = Child; O = Other
18	Insured's Date Of Birth	<Insured's Date of Birth>	ST			////	////		

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
19	Insured Address					////	////		
19.1	Ins'd Address line 1	<Insured Address line 1>	ST			////	////		
19.2	Ins'd Address line 2	<Insured Address line 2>	ST			////	////		
19.3	Ins'd Address City	<Insured City>	ST			////	////		
19.4	Ins'd Address State	<Insured State>	ST			////	////		
19.5	Ins'd Address Zip	<Insured Zip>	ST			////	////		
19.6	Ins'd Country Code	<Insured Country>	ST			////	////		
22	Coord Of Ben. Priority	<Coord. of Benefit Priority>	ST			////	////		Numeric value indicates primary, secondary, tertiary, etc. insurance. Since IN1 segments are sent in this order naturally, this is a repeat of the Set ID in IN1[1].
36	Policy Number	<Policy Number>	ST			////	////		
43	Insured's Sex	<Insured's Sex>	ST			////	////		M = Male; F = Female; U = Undefined
ORC Segment									
0	ORC	ORC	ID	R	R	R	R		
1	Order Control	<HL7 Control Code>	ID	R	R	R	R		
2	Placer Order Number								
2.1	Placer Order Number	<Placer Order #>	ST					6, 22	"Foreign System" Placer Request Number. See also OBR-2. This field supports use of HL7 Escape sequences.
2.2	Namespace ID	<Placer Number NS ID>	ST						As posted with inbound NW, SN, and NA messages from the placer system
2.3	Universal Identifier	<Placer Number UID>	ST						As posted with inbound NW, SN, and NA messages from the placer system. Should be ISO Number (OID) or CLIA Number.
2.4	Universal Identifier Type	<Placer Number UID Type>	ST						As posted with inbound NW, SN, and NA messages from the placer system. ISO = International Standards Organization; CLIA = CLIA number; L = local code
3	Filler Order Number								
3.1	Filler Order Number	<SCC "LIS #">	ST						SCC Filler Number. See also OBR-3.
3.2	Namespace ID	<Order# Namespace ID>	ST						A constant value defined in Universal Identifiers for the Code ORDNUM representing the client/installation.
3.3	Universal Identifier	<Order# UID>	ST						An ISO-compliant OID defined in Universal Identifiers for the Code ORDNUM representing the client/installation.
3.4	Universal Identifier Type	ISO	ST						ISO = International Standards Organization
4	Placer Group Number								
4.1	SCC Order Number	<SoftLab Order Number> <SoftPath Case Number>	ST	A	A	A	A		SCC Order Number. Multiple tests (OBR segments) may share the same SoftLab Order Number. Taken together, the SoftLab Order Number and Ordered Test Code form a unique combination for the enterprise.
4.2	Namespace ID	<Order# Namespace ID>	ST						A constant value defined in Universal Identifiers for the Code ORDNUM representing the client/installation.
4.3	Universal Identifier	<Order# UID>	ST						An ISO-compliant OID defined in Universal Identifiers for the Code ORDNUM representing the client/installation.
4.4	Universal Identifier Type	ISO	ST						ISO = International Standards Organization
8	Parent								
8.1.1	Parent	<Auxiliary Order #>	ST						A non-unique Placer Order Number that is saved in SCC's genindex table as AUX#
8.1.2	Namespace ID	<Auxiliary Number NS ID>	ST						As posted with inbound NW, SN, and NA messages from the placer system
8.1.3	Universal Identifier	<Auxiliary Number UID>	ST						As posted with inbound NW, SN, and NA messages from the placer system. Should be ISO Number (OID) or CLIA Number.
8.1.4	Universal Identifier Type	<Auxiliary Number UID Type>	ST						As posted with inbound NW, SN, and NA messages from the placer system. ISO = International Standards Organization; CLIA = CLIA number; L = local code

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
9	Event Date/Time	<Ordered Date/Time>	TS	A	A	A	A		CCYYMMDDhhmmss format Date & time when the order was placed. Time is sent as 0000 when not entered in SCC.
10	Entered by								
10.1	Common ID	<Ordering Tech ID or Pathologist ID>	ST	A	A	A	A		SoftLab/SoftMic/SoftBank: ID of the technologist who placed the order. SoftPath: Code of the pathologist who signed out the case.
13	Enterer's Location								
13.1	Ward	<Ordering Ward>	ST	A	A	A	A	23	SCC ID of the ward where the order was placed
13.2	Depot	<Ordering Depot>	ST						Code of the depot from which the order was placed, as defined in <i>Multisite</i> setup
21	Ordering Facility Information								
21.1	Organization Name	<Facility Name - ordering clinic>	ST						Facility Name is defined in <i>Clinic</i> setup
21.2	Organization Name Type Code	L	ID	A	A	A	A		Options are: A = Alias name; D = Display name; L = Legal name NS ID, UID, and UID Type are defined in the <i>Universal Identifiers</i> table and are linked to a matching SCC ID in both <i>Clinic</i> setup and the <i>Universal Identifiers</i> table.
21.6	Ordering Facility Assigning Authority		ST						
21.6.1	Assigning Authority Namespace ID	<Ordering Facility NS ID>	ST						
21.6.2	Assigning Authority Universal ID	<Ordering Facility UID>	ST						ISO Number (OID) or CLIA Number
21.6.3	Assigning Authority Universal ID Type	<Ordering Facility UID Type>	ST						ISO = International Standards Organization; CLIA = CLIA number; L = local code
21.7	Identifier Type Code	XX	ID	A	A	A	A		XX = Organization Identifier
21.10	Organization Identifier	<Facility code - ordering clinic>	ST						Facility Code from <i>Clinic</i> setup
22	Ordering Facility Address								
22.1	Street or Mailing Address line 1	<Ordering Clinic Address 1>	ST						
22.2	Street or Mailing Address line 2	<Ordering Clinic Address 2>	ST						
22.3	City	<Ordering Clinic City>	ST						
22.4	State or Province	<Ordering Clinic State>	ST						
22.5	Postal Code	<Ordering Clinic Zip>	ST						
22.6	Country	<Ordering Clinic Country>	ST						SCC codes are sent with no translation.
22.7	Address Type	B	ID						Options are: B = Firm/Business; L = Legal Address; M = Mailing; O = Office; P = Permanent
22.9	County Code	<Ordering Clinic County>	ST						
23	Ordering Facility Phone Number	<Ordering Clinic Phone #>						5	A single number is sent with the following: Use Code: WPN - Business Phone Equipment Type: PH - Phone See Common Elements below, Phone Number for full structure
24	Ordering Provider Address								
24.1	Street or Mailing Address line 1	<Requesting Doctor Address 1>	ST						
24.2	Street or Mailing Address line 2	<Requesting Doctor Address 2>	ST						
24.3	City	<Requesting Doctor City>	ST						
24.4	State or Province	<Requesting Doctor State>	ST						
24.5	Postal Code	<Requesting Doctor Zip>	ST						
24.6	Country	<Requesting Doctor Country>	ST						SCC codes are sent with no translation.
24.7	Address Type	<Ordering Doctor Address type code>	ID						Options are: B = Firm/Business; L = Legal Address; M = Mailing; O = Office; P = Permanent
24.9	County Code	<Ordering Doctor County>	ST						
OBR Segment									
0	OBR	OBR	ID	R	R	R	R		
1	Set ID - OBR	1	NM						
2	Placer Order Number								

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
2.1	Placer Order Number	<Placer Order #>	ST					6, 22	"Foreign System" Placer Request Number. See also ORC-2. This field supports use of HL7 Escape sequences.
2.2	Namespace ID	<Placer Number NS ID>	ST						As posted with inbound NW, SN, and NA messages from the placer system
2.3	Universal Identifier	<Placer Number UID>	ST						As posted with inbound NW, SN, and NA messages from the placer system. Should be ISO Number (OID) or CLIA Number.
2.4	Universal Identifier Type	<Placer Number UID Type>	ST						As posted with inbound NW, SN, and NA messages from the placer system. ISO = International Standards Organization; CLIA = CLIA number; L = local code
3	Filler Order Number								
3.1	Filler Order Number	<SCC "LIS #">	ST						SCC Filler Number. See also ORC-3.
3.2	Namespace ID	<Order# Namespace ID>	ST						A constant value defined in Universal Identifiers for the Code ORDNUM representing the client/installation.
3.3	Universal Identifier	<Order# UID>	ST						An ISO-compliant OID defined in Universal Identifiers for the Code ORDNUM representing the client/installation.
3.4	Universal Identifier Type	ISO	ST						ISO = International Standards Organization
4	Ordered Procedure	<Ordered Test>		A	A	A	A	28	See Common Elements below, Ordered Procedure
7	Observation Date/Time	<Collected Date/Time>	TS						Empty for not collected specimens. Includes Timezone offset indicator
10	Collector Identifier	<Collecting Phlebotomist ID>	ST						Empty for not collected specimens
13	Relevant Clinical Information								
13.1	Identifier	<test level Diagnosis Code>	ST						First test level diagnosis code as stored in SoftLab database, SoftLab Order menu, Check Medical Necessity, Service Code modifiers, Test Diagnosis.
13.2	Text	<dictionary dx description>	ST						Text description of code as defined in Diagnosis setup table
13.3	Name of Coding System	<type of dx code>	ST						From dictionary definition. Should be defined to indicate "I9CDX"
14	Specimen Received Date/Time	<Received Date/Time>	TS						Empty for not received specimens
15	Specimen Source			////		////			
15.1	Source Code	<Specimen Source Code>	ST	////		////		26	SoftMic: Source code as defined by the user in the Microbiology system files. (e.g.: WND) SoftPath: Source of pathology specimen.
15.3	Source Name	<Specimen Source Name>	ST	////		////	////		SoftMic: Source name as defined by the user in the Microbiology system files. (e.g.: Abscess Wound). Requires special SoftMic parameter setup.
15.4	Site	<Specimen Site>	ST	////		////	////		SoftMic: Text description of the body site. (e.g.: Right Leg)
16	Ordering Provider Information	<Requesting Doctor>		A	A	A	A	24, 25	Matches ORC-12 See Common Elements below, Provider Information
17	Callback Phone Number	<Ordering Doctor Phone #>						5	Primary number is listed first, e-mail is listed last. Use Codes based on database field as follows: WPN - Primary Office Phone; WPN - Other Office Phone; BPN - Pager Number; ORN - Fax; NET - e-Mail Equipment Types based on database field as follows: PH - Primary Office Phone; PH - Other Office Phone; BP - Pager; FX - Fax; Internet - e-Mail See Common Elements below, Phone Number for full structure
19	Placer field 2	<Patient Visit number (order-specific)>	ST						As stored under Order Comm button, !Tags tab as IHISV tagged data. Strings of up to 255 characters may be stored as tagged data. Actual length is restricted only by the originating system sending such data to SCC with inbound messages.
21	Filler field 2	<Significant Occurrence Flag>	ST	////		////	////		Used only with SoftMic results. +=Significant Occurrence. Requires setup in SoftMic.

Seq	Element	Output	Type	ORU	ORU	ORU	ORU	Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
22	Results Rpt/Status Chng - Date/Time	<Last Verified Date/Time>	TS						SoftLab: Latest verified date/time SoftMic: Latest status-change date SoftBank: Date the last test in a group of tests was resulted. SoftPath: Sign-out date. Includes Timezone offset indicator
24	Diagnostic Serv Sect ID	<Test Department>	ST						Department code for the ordered test as defined in the SoftLab Department Setup File. If none is defined, then the Department code of the first component test is used.
25	Result Status								
25.1	Status	<Result Status>	ST						F – Final – all modules. For SoftLab results, this indicates all tests for the requested procedure are resulted & verified. For all other results, this directly reflects result flags set in each module. P – Preliminary – all modules. For SoftLab results, this indicates at least one test on the requested procedure is not yet verified. For all other results, this directly reflects result flags set in each module. All SoftMic status codes are configurable including the result cancellation message. R – Revised Report – SoftPath only. S – Supplemental Report – SoftPath only. C – Corrected – SoftPath only.
26	Parent Result						////		Valued only if the test in OBR-4 is created as a reflex test. Valued for result-based reflex tests. Other reflex rules may not provide a parent identity.
26.1.1	Parent Observation Identifier	<Parent individual test code (LOINC or Local code)>	ST				////		OBX-3.1 of component test that triggered this ordered test as a reflex test. Sent as received from ref labs.
26.1.2	Parent Observation ID Text	<Parent test name (LOINC or Locally defined)>	ST				////		OBX-3.2 of component test that triggered this ordered test as a reflex test.
26.1.3	Parent Observation ID Name of Coding System	LN or L	ST				////		LN = LOINC® system, L = local code Value depends on configuration and content of OBR-26.1.1 and OBX-3.
26.1.4	Parent Observation Alternate ID	<Other Parent individual test code (Local code or LOINC)>	ST				////		OBX-3.4 of component test that triggered this ordered test as a reflex test.
26.1.5	Parent Observation Alternate ID Text	<Other Parent test name (Locally defined or LOINC)>	ST				////		OBX-3.5 of component test that triggered this ordered test as a reflex test.
26.1.6	Parent Observation Name of Alternate Coding System	L or LN	ST				////		LN = LOINC® system, L = local code Value depends on configuration and content of OBR-26.1.4 and OBX-3.
26.3	Parent Observation Value Descriptor	<Parent individual test result>	ST				////		OBX-5 of component test that triggered this ordered test as a reflex test. No formatting. Sent as received from reference labs.
27	Quantity/Timing								
27.1	Quantity	<Number of Items>	NM						Null value implies quantity of "1". Applies to SN or NW transactions only.
27.4	Start Date/Time	<To Be Collected Date/Time>	TS						SoftLab: Date and time as on the main Order Entry screen. Time is sent as 0000 when not entered in SCC. SoftBank: Requested Date and Time SoftPath: Requested Date and Time Includes Timezone offset indicator
27.6	Priority	<Priority>	ST						S – Stat; A – ASAP (Urgent); R – Routine; T – Timed
28	Result Copies To (may repeat up to 4x)	<Copy-to Doctors x4>							See Common Elements below, Provider Information May repeat up to 4X
29	Parent Number						////		Valued only for Reflex Tests
29.1	Placer Identifier						////		
29.1.1	Placer Entity Identifier	<Parent Placer Order #>	ST				////		OBR-2.1 of parent ordered test that triggered this ordered test as a reflex test.
29.1.2	Placer Namespace ID	<Parent Placer Number NS ID>	ST				////		OBR-2.2 of parent ordered test that triggered this ordered test as a reflex test.
29.1.3	Placer Universal ID	<Parent Placer Number UID>	ST				////		OBR-2.3 of parent ordered test that triggered this ordered test as a reflex test.

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
29.1.4	Placer Universal ID Type	<Parent Placer Number UID Type>	ST				////		OBR-2.4 of parent ordered test that triggered this ordered test as a reflex test.
29.2	Filler Identifier						////		
29.2.1	Filler Entity Identifier	<Parent SCC "LIS #">	ST				////		OBR-3.1 of parent ordered test that triggered this ordered test as a reflex test.
29.2.2	Filler Namespace ID	<Order# Namespace ID>	ST				////		OBR-3.2 of parent ordered test that triggered this ordered test as a reflex test.
29.2.3	Filler Universal ID	<Order# UID>	ST				////		OBR-3.3 of parent ordered test that triggered this ordered test as a reflex test.
29.2.4	Filler Universal ID Type	ISO	ST				////		OBR-3.4 of parent ordered test that triggered this ordered test as a reflex test.
32	Principal Result Interpreter								
32.1.1	Common ID	<Tech ID>	ST						SCC User ID who verified the latest result
32.1.2	Last Name	<Tech/User Last Name>	ST						Defined in Security or posted from reference labs
32.1.3	First Name	<Tech/User First Name>	ST						Defined in Security or posted from reference labs
32.1.4	Further Given Names or Initials	<Tech/User Middle Name>	ST						Defined in Security or posted from reference labs
32.1.5	Suffix	<Tech/User Suffix>	ST						Defined in Security or posted from reference labs
32.1.6	Prefix	<Tech/User Prefix>	ST						Defined in Security or posted from reference labs
32.1.7	Degree	<Tech/User Professional Suffix>	ST						Defined in Security or posted from reference labs
	Principal Result Interpreter Assigning Authority								NS ID, UID, and UID Type are defined in the <i>Universal Identifiers</i> table and are linked to a matching <i>Code</i> in both <i>User</i> setup in Security and the <i>Universal Identifiers</i> table.
32.1.9	Assigning Authority Namespace ID	<Tech/User AA Namespace ID>	ST						Defined in Security or posted from reference labs
32.1.10	Assigning Authority Universal ID	<Tech/User AA Universal ID>	ST						ISO Number (OID) or CLIA Number, defined in Security or posted from reference labs
32.1.11	Assigning Authority Universal ID Type	<Tech/User AA Universal ID Type>	ST						ISO = International Standards Organization; CLIA = CLIA number; L = local code
34	Technician	<Tech ID who last entered a result>	ST						Related to OBR[22] Sign-out pathologist ID for SoftPath.
45	Procedure Code Modifier	<Service Code Modifiers>	ST						Service Code as stored in the SoftLab database, SoftLab Order menu, <i>Check Medical Necessity</i> , <i>Service Code modifiers</i> . Service Code may repeat up to a maximum of three times.
DG1 Segment									
0	DG1	DG1	ID	R	R	R	R		
1	Set ID - DG1	<counter>	NM						Increments from 1 to n for each group of segments
3	Diagnosis								
3.1	Diagnosis Code	<test level Diagnosis Code>	ST						Test Level diagnosis codes as stored in SoftLab database, SoftLab Order menu, <i>Check Medical Necessity</i> , <i>Service Code modifiers Test Diagnosis</i> .
3.2	Text	<dictionary dx description>	ST						Text description of code as defined in Diagnosis setup table
3.3	Name of Coding System	<type of dx code>	ST						From dictionary definition. Should be defined to indicate "I9CDX"
3.7	Coding System Version ID	<dx code version>	ST						From dictionary definition.
SPM Segment									
0	SPM	SPM	ID	R	R	R	R		
1	Set ID - SPM	<counter>	NM						
2.2	Specimen ID								
2.2.1	Filler Specimen Number	<Softlab Order Number + Extension>	ST						
2.2.2	Namespace ID	<Order# Namespace ID>	ST						A constant value defined in <i>Universal Identifiers</i> for the <i>Code</i> ORDNUM representing the client/installation. Same data as ORC-3.2
2.2.3	Universal ID	<Order# UID>	ST						An ISO-compliant OID defined in <i>Universal Identifiers</i> for the <i>Code</i> ORDNUM representing the client/installation. Same data as ORC-3.3
2.2.4	Universal ID Type	ISO	ST						ISO = International Standards Organization
4	Specimen Type								
4.1	Identifier	<Specimen Type Code (UC)>	ST						Code defined in Specimen setup. SNOMED or HL7 codes recommended.
4.2	Text	<Specimen Type Name (UC)>	ST						Defined in <i>HIS Mapping Table</i> .

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
4.3	Name of Coding System	<Specimen Type Coding System (UC)>	ST						Defined in <i>HIS Mapping Table</i> . "SCT" (SNOMED) or HL7 table recommended.
4.4	Alternate Identifier	<SCC specimen code>	ST						Specimen Tube Type code or Micro Specimen code formerly sent in OBR-15.1
4.5	Alternate Text	<SCC specimen name>	ST						Defined in Specimen Tube Type setup or Micro Specimens setup
4.6	Name of Alternate Coding System	L	ST						L = Local system
4.7	Coding System Version ID	<Specimen Type Coding System Version (UC)>	ST						Defined in <i>HIS Mapping Table</i> . (Note: SNOMED version is typically expressed as a date)
4.8	Alternate Coding System Version ID	NA	ST						NA = No versioning applicable for Local codes
4.9	Original Text	<Specimen Type Name (UC)>	ST						Same data as above.
5	Specimen Type Modifier								
5.1	Identifier	<Specimen Type Modifier Code (UC)>	ST				////		Defined in <i>HIS Mapping table</i> . SNOMED or HL7 codes recommended.
5.2	Text	<Specimen Type Modifier Text (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> .
5.3	Name of Coding System	<Specimen Type Modifier Coding System (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . "SCT" (SNOMED) or HL7 table recommended.
5.4	Alternate Identifier	<SCC Specimen Type Modifier Code>	ST				////		Code as defined in Specimen setup and captured during specimen collection.
5.5	Alternate Text	<SCC Specimen Type Modifier Text>	ST						Defined in Simple Messages setup
5.6	Name of Alternate Coding System	L	ST				////		L = Local system
5.7	Coding System Version ID	<Specimen Type Modifier Coding System Version (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . (Note: SNOMED version is typically expressed as a date)
5.8	Alternate Coding System Version ID	NA	ST				////		NA = No versioning applicable for Local codes
5.9	Original Text	<Specimen Type Modifier Text (UC)>	ST				////		Same data as above.
6	Specimen Additives						////		
6.1	Identifier	<Specimen Additive Code (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . HL7 codes recommended.
6.2	Text	<Specimen Additive Text (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> .
6.3	Name of Coding System	<Specimen Additive Coding System (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . "HL70371" recommended.
6.4	Alternate Identifier	<SCC Specimen Additive Code>	ST				////		Default code as defined in Specimen setup and captured during specimen collection.
6.5	Alternate Text	<SCC Specimen Additive Text>	ST				////		Defined in Simple Messages setup
6.6	Name of Alternate Coding System	L	ST				////		L = Local system
6.7	Coding System Version ID	<Specimen Additive Coding System Version (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> .
6.8	Alternate Coding System Version ID	NA	ST				////		NA = No versioning applicable for Local codes
6.9	Original Text	<Specimen Additive Text (UC)>	ST				////		Same data as above.
7	Specimen Collection Method								
7.1	Identifier	<Specimen Collection Method Code (UC)>	ST						Defined in <i>HIS Mapping Table</i> . SNOMED or HL7 codes recommended.
7.2	Text	<Specimen Collection Method Text (UC)>	ST						Defined in <i>HIS Mapping Table</i> .
7.3	Name of Coding System	<Specimen Collection Method Coding System (UC)>	ST						Defined in <i>HIS Mapping Table</i> . "SCT" (SNOMED) or "HL70488" recommended.
7.4	Alternate Identifier	<Specimen Collection Method Code>	ST						Method is based on flags set during specimen collection.
7.5	Alternate Text	<SCC Specimen Collection Method Text>	ST						Defined in Simple Messages setup
7.6	Name of Alternate Coding System	L	ST						L = Local system
7.7	Coding System Version ID	<Specimen Collection Method Coding System Version (UC)>	ST						Defined in <i>HIS Mapping Table</i> . (Note: SNOMED version is typically expressed as a date)
7.8	Alternate Coding System Version ID	NA	ST						NA = No versioning applicable for Local codes
7.9	Original Text	<Specimen Collection Method Text (UC)>	ST						Same data as above.
8	Specimen Source Site								Micro results: Site text is sent in component 9 with all other components blank.
8.1	Identifier	<Specimen Site Code (UC)>	ST						Defined in <i>HIS Mapping Table</i> . SNOMED or HL7 codes recommended.
8.2	Text	<Specimen Site Name (UC)>	ST						Defined in <i>HIS Mapping Table</i> .
8.3	Name of Coding System	<Specimen Site Coding System (UC)>	ST						Defined in <i>HIS Mapping Table</i> . "SCT" (SNOMED) or HL7 table recommended.
8.4	Alternate Identifier	<SCC Specimen Site Code>	ST						Code for source site captured for each specimen during collection.
8.5	Alternate Text	<SCC Specimen Site Name>	ST						Defined in Simple Messages setup

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
8.6	Name of Alternate Coding System	L	ST						L = Local system
8.7	Coding System Version ID	<Specimen Site Coding System Version (UC)>	ST						Defined in <i>HIS Mapping Table</i> . (Note: SNOMED version is typically expressed as a date)
8.8	Alternate Coding System Version ID	NA	ST						NA = No versioning applicable for Local codes
8.9	Original Text	<Specimen Site Name (UC)> or <Micro Site text>	ST						If codes are sent, same data as above. For micro, textual Site information as formerly sent in OBR-15.4
9	Specimen Source Site Modifier								
9.1	Identifier	<Specimen Site Modifier Code (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . SNOMED or HL7 codes recommended.
9.2	Text	<Specimen Site Modifier Text (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> .
9.3	Name of Coding System	<Specimen Site Modifier Coding System (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . "SCT" (SNOMED) or HL7 table recommended.
9.4	Alternate Identifier	<SCC Specimen Site Modifier Code>	ST				////		Code for source site modifier captured for each specimen during collection.
9.5	Alternate Text	<SCC Specimen Site Modifier Text>	ST						Defined in Simple Messages setup
9.6	Name of Alternate Coding System	L	ST				////		L = Local system
9.7	Coding System Version ID	<Specimen Site Modifier Coding System Version (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . (Note: SNOMED version is typically expressed as a date)
9.8	Alternate Coding System Version ID	NA	ST				////		NA = No versioning applicable for Local codes
9.9	Original Text	<Specimen Site Modifier Text (UC)> <Micro Site text>	ST				////		Same data as above.
12	Specimen Collection Amount						////		
12.1	Quantity	<Specimen Collection Amount>	NM				////		Amount collected defined in Specimen window in Order Entry
12.2.1	Units Identifier	<Specimen Collection Units Code (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . Unified Code for Units of Measure (UCUM) codes recommended.
12.2.2	Units Text	<Specimen Collection Units Text (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> .
12.2.3	Units Coding System	<Specimen Collection Units Coding System (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . "UCUM" recommended.
12.2.4	Units Alternate Identifier	<SCC Specimen Collection Units Code>	ST				////		Default code defined in Specimen setup and captured during specimen collection.
12.2.5	Units Alternate Text	<SCC Specimen Collection Units Text>	ST				////		Defined in Simple Messages setup
12.2.6	Units Alternate Coding System	L	ST				////		L = Local system
12.2.7	Units Coding System Version ID	<Specimen Collection Units Coding System Version (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> .
12.2.8	Units Alt. Coding System Version ID	NA	ST				////		NA = No versioning applicable for Local codes
12.2.9	Units Original Text	<Specimen Collection Units Text (UC)>	ST				////		Same data as above.
17	Specimen Collection Date/Time								
17.1	Range Start Date/Time	<Specimen Collected D/T>	TS						Includes Timezone offset indicator
17.2	Range End Date/Time	<Specimen Collected End D/T>	TS				////		Includes Timezone offset indicator
18	Specimen Received Date/Time	<Specimen Received D/T>	TS						Includes Timezone offset indicator
21	Specimen Reject Reason						////		
21.1	Identifier	<Specimen Rejection Reason Code (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . HL7 codes as used in SCC are recommended.
21.2	Text	<Specimen Rejection Reason Text (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> .
21.3	Name of Coding System	<Specimen Rejection Reason Coding System (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> . "HL70490" recommended.
									Code for rejection reason captured for each specimen during collection. EX = Expired; QS = Quantity not sufficient; RB = Broken container; RC = Clotting; RD = Missing collection date; RA = Missing patient ID number; RE = Missing patient name; RH = Hemolysis; RI = Identification problem; RM = Labeling; RN = Contamination; RP = Missing phlebotomist ID; RR = Improper storage; RS = Name misspelling
21.4	Alternate Identifier	<SCC Specimen Rejection Reason Code>	ST				////		
21.5	Alternate Text	<SCC Specimen Rejection Reason Text>	ST				////		Defined in Simple Messages setup

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
21.6	Name of Alternate Coding System	L	ST				////		L = Local system
21.7	Coding System Version ID	<Specimen Rejection Reason Coding System Version (UC)>	ST				////		Defined in <i>HIS Mapping Table</i> .
21.8	Alternate Coding System Version ID	NA	ST				////		NA = No versioning applicable for Local codes
21.9	Original Text	<Specimen Rejection Reason Text (UC)>	ST				////		Same data as above.
24	Specimen Condition								
24.1	Identifier	<Specimen Condition Code (UC)>	ST						Defined in <i>HIS Mapping Table</i> . HL7 codes as used in SCC are recommended.
24.2	Text	<Specimen Condition Text (UC)>	ST						Defined in <i>HIS Mapping Table</i> .
24.3	Name of Coding System	<Specimen Condition Coding System (UC)>	ST						Defined in <i>HIS Mapping Table</i> . "HL70493" recommended.
24.4	Alternate Identifier	<SCC Specimen Condition Code>	ST						Code for Condition captured for each specimen during collection. AUT = Autolyzed; CLOT = Clotted; CON = Contaminated; COOL = Cool; FROZ = Frozen; HEM = Hemolyzed; LIVE = Live; ROOM = Room Temp; SNR = Sample Not Received
24.5	Alternate Text	<SCC Specimen Condition Text>	ST				////		Defined in Simple Messages setup
24.6	Name of Alternate Coding System	L	ST						L = Local system
24.7	Coding System Version ID	<Specimen Condition Coding System Version (UC)>	ST						Defined in <i>HIS Mapping Table</i> .
24.8	Alternate Coding System Version ID	NA	ST						NA = No versioning applicable for Local codes
24.9	Original Text	<Specimen Condition Text (UC)>	ST						Same data as above.
Common Elements with subfields									
Provider Information									
f.1	Physician Code	<Doctor NPI>	ST					24	Doctor NPI number as seen in SoftLab Doctor setup files
f.2	Physician Last Name	<Doctor Last Name>	ST						
f.3	Physician First Name	<Doctor First Name>	ST						
f.4	Physician Middle Name	<Doctor Middle Name>	ST						
f.5	Physician Name Suffix	<Doctor Name Suffix>	ST						
f.6	Physician Name Prefix	<Doctor Title>	ST						
f.8	Physician Code	<SCC Doctor code>	ST	A	A	A	A	24, 25	5-character SCC primary Doctor ID as defined in SoftLab Doctor Setup files. NS ID, UID, and UID Type are defined in the <i>Universal Identifiers</i> table and are linked to a matching Code in both <i>Doctors</i> setup and the <i>Universal Identifiers</i> table.
Provider ID Assigning Authority									
f.9.1	Assigning Authority Namespace ID	<Doctor AA NS ID>	ST						
f.9.2	Assigning Authority Universal ID	<Doctor AA UID>	ST						ISO Number (OID) or CLIA Number
f.9.3	Assigning Authority Universal ID Type	<Doctor AA UID Type>	ST						ISO = International Standards Organization; CLIA = CLIA number; L = local code
f.10	Name Type Code	L	ST						Configured to reflect the type of name used. L = Legal name; D = Display name
f.13	Identifier Type Code	<Type code>	ST						Reflects the type of code sent in subfield 1. DN = Doctor number (locally defined); NPI = NPI code
Provider ID Assigning Facility									
f.14.1	Assigning Facility Namespace ID	<Doctor AF NS ID>	ST						
f.14.2	Assigning Facility Universal ID	<Doctor AF UID>	ST						
f.14.3	Assigning Facility Universal ID Type	<Doctor AF UID Type>	ST						
f.21	Professional Suffix	<SCC Doctor Pro Suffix>	ST						
Phone Number - Up to 5 repetitions as applicable to the field - Phone number if available, otherwise e-mail address									
f[n].2	Telecommunication Use Code	<Use Code>	ID						Based on database field as described for each element. PRN - Primary Phone; ORN - Other Phone; WPN - Business Phone; BPN - Pager Number; NET - Internet

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
f[n].3	Telecommunication Equipment Type	<Equipment Type>	ST						If <i>Use Code</i> represents a phone, as stored in <i>Equipment Type</i> field: PH - Telephone; FX - Fax; MD - Modem; CP - Cellular Phone; BP - Beeper If <i>Use Code</i> represents e-mail (NET): Internet - Internet Address
f[n].4	e-mail Address	<e-mail address>	ST						empty for phone number <i>Use Codes</i> PRN, ORN, WPN, BPN
f[n].5	Country Code	<Phone #, country prefix>	ST					5	empty for <i>Use Code</i> NET
f[n].6	Area Code	<Phone #, area code>	ST					5	empty for <i>Use Code</i> NET
f[n].7	Local Phone Number	<Phone #, local #>	ST						empty for <i>Use Code</i> NET
f[n].8	Extension	<Phone #, extension>	ST						empty for <i>Use Code</i> NET
f[n].9	Text	<comment>	ST						
Ordered Procedure (OBR-4)									
4.1	Universal Service Identifier (LOINC)	<LOINC Code - ordered test> or <SCC Code - ordered test>	ST	R	R	R	R	28	LOINC code as defined in SoftLab Test Setup. If no LOINC code is defined, the test code to be sent in OBR-4.4 will be mapped to be sent here.
4.2	Universal Service Text	<LOINC Name> or <SCC Test Name>	ST						Name as defined in LOINC dictionary. If no LOINC code is defined, SCC test name will be mapped to be sent here.
4.3	Name of Universal Service Coding System	LN or L	ST	A	A	A	A		LN = LOINC® system; L = Local system
4.4	Alternate Universal Service Identifier	<SCC Code - ordered test>	ST	A	A	A	A	28	SCC primary code for the ordered test or procedure as defined in Test Setup dictionaries.
4.5	Alternate Universal Service Text	<SCC Test Name>	ST						
4.6	Name of Alternate Coding System	L	ST	A	A	A	A		L = Local system
4.7	Coding System Version ID	<LOINC Version>	ST						As defined in LOINC dictionary
4.8	Alternate Coding System Version ID	NA	ST	A	A	A	A		NA = No versioning applicable for Local codes
4.9	Universal Service Text	<LOINC Name> or <SCC Test Name>	ST						Same data as OBR-4.2
Individual Test Components (OBX-3)									
3.1	Universal Service Identifier	<LOINC Code - component test>	ST					29	LOINC code as defined in the LOINC field in Test setup when the test is performed in-house and as captured with reference lab results when the test was performed by a reference lab.
3.2	Universal Service Text	<LOINC Name>	ST						As defined in LOINC dictionary.
3.3	Name of Coding System	LN	ST	A	A	A	A		LN = LOINC® system
3.4	Alternate Universal Service Identifier	<SCC Code - component test>	ST	A	A	A	A	29	SCC primary code for the individual test as defined in Test Setup dictionaries.
3.5	Alternate Universal Service Text	<SCC Test Name>	ST						
3.6	Name of Alternate Coding System	L	ST	A	A	A	A		L = Local code
3.7	Coding System Version ID	<LOINC Version>	ST						From LOINC dictionary
3.8	Alternate Coding System Version ID	NA	ST	A	A	A	A		NA = No versioning applicable for Local codes
3.9	Universal Service Text	<LOINC Name>	ST						Same data as OBX-3.2
Performing Organization Information (OBX-23)									
23.1	Performing Organization Name	<Individual Test Location Name>	ST						Based on database dictionary elements for in-house tests. As received and posted with results from reference labs.
23.2	Performing Organization Name Type Code	<Individual Test Location Name Type>	ST	A	A	A	A		Options are: A = Alias name; D = Display name; L = Legal name
Performing Org Assigning Authority			ST						NS ID, UID, and UID Type are defined in the <i>Universal Identifiers</i> table and are linked to a matching <i>Code</i> for Performing Organization in both <i>Location</i> setup and the <i>Universal Identifiers</i> table.
23.6.1	Assigning Authority Namespace ID	<Performing Org AA NS ID>	ST						
23.6.2	Assigning Authority Universal ID	<Performing Org Universal ID>	ST						ISO Number (OID) or CLIA Number
23.6.3	Assigning Authority Universal ID Type	<Performing Org UID Type>	ST						ISO = International Standards Organization; CLIA = CLIA number; L = local code

Seq	Element	Output	Type					Rules	Notes
	MSH-9.1 Message Type			ORU	ORU	ORU	ORU		
	MSH-9.2 Event Code			R01	R01	R01	R01		
	ORC-1 Control Code			RE	RE	RE	RE		
	Origin			Lab	Mic	BB	Pat		
23.7	Performing Organization Identifier Type Code	XX	ST	A	A	A	A		XX = Organization Identifier
23.10	Performing Organization Identifier	<CLIA #>	ST						CLIA # as defined in Location Setup or as posted with reference lab results.
Performing Organization Address (OBX-24)									
24.1.1	Street or Mailing Address line 1	<Location Street Address 1>	ST						Location Setup Address line 1
24.2	Street or Mailing Address line 2	<Location Street Address 2>	ST						Location Setup Address line 2
24.3	City	<Location City>	ST						Location Setup City
24.4	State or Province	<Location State>	ST						Location Setup State
24.5	Zip Code	<Location Zip>	ST						Location Setup Zip
24.6	Country Code	<Location Country>	ST						Location Setup Country
24.7	Address Type	<Location Address Type>	ST	A	A	A	A		Options are: B = Firm/Business; L = Legal Address; M = Mailing; O = Office; P = Permanent
24.9	County Code	<Location County>	ST						Location Setup County

Rev: 170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0										
1.1 Result Segments										
Seq	Data Element	Output	Type				Rules	Notes (Discrete Lab)	Notes (Discrete BB)	Notes (OBX Report - Path)
	MSH-9.1 Message Type			ORU	ORU	ORU				
	MSH-9.2 Event Code			R01	R01	R01				
	ORC-1 Control Code			RE	RE	RE				
	Origin			Lab	BB	Pat				
OBX Segment										
0	OBX	OBX	ID	R	R	R				
1	Set ID – OBX	<counter>	NM							
2	Value Type ST, TX	'ST' or 'TX'	ID	R	R	R		ST = string data	TX = Textual data	TX = Textual data
2	Value Type SN	'SN' (rel 4.0.7 only)	ID	R	R	R		SN = structured numeric		
2	Value Type NM	'NM'	ID	R	R	R		NM = Numeric		
2	Value Type CWE	'CWE'	ID	R	R	R		CWE = Coded Element		
3	Observation Identifier	<Test ID>					29	See <i>Common Elements, Individual Test Components</i> Represents Individual Test	See <i>Common Elements, Individual Test Components</i> Represents Test, Product, or Action	See <i>Common Elements, Individual Test Components</i> Represents Ordered Test
4	Observation Sub-ID	<counter>	NM			////		Integer index (from 0) of individual test within the group test as defined in SoftLab <i>Group Test</i> setup.	Unique integer index (from 1) to be used when Observation identifiers repeat for a series of OBX segments (Products, Actions)	Unique integer index (from 1) to be used when Observation identifiers repeat for a series of OBX segments
5	Observation Value - ST, TX types									
5.1	Observation Value	<Test Result>	ST				6, 10, 11, 18, 19	Non-numeric, non-coded (non-NM, non-CWE) results. This field supports use of HL7 Escape sequences.	This field supports use of HL7 Escape sequences.	Lines of report text. This field supports use of HL7 Escape sequences.
5	Observation Value - NM type (SN is not used)					////	////	SN form is not used. Numeric results with comparitors and symbolic separators are sent as ST-type.	Not Used	Not Used
5.1	Number	<numeric test result with symbols>	NM	R	////	////		Numeric result including sign character -, +	Not Used	Not Used
5	Observation Value - SN type (rel 4.0.7 only)					////	////	All strictly numeric or numeric/symbolic lab results are normally sent as SN type.		
5.1	Comparator	<comparator portion of result>	ST		////	////		<, >, =, <=, >=, =<, >=	Not Used	Not Used
5.2	Number	<numeric portion of result>	NM	R	////	////		Decimal numeric value including sign character -, +	Not Used	Not Used
5.3	Separator/Suffix	<non-numeric separator>	ST		////	////		;, -, /, +	Not Used	Not Used
5.4	Number	<second numeric portion of result>	NM		////	////		Decimal numeric value	Not Used	Not Used

Seq	Data Element	Output	Type				Rules	Notes (Discrete Lab)	Notes (Discrete BB)	Notes (OBX Report - Path)
	MSH-9.1 Message Type			ORU	ORU	ORU				
	MSH-9.2 Event Code			RO1	RO1	RO1				
	ORC-1 Control Code			RE	RE	RE				
	Origin			Lab	BB	Pat				
5	Observation Value - CWE-type				////	////		All lab results that are defined in Test Setup as Coded type are assumed to contain codes as results and are sent as CWE type. SNOMED coding system is used.	Not Used	Not Used
5.1	Identifier	<Result Code>	ST	R	////	////		A SNOMED code or other coded value as entered as the result. If an invalid code is entered (matching code is not found in the SNOMED dictionary) the OBX segment will be sent with no code.	Not Used	Not Used
5.2	Text	<Result Text (UC)>	ST		////	////		Textual description of the code as defined in <i>SNOMED Codes</i> table.	Not Used	Not Used
5.3	Name of Coding System	<Result Coding System (UC)>	ST		////	////		Coding system as defined in <i>SNOMED Codes</i> table.	Not Used	Not Used
5.7	Coding System Version ID (UC)	<Result Coding System Version (UC)>	ST		////	////		Date value as defined in <i>SNOMED Codes</i> table.	Not Used	Not Used
5.9	Original Text	<Result Text (UC)>	ST		////	////		Same data as OBX-5.2.	Not Used	Not Used
6	Units				////	////				
6.1	Units Identifier	<Units (UC)>	ST		////	////		Universal code for units defined in <i>HIS Mapping Table</i> . Unified Code for Units of Measure (UCUM) codes recommended. Ref lab tests: sent as received.	Not Used	Not Used
6.2	Units Text	<Units Text (UC)>	ST		////	////		Defined in <i>HIS Mapping Table</i> . Ref lab tests: sent as received.	Not Used	Not Used
6.3	Units Coding System	<Units Coding System (UC)>	ST		////	////		Defined in <i>HIS Mapping Table</i> . "UCUM" recommended. Ref lab tests: sent as received..	Not Used	Not Used
6.4	Units Alternate Identifier	<SCC Units>	ST		////	////		Code for units defined in Test setup.	Not Used	Not Used
6.5	Units Alternate Text	<Units Text (UC)>	ST		////	////		Same data as OBX-6.2.	Not Used	Not Used
6.6	Units Alternate Coding System	L	ST		////	////		L = Local system	Not Used	Not Used
6.7	Units Coding System Version ID (UC)	<Units Coding System Version (UC)>	ST		////	////		Defined in <i>HIS Mapping Table</i> . Ref lab tests: sent as received.	Not Used	Not Used
6.8	Units Alt. Coding System Version ID	NA	ST		////	////		NA = No versioning applicable for Local codes	Not Used	Not Used
7	References Range	<Reference Range>	ST		////	////	6	text or <lower> - <upper> Ref lab tests: sent as received. This field supports use of HL7 Escape sequences.	Not Used	Not Used

Seq	Data Element	Output	Type				Rules	Notes (Discrete Lab)	Notes (Discrete BB)	Notes (OBX Report - Path)
	MSH-9.1 Message Type			ORU	ORU	ORU				
	MSH-9.2 Event Code			R01	R01	R01				
	ORC-1 Control Code			RE	RE	RE				
	Origin			Lab	BB	Pat				
8	Abnormal Flags									
8.1	Abnormal Flags ID	<Abnormal Flags (UC)>	ST				31	Universal code for flags defined in <i>HIS Mapping Table</i> . HL7 codes recommended.	Universal code for flags defined in <i>HIS Mapping table</i> . HL7 codes recommended.	Universal code for flags defined in <i>HIS Mapping Table</i> . HL7 codes recommended.
8.2	Text	<Abnormal Flags Text (UC)>	ST					Defined in <i>HIS Mapping Table</i> .	Defined in <i>HIS Mapping Table</i> .	Defined in <i>HIS Mapping Table</i> .
8.3	Name of Coding System	<Abnormal Flags Coding System (UC)>	ST					Defined in <i>HIS Mapping Table</i> . "HL70078" recommended.	Defined in <i>HIS Mapping Table</i> . "HL70078" recommended.	Defined in <i>HIS Mapping Table</i> . "HL70078" recommended.
8.4	Alternate Identifier	<SCC Abnormal Flags>	ST				31	A subset of HL7 standard codes	A subset of HL7 standard codes	Flags as sent by SoftPath.
11	Observation Result Status									
11.1	Status	<Result Status>	ST					P - Pending F - Final C - Correction X - Cancelled	P - Pending F - Final X - Cancelled	Valued as in the Preceding OBR segment. P - Pending F - Final C - Correction X - Cancelled
14	Date/Time of the Observation	<Result Date/Time>	TS				////	Result Entered/Posted Date/Time	Status Date/Time	Not Used
15	Producer's ID	<Performing Site Code>	ST				//// 32			Not Used
16	Responsible Observer						////			Not Used
16.1	Common ID	<Tech ID who entered the result>	ST				////	SCC User ID	Not Used	Not Used
17	Observation Method						////			
17.1	Method Identifier	<Observation Method Code>	ST				////	Code defined in Test setup. No specific coding system recommended. Ref lab tests: sent as received.	Code defined in Test setup. No specific coding system recommended.	Not Used
17.2	Text	<Observation Method Text (UC)>	ST				////	Defined in <i>HIS Mapping Table</i> . Ref lab tests: sent as received.	Defined in <i>HIS Mapping Table</i> .	Not Used
17.3	Name of Coding System	<Observation Method Coding System (UC)>	ST				////	Defined in <i>HIS Mapping Table</i> . Ref lab tests: sent as received.	Defined in <i>HIS Mapping Table</i> .	Not Used
17.7	Coding System Version ID	<Observation Method Coding System Version (UC)>	ST				////	Defined in <i>HIS Mapping Table</i> . Ref lab tests: sent as received.	Defined in <i>HIS Mapping Table</i> .	Not Used
18	Equipment Identifier	<Performing Workstation>	ST				////	Performing workstation code	Not Used	Not Used
19	Resulted Date/Time	<Result Verified Date/Time>	TS				////	Verified Date/Time	Verified Date/Time	Not Used
23	Performing Organization Information	<Location Info>					////	See Common Elements, Performing Organization Information Ref lab tests: sent as received.	See Common Elements, Performing Organization Information	Not Used
24	Performing Organization Address	<Location Address>					////	See Common Elements, Performing Organization Address Ref lab tests: sent as received.	See Common Elements, Performing Organization Address	Not Used
25	Performing Organization Medical Director	<Location Doctor>					////	See Common Elements, Provider Information Based on setup. Ref lab tests: sent as received.	See Common Elements, Provider Information Based on setup.	Not Used

Seq	Data Element	Output	Type				Rules	Notes (Discrete Lab)	Notes (Discrete BB)	Notes (OBX Report - Path)
	MSH-9.1 Message Type			ORU	ORU	ORU				
	MSH-9.2 Event Code			R01	R01	R01				
	ORC-1 Control Code			RE	RE	RE				
	Origin			Lab	BB	Pat				
OBX Segment (OBX(B)) Used for transmitting product details as discrete results										
0	OBX	OBX	ID	////	R	////		Not Used		Not Used
1	Set ID - OBX	<counter>	NM	////		////		Not Used		Not Used
2	Value Type	"ST"	ID	////	R	////		Not Used	ST	Not Used
3	Observation Identifier	<Test ID>		////		////	44	Not Used	See Common Elements, Individual Test Components Represents Product or Action	Not Used
4	Observation Sub-ID	<counter>	NM	////		////		Not Used	Integer index (from 101) reflecting Sub-ID of parent OBX followed by a unique 2-digit counter.	Not Used
5	Observation Value	<Test Result>	ST	////		////	6, 11, 12	Not Used	This field supports use of HL7 Escape sequences.	Not Used
11	Observation Result Status	<Result Status>	ST	////		////		Not Used	P - Pending F - Final X - Cancelled	Not Used
14	Date/Time of the Observation	<Status Date/Time>	TS	////		////		Not Used		Not Used
15	Producer's ID	<Performing Site Code>	ST	////		////	32	Not Used		Not Used
16	Responsible Observer			////		////		Not Used		Not Used
16.1	Common ID	<Tech ID who entered the result>	ST	////		////		Not Used	Not Used	Not Used
19	Resulted Date/Time	<Result Verified Date/Time>	TS	////		////		Not Used	Verified Date/Time	Not Used
NTE Segment										
0	NTE	NTE	ID	R	R	////				Not Used
1	Set ID - NTE	<counter>	NM			////		Increments from 1 to n for each group of segments	Increments from 1 to n for each group of segments	Not Used
2	Source of Comment	L	ST	A	A	////		L = Filler is source of comment	L = Filler is source of comment	Not Used
3	Comment Text	<comment text>	TX			////	6, 7, 19	Line of comment. May be blank if user enters blank lines. This field supports use of HL7 Escape sequences.	Line of comment. May be blank if user enters blank lines. This field supports use of HL7 Escape sequences.	Not Used
4	Comment Type					////				Not Used
4.1	Identifier	RE	ID	A	A	////		RE = Remark - all comments are characterized as remarks	RE = Remark - all comments are characterized as remarks	Not Used
4.2	Text	Remark	ST	A	A	////				Not Used
4.3	Name of Coding System	HL70364	ST	A	A	////				Not Used
4.7	Coding System Version ID	2.5.1	ST	A	A	////				Not Used

Cell: AE17

Comment: OBX-4, Blood Bank results:

Products and some Blood Bank tests will send multiple OBX segments with the same Observation identifier (i.e. *RC) which may result in some foreign systems overwriting previous results. The Observation Sub-ID should be utilized to create a unique ID for a given product. Once a Sub-ID has been assigned to a test/product, the same Sub-ID will be utilized in all subsequent result messages. The Sub-ID along with the observation ID should be utilized to update the appropriate result in the foreign system.

Cell: AD19

Comment: OBX-5, Lab results:

When configured to send both a cancellation and result event upon cancellation of a previously verified result, the result message will contain the most recent lab result data for either the single component of an individual test or all the components of a group test and OBX[11] will be valued with an "X".

Cell: AE19

Comment: OBX-5, Blood Bank results:

SoftBank Discrete Long Text Style for Discrete, Hybrid, and OBX Report forms of results: OBX[5] is formatted as lines of the printed report, each line containing:

Tests: Test Name, Interpretation, Short Comment, Status date/time

Products: Product Name, Unit #, Status, Status date/time

Actions: Action Name, Lot #, Status, Status date/time

SoftBank Discrete Short Text Style for Discrete and Hybrid forms of results: OBX[5] is formatted as a long string, each line containing:

Tests: Test Interpretation

Products: Unit # and Status

Actions: Lot # and Status

Cell: AF19

Comment: OBX-5, OBX-Report format:

OBX[5] in OBX-Report format may be sent as null to reflect blank lines in the report. SoftBank results sent in OBX-Report format will adhere to Discrete Long Text Style.

Format of this field (Option 25) affects all other text data sent in NTE Report segments and DSP segments.

Cell: AD42

Comment: OBX-7, Lab Results:

Reference ranges are derived from SoftLab Individual Test Setup, Ranges, Age Ranges, !RFR and !RFRM tags, and from reference lab !RFL result tags.

!RFR defined reference ranges are sent in OBX[7] as defined in SoftLab Individual Test Setup.

!RFRM (multiline line reference ranges) are sent in separate NTE segments following the OBX segment to which they relate as defined in SoftLab Individual Test Setup.

!RFL single line reference ranges are sent in OBX[7], if multiple reference ranges are present in the tag then each reference range is sent in OBX[7], each line separated by the repetition character (~) as stored by the Reference Lab/Autoposting servers.

Cell: AD48

Comment: OBX-8.4 (LAB):

HL7 Abnormal Flags that are used are:

L - Low result

LL - Critical (Panic) or Absurd Low

H - High result

HH - Critical (Panic) or Absurd High

A - Abnormal (alphanumeric only)

AA - Critical or Absurd (alphanumeric only)

Cell: AE48

Comment: OBX-8.4 (BANK):

HL7 Abnormal Flags that are used are:

A - Abnormal (alphanumeric only)

Cell: AD54

SCC Standard EHI export rel.4.0.xlsx

Results Key: R = Required, C = Conditionally Required, A = Always Sent, <empty> = Optional, / = Not Used by SCC, Shaded elements will not be used at this installation.

HL7 Abnormal Flags that are used are:

- L - Low result
- LL - Critical (Panic) or Absurd Low
- H - High result
- HH - Critical (Panic) or Absurd High
- A - Abnormal (alphanumeric only)
- AA - Critical or Absurd (alphanumeric only)

Cell: AD56

Comment: OBX-11:

Observation result status of "X" is valued only when the interface is configured to send BOTH a cancellation event and result messages when a previously verified result is manually cancelled. OBX[5] will contain the most recent verified result.

Cell: AE78

Comment: OBX-4, Blood Bank expanded components:

A series of products will all be sent with the same series of test codes representing product type, unit number, blood type, etc. The Observation Sub-ID creates a unique ID for a given test for a given product. Once a Sub-ID has been assigned to a test/product, the same Sub-ID will be utilized in all subsequent result messages. The Sub-ID along with the observation ID should be utilized to update the appropriate result in the foreign system.

Cell: AE79

Comment: OBX-5, Blood Bank results:

SoftBank Discrete Long Text Style for Discrete, Hybrid, and OBX Report forms of results: OBX[5] is formatted as lines of the printed report, each line containing:

- Tests: Test Name, Interpretation, Short Comment, Status date/time
- Products: Product Name, Unit #, Status, Status date/time
- Actions: Action Name, Lot #, Status, Status date/time

SoftBank Discrete Short Text Style for Discrete and Hybrid forms of results: OBX[5] is formatted as a long string, each line containing:

- Tests: Test Interpretation
- Products: Unit # and Status
- Actions: Lot # and Status

Cell: AD134

Comment: URD-3.1, Display results:

MRN may be stored in SCC databases with an internal prefix. This prefix is usually stripped from the MRN before messages are sent. If a checksum character was stored as a suffix to the MRN, it is no longer distinguishable from the MRN and will be sent with outbound messages. See Option 1. MRN may be stored in SCC databases with or without leading zeros received with inbound messages. If stripped of leading zeros, the MRN may be returned to a fixed length with outbound messages by prefixing with leading zeros to a fixed length. See option 2.

Cell: AD135

Comment: URD-3.2, Display results:

Billing Number may be stored in SCC databases with an internal prefix. This prefix is usually stripped from the Billing Number before messages are sent. See Option 3. Billing Number may be stored in SCC databases with or without leading zeros received with inbound messages. If stripped of leading zeros, the Billing Number may be returned to a fixed length with outbound messages by prefixing with leading zeros to a fixed length. See Option 4.

Cell: AD145

Comment: URD-7.1, Display results:

- F – Final – all modules. For SoftLab results, this indicates all tests for the requested procedure are resulted & verified. For all other results, this directly reflects result flags set in each module.
- P – Preliminary – all modules. For SoftLab results, this indicates at least one test on the requested procedure is not yet verified. For all other results, this directly reflects result flags set in each module.
- All SoftMic status codes are configurable including the result cancellation message.
- R – Revised Report – SoftPath only.
- S – Supplemental Report – SoftPath only.
- C – Corrected – SoftPath only.

Cell: AD146

SCC Standard File Export 4.0.xlsx

Results Key: R = Required, C = Conditionally Required, A = Always Sent, <empty> = Optional, / = Not Used by SCC, Shaded elements will not be used at this installation.

Example: Three iterations of a Preliminary report followed by a Supplemental report would be sent with URD[7] valued as:

- P^a 1st copy of Preliminary report
- P^b 2nd copy of Preliminary report
- P^c 3rd copy of Preliminary report
- S^a 1st copy of Supplemental report

Rev:	170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0				
1.1	Discrete Micro Result Segments				
Seq	Data Element	Output	Type	Rules	Micro Type I
	MSH-9.1 Message Type			ORU	
	MSH-9.2 Event Code			RO1	
	ORC-1 Control Code			RE	
	Origin			Mic	
OBX Segment (OBX(P)) Procedure Notes and Culture Comments					
0	OBX	OBX	ID	R	
1	Set ID – OBX	<counter>	NM		Increments for all OBX segments subordinate to an OBR
2	Value Type	<result type>	ID	R	TX = Text Results
3	Observation Identifier	<Test ID>	ST	A 29	See Common Elements, Individual Test Components Represents Micro Test
5	Observation Value	<Result Data>	TX	A 6, 13	Micro procedure-specific comments This field supports the use of HL7 escape sequences
8	Abnormal Flags	'A'	ST		A = Abnormal (Sig Occ + flag is set) AA = Critical (Sig Occ ++ flag is set)
11	Observation Result Status	<Result Status>	ST	A	Status of the single component test result from which the organism was isolated P - Preliminary or Interim F - Final C - Corrected I - Incomplete; results pending (no status entered) X - Cancelled
13	User Defined Access Checks	<Significant Occurrence Flag>	ST		+ = Significant Occurrence ++ = Significant Occurrence
14	Date/Time of the Observation	<Status Date/Time>	TS		
15	Producer's ID	<Performing Site Code>	ST	32	As defined by SoftMic
19	Date/Time of the Analysis	<Observation Date/Time>	TS		D/T observation was entered
23	Performing Organization Information	<Location Info>			See Common Elements, Performing Organization Information
24	Performing Organization Address	<Location Address>			See Common Elements, Performing Organization Address
25	Performing Organization Medical Director	<Location Doctor>		24, 25	See Common Elements, Provider Information Based on setup. As received and posted with results from reference labs.
OBX Segment (OBX(E)) Micro Exam Observations					
0	OBX	OBX	ID	R	
1	Set ID – OBX	<counter>	NM		Increments for all OBX segments subordinate to an OBR
2	Value Type	<result type>	ID	R	TX = Text Results
3	Observation Identifier	<Test ID>		A 29	See Common Elements, Individual Test Components Represents Micro Test
5	Observation Value	<Result Data>	TX	A 6, 13	Micro exam/procedure specific comments This field supports the use of HL7 escape sequences
8	Abnormal Flags	'A'	ST		A = Abnormal (Sig Occ + flag is set) AA = Critical (Sig Occ ++ flag is set)
11	Observation Result Status	<Result Status>	ST	A	Status of the single component test result from which the organism was isolated P - Preliminary or Interim F - Final C - Corrected I - Incomplete; results pending (no status entered) X - Cancelled
13	User Defined Access Checks	<Significant Occurrence Flag>	ST		+ = Significant Occurrence ++ = Significant Occurrence
14	Date/Time of the Observation	<Status Date/Time>	TS		

Seq	Data Element	Output	Type	Rules	Micro Type I
	MSH-9.1 Message Type			ORU	
	MSH-9.2 Event Code			R01	
	ORC-1 Control Code			RE	
	Origin			Mic	
15	Producer's ID	<Performing Site Code>	ST	32	As defined by SoftMic
19	Date/Time of the Analysis	<Observation Date/Time>	TS		D/T observation was entered
23	Performing Organization Information	<Location Info>			See Common Elements, Performing Organization Information
24	Performing Organization Address	<Location Address>			See Common Elements, Performing Organization Address
25	Performing Organization Medical Director	<Location Doctor>		24, 25	See Common Elements, Provider Information Based on setup. As received and posted with results from reference labs.
OBX Segment (OBX(O)) Organism/Isolate Identification					
0	OBX	OBX	ID	R	
1	Set ID – OBX	<counter>	NM		Increments for all OBX segments subordinate to an OBR
2	Value Type	'CWE'	ID	R	CWE = Coded Element See Common Elements, Individual Test Components Represents Micro Test
3	Observation Identifier	<Test ID>		A	29
4	Observation Sub-ID	<Organism Number>	NM	A	15
5	Observation Value				
5.1	Identifier	<Organism ID (UC)> or <SCC Organism ID>	ST		A SNOMED or LOINC code, as defined by the client. If no SNOMED or LOINC code is defined, the organism code to be sent in OBX-5.4 will be mapped to be sent here.
5.2	Text	<Organism Name (UC)> or <SCC Organism Name>	ST		Textual description of the code as defined in <i>SNOMED Code Dictionary</i> . If no SNOMED or LOINC code is defined, SCC organism name will be mapped to be sent here.
5.3	Name of Coding System	<Coding System (UC)> or 'L'	ST		SCT = SNOMED CT Code; LN = LOINC code; L = Local code
5.4	Alternate Identifier	<SCC Organism ID>	ST	A	14
5.5	Alternate Text	<SCC Organism Name>	ST		Either name of organism as defined in SoftMic setup or analyzer organism ID code as defined in SoftMic setup.
5.6	Name of Alternate Coding System	'L'	ST		Name of organism as defined in SoftMic setup. L = Local system
5.7	Coding System Version ID	<Coding System Version (UC)>	ST		Date value as defined in <i>SNOMED Codes</i> table.
5.8	Alternate Coding System Version ID	'NA'	ST		NA = No versioning applicable for Local codes
5.9	Original Text	<Organism Name (UC)>	ST		Same data as OBX-5.2
8	Abnormal Flags	'A'	ST		A = Abnormal (Sig Occ + flag is set) AA = Critical (Sig Occ ++ flag is set) Status of the single component test result from which the organism was isolated P - Preliminary or Interim F - Final C - Corrected I - Incomplete; results pending (no status entered) X - Cancelled
11	Observation Result Status	<Result Status>	ST	A	+ = Significant Occurrence ++ = Significant Occurrence
13	User Defined Access Checks	<Significant Occurrence Flag>	ST		
14	Date/Time of the Observation	<Status Date/Time>	TS		
15	Producer's ID	<Performing Site Code>	ST	32	As defined by SoftMic
19	Date/Time of the Analysis	<Isolate Date/Time>	TS		Isolated Date/Time
23	Performing Organization Information	<Location Info>			See Common Elements, Performing Organization Information
24	Performing Organization Address	<Location Address>			See Common Elements, Performing Organization Address
25	Performing Organization Medical Director	<Location Doctor>		24, 25	See Common Elements, Provider Information Based on setup. As received and posted with results from reference labs.
OBX Segment (OBX(Q)) Isolate Quantitation					
0	OBX	OBX	ID	R	
1	Set ID – OBX	<counter>	NM		Increments for all OBX segments subordinate to an OBR

Seq	Data Element	Output	Type	Rules	Micro Type I
	MSH-9.1 Message Type			ORU	
	MSH-9.2 Event Code			R01	
	ORC-1 Control Code			RE	
	Origin			Mic	
2	Value Type	<result type>	ID	R	TX = Text Results
3	Observation Identifier	<Test ID>		A 29	See Common Elements, Individual Test Components Represents Micro Test
4	Observation Sub-ID	<Organism Number>	NM	A	Numeric index (from 1) used to identify organism number
5	Observation Value	<Quantitation>	TX		Organism quantitation comments This field supports use of HL7 Escape sequences. Status of the single component test result from which the organism was isolated P - Preliminary or Interim F - Final C - Corrected I - Incomplete; results pending (no status entered) X - Cancelled
11	Observation Result Status	<Result Status>	ST	A	
14	Date/Time of the Observation	<Status Date/Time>	TS		
15	Producer's ID	<Performing Site Code>	ST	32	As defined by SoftMic
19	Date/Time of the Analysis	<Isolate Date/Time>	TS		Isolated Date/Time
23	Performing Organization Information	<Location Info>			See Common Elements, Performing Organization Information
24	Performing Organization Address	<Location Address>			See Common Elements, Performing Organization Address
25	Performing Organization Medical Director	<Location Doctor>		24, 25	See Common Elements, Provider Information Based on setup. As received and posted with results from reference labs.
OBX Segment (OBX(OC)) Organism Comments					
0	OBX	OBX	ID	R	
1	Set ID – OBX	<counter>	NM		Increments for all OBX segments subordinate to an OBR
2	Value Type	<result type>	ID	R	TX = Text Results
3	Observation Identifier	<Test ID>		A 29	See Common Elements, Individual Test Components Represents Micro Test
4	Observation Sub-ID	<Organism Number>	NM	A	Numeric index (from 1) used to identify organism number
5	Observation Value	<Organism Comments>	TX		Isolate comments This field supports use of HL7 Escape sequences. Status of the single component test result from which the organism was isolated P - Preliminary or Interim F - Final C - Corrected I - Incomplete; results pending (no status entered) X - Cancelled
11	Observation Result Status	<Result Status>	ST	A	
14	Date/Time of the Observation	<Status Date/Time>	TS		
15	Producer's ID	<Performing Site Code>	ST	32	As defined by SoftMic
19	Date/Time of the Analysis	<Isolate Date/Time>	TS		Isolated Date/Time
23	Performing Organization Information	<Location Info>			See Common Elements, Performing Organization Information
24	Performing Organization Address	<Location Address>			See Common Elements, Performing Organization Address
25	Performing Organization Medical Director	<Location Doctor>		24, 25	See Common Elements, Provider Information Based on setup. As received and posted with results from reference labs.
ORC Segment (ORC(S)) Antibiotic Sensitivity Panel					
1	Order Control	RE	ID	R	RE
2	Placer Order Number				
2.1	Entity Identifier	<Placer #>-<Organism #>		6, 22	Value is unique to this ORC. Placer Order Number as sent in first ORC is appended with Organism #, hyphen separated.

Seq	Data Element	Output	Type	Rules	Micro Type I
	MSH-9.1 Message Type			ORU	
	MSH-9.2 Event Code			R01	
	ORC-1 Control Code			RE	
	Origin			MIC	
2.2	Namespace ID	<Placer Number NS ID>	ST		Same data as ORC-2.2 of the first ORC segment.
2.3	Universal Identifier	<Placer Number UID>	ST		Same data as ORC-2.3 of the first ORC segment.
2.4	Universal Identifier Type	<Placer Number UID Type>	ST		Same data as ORC-2.4 of the first ORC segment.
3	Filler Order Number				
3.1	Entity Identifier	<Filler # >-<Organism #>			Value is unique to this ORC. Filler Order Number as sent in first ORC is appended with Organism #, hyphen separated.
3.2	Namespace ID	<Order# Namespace ID>	ST		Same data as ORC-3.2 of the first ORC segment.
3.3	Universal Identifier	<Order# UID>	ST		Same data as ORC-3.3 of the first ORC segment.
3.4	Universal Identifier Type	ISO	ST		Same data as ORC-3.4 of the first ORC segment.
All other ORC elements are identical to the first ORC segment					
OBR Segment (OBR(S)) Antibiotic Sensitivity Panel					
1	Set ID – OBR	<counter>	NM	R	Increments from 2
2	Placer Order Number				
2.1	Entity Identifier	<Placer #>-<Organism #>		6, 22	Value is unique to this OBR. Placer Order Number as sent in first OBR is appended with Organism #, hyphen separated.
2.2	Namespace ID	<Placer Number NS ID>	ST		Same data as OBR-2.2 of the first OBR segment.
2.3	Universal Identifier	<Placer Number UID>	ST		Same data as OBR-2.3 of the first OBR segment.
2.4	Universal Identifier Type	<Placer Number UID Type>	ST		Same data as OBR-2.4 of the first OBR segment.
3	Filler Order Number				
3.1	Entity Identifier	<Filler # >-<Organism #>			Value is unique to this OBR. Filler Order Number as sent in first OBR is appended with Organism #, hyphen separated.
3.2	Namespace ID	<Order# Namespace ID>	ST		Same data as OBR-3.2 of the first OBR segment.
3.3	Universal Identifier	<Order# UID>	ST		Same data as OBR-3.3 of the first OBR segment.
3.4	Universal Identifier Type	ISO	ST		Same data as OBR-3.4 of the first OBR segment.
4	Ordered Procedure				
4.1	Universal Service Identifier (LOINC)	<LOINC Panel code>	ST	A	50545-3 = MIC panel results 50546-1 = Kirby Bauer panel results 49589-5 = Breakpoint panel results
4.2	Universal Service Text	<LOINC Panel Name>	ST	A	
4.3	Name of Universal Service Coding System	'LN'	ST	A	
4.4	Alternate Universal Service Identifier	<SCC Test Code - ordered test>	ST	A	MIC = MIC panel results; KB = Kirby Bauer panel results; BP = Breakpoint panel results
4.5	Alternate Universal Service Text	<Panel Name>	ST	A	Same data as OBR(S)-4.2
4.6	Name of Alternate Universal Service Coding System	'L'	ST	A	L = Local system
4.7	Coding System Version ID	'2.40'	ST	A	LOINC version 2.40
4.8	Alternate Coding System Version ID	'NA'	ST	A	NA = No versioning applicable for Local codes
4.9	Original Text	<Panel Name>	ST	A	Same data as OBR(S)-4.2
7	Observation Date/Time	<Collected Date/Time>	TS		As sent in first OBR segment of Mic results
11	Specimen Action Code	<Reflex indicator>	ID		G = sensitivity panel added to the order
16	Ordering Provider Information	<Requesting Doctor>		A	See Common Elements, Provider Information
22.1	Results Rpt/Status Chng - Date/Time	<Last Result D/T>	TS		
25	Result Status	<Result Status>	ST		
26	Parent Result				<i>Parent Result</i> refers to the OBX(O) segment that was used to report the organism that was found and to which this sensitivity panel applies.
26.1.1	Parent Observation Identifier	<Parent LOINC code>	ST		Matching LOINC code in OBX-3.1 of parent result
26.1.2	Parent Observation Text	<Parent LOINC name>	ST		Matching LOINC name in OBX-3.2 of parent result
26.1.3	Parent Observation Coding System	'LN'	ST		

Seq	Data Element	Output	Type	Rules	Micro Type I
	MSH-9.1 Message Type			ORU	
	MSH-9.2 Event Code			R01	
	ORC-1 Control Code			RE	
	Origin			Mic	
26.1.4	Alternate Identifier	<Parent SCC test code>	ST		Matching SCC test code in OBX-3.4 of parent result
26.1.5	Alternate Text	<Parent SCC test name>	ST		Matching SCC test name in OBX-3.5 of parent result
26.1.6	Alternate Coding System	'L'	ST		
26.1.9	Original Text	<Parent SCC test name>	ST		Matching SCC test name in OBX-3.5 of parent result
26.2	Parent Observation Sub-ID	<Organism #>	NM	15	Numeric value from OBX-4 of parent result
29	Parent Number				
29.1	Parent Placer Number				
29.1.1	Parent Placer Order Number Entity ID	<Placer Order Number>	ST		Same data as OBR-2.1.
29.1.2	Parent Placer Order Number Namespace ID	<Placer Number NS ID>	ST		Same data as OBR-2.2.
29.1.3	Parent Placer Order Number Universal ID	<Placer Number UID>	ST		Same data as OBR-2.3.
29.1.4	Parent Placer Order Number Universal ID Type	<Placer Number UID Type>	ST		Same data as OBR-2.4.
29.2	Parent Filler Number				
29.2.1	Parent Filler Order Number Entity ID	<SCC "LIS #">	ST		Same data as OBR-3.1
29.2.2	Parent Filler Order Number Namespace ID	<Order# Namespace ID>	ST		A constant value is defined by SCC representing the client/installation. Same data as OBR-3.2
29.2.3	Parent Filler Order Number Universal ID	<Order# UID>	ST		An ISO-compliant OID is defined by SCC representing the client/installation. Same data as OBR-3.3
29.2.4	Parent Filler Order Number Universal ID Type	ISO	ST		ISO = International Standards Organization
OBX Segment (OBX(S)) Antibiotic Sensitivity					
0	OBX	OBX	ID	R	
1	Set ID – OBX	<counter>	NM		Increments from 1 for all Antibiotics under a single OBR(S)
2	Value Type	'NM'	ID	R	NM = Numeric
2	Value Type (rel 4.0.7 only)	'SN'	ID	R	SN = Structured Number
3	Observation Identifier	<Antibiotic>		A	29 See <i>Common Elements, Individual Test Components</i> Represents Micro Antibiotics. Local codes and LOINC codes are defined in SoftMic setup files.
4	Observation Sub-ID	<Organism #>	NM	A	15 Numeric index (from 1) matching OBX-4 in parent OBX-O segment and matching OBR-26.2 in parent OBR segment.
5	Observation Value - NM-type				Numeric results with comparitors and symbolic separators are sent as ST-type.
5.1	Comparator	<numeric test result with symbols>	ST		Numeric result including sign character -, +
5	Observation Value - SN-type (rel 4.0.7 only)				First MIC sensitivity value for the Antibiotic tested for the organism isolated. Not required by SoftMic.
5.1	Comparator	<comparator portion of result>	ST		<, >, =, <=, >=, =<, >=
5.2	Number	<1st number>	NM	R	Decimal numeric value
5.3	Separator/Suffix	<separator>	ST		;, -, /
5.4	Number	<2nd number>	NM		Decimal numeric value
6	Units				Unit codes as defined in SoftMic
6.1	Units Identifier	<MIC Units (UC)>	ST		Universal code for units defined in <i>HIS Mapping Table</i> . Unified Code for Units of Measure (UCUM) codes recommended.
6.2	Units Text	<Units Text (UC)>	ST		Defined in <i>HIS Mapping Table</i> .
6.3	Units Coding System	<Units Coding System (UC)>	ST		Defined in <i>HIS Mapping Table</i> . "UCUM" recommended.
6.4	Alternate Identifier	<SCC Units>	ST		Unit codes as defined in SoftMic
6.5	Alternate Text	<Units Text (UC)>	ST		Same data as OBX(S)-6.2.
6.6	Name of Alternate Coding System	'L'	ST	A	L = Local system
6.7	Coding System Version ID	<Units Coding System Version (UC)>	ST		Defined in <i>HIS Mapping Table</i> .
6.8	Alternate Coding System Version ID	'NA'	ST	A	NA = No versioning applicable for Local codes
8.1	Abnormal Flags				
8.1	Abnormal Flag ID	<Interpretive Flags (UC)>	ST		Universal code for flags defined in <i>HIS Mapping Table</i> . HL7 codes recommended.

Seq	Data Element	Output	Type	Rules	Micro Type I
	MSH-9.1 Message Type			ORU	
	MSH-9.2 Event Code			R01	
	ORC-1 Control Code			RE	
	Origin			Mic	
8.2	Flag Text	<Interpretive Flags Text (UC)>	ST		Defined in <i>HIS Mapping Table</i> .
8.3	Flag Coding System	<Interpretive Flags Coding System (UC)>	ST		Defined in <i>HIS Mapping Table</i> . "HL70078" recommended.
8.4	Alternate Identifier	<SCC Interpretive Flags>	ST		S - Sensitive; R - Resistant; I - Intermediate; MS - Moderately Sensitive Status of the single component test result from which the organism was isolated P - Preliminary or Interim F - Final C - Corrected I - Incomplete; results pending (no status entered) X - Cancelled
11	Observation Result Status	<Result Status>	ST	A	
14	Date/Time of the Observation	<Result Date/Time>	TS		
15	Producer's ID	<Performing Site Code>	ST	32	As defined by SoftMic
17	Observation Method	<SCC Panel code>	ST		MIC = MIC panel results KB = Kirby Bauer panel results BP = Breakpoint panel results
19.1	Date/Time of the Analysis	<Observation Date/Time>	TS		Antibiotic Sensitivity Date/Time Includes Timezone indicator
23	Performing Organization Information	<Location Info>			See Common Elements, Performing Organization Information
24	Performing Organization Address	<Location Address>			See Common Elements, Performing Organization Address
25	Performing Organization Medical Director	<Location Doctor>		24, 25	See Common Elements, Provider Information Based on setup. As received and posted with results from reference labs.
NTE Segment					
0	NTE	NTE	ID	R	
1	Set ID - NTE	<counter>	NM		Increments from 1 to n for each group of segments
2	Source of Comment	L	ST	A	
3	Comment Text	<comment text>	TX		Line of result comment. May be blank if user enters blank lines. This field supports use of HL7 Escape sequences.
4	Comment Type				
4.1	Identifier	RE	ID	A	
4.2	Text	Remark	ST	A	RE = Remark - all comments are characterized as remarks
4.3	Name of Coding System	HL70364	ST	A	
4.7	Coding System Version ID	2.5.1	ST	A	

Rev: 170.315(b)(10) HL7 Result Reporting for EHI Export, release 4.0					
1.1 File and Batch Segments					
Seq	Data Element	Output	Type		Notes
	MSH-9.1 Message Type			ORU	
	MSH-9.2 Event Code			R01	
	ORC-1 Control Code			RE	
	Origin			Any	
FHS Segment					
0	FHS	FHS	ID	R	
1	File Field Separator		ST	R	
2	File Encoding Characters	^~\&	ST	R	Component Separator, Repetition Character, Escape Character, Subcomponent Separator.
3	File Sending Application	SCC	ST		
4	File Sending Facility	SCC	ST		
5	File Receiving Application	EHIEXPORT	ST		
6	File Receiving Facility	EHIEXPORT	ST		
7	File Creation Date/Time	<Run Date/Time>	TS	R	Date/Time Billing Report was run
9	File Name/ID	<File Name>	ST	R	
10	File Header Comment	<publicly accessible hyperlink>	ST	R	publicly accessible hyperlink to this specification documenting the Electronic Health Information (EHI) export e.g. https://www.softcomputer.com/regulatory-affairs/
FTS Segment					
0	FTS	FTS	ID	R	
1	File Batch Count	<Batch count>	NM	R	Total number of batches (BHS segments) in the file.