

HL7 v2 Inbound RDE

Specification

Version 0.1



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1. Overview of RDE Docs: Message Types

This specification is for organizations preparing HL7 interfaces to Healthix. It dictates the format and context of *required* and *required if available* RDE message types, segments and fields. Healthix prefers HL7 version 2.5 messages but will accept well-formed HL7 2.x messages.

Healthix requires data providers to include all required data elements in their feeds (denoted by an **R** in the “use” column of the segment tables). Healthix also requires data providers to include all ‘required if available’ data elements if they are available (denoted by an **A** in the “use” column of the segment tables). The value of Healthix is directly related to the quality of accurate, consistent, and complete information. The inclusion of all required data elements increases the value of Healthix to users and patients. Consequently, it is imperative that you send all required and ‘required if available’ data elements through the interfaces.

This specification is for RDE message types only. Non-RDE specifications are documented separately.

1.1. Important Points to Note

1.1.1 Patient Identifiers

Healthix patient encounters are identified by Visit Numbers. To tie all this information to the visit, corresponding visit numbers must be present in all related RDEs.

Healthix uses the following identifier hierarchy:

External Patient ID	= Healthix-generated ID (MPI)
Internal Patient ID	= Unique MRN from a site (PID-3 or PID-2)
Encounter ID	= Unique visit number from a site (PV1-19)

- A single patient can have different MRNs from different sites
- A single patient can have multiple encounters from one site

Healthcare information systems may use Account Numbers or Case Numbers for billing purposes and consequently an encounter number, as well. In these cases, an encounter number may reside in PID-18 and/or PV1-19. If PID-18 is used consistently for an encounter instead of PV1-19, the Account Number in PID-18 should be copied to the Visit Number in PV1-19. A *case* or *account* may correspond to multiple visits. In that instance, the encounter is either a single visit or series of visits associated with a single *case* or *account*. Either way, the unique identifier for the encounter must reside in PV1-19.

1.1.2 Guidelines for RDE Docs messages

An identifier is associated with a set (or sets) of data. For example, an identifier (*PID-3 - Patient Identifier List*) may be an MRN which has account numbers (*PID-18 - Patient Account Number*) associated with it. Account number (*PID-18 – Patient Account Number*) is a type of identifier which may have visit numbers (*PV1-19 – Visit Number*) associated with it.

2. RDE - Segments & Groups of segments in the RDE message

The segments and groups of segments in the RDE message are as follows, and apply for all trigger events:

2.1. RDE Message Content

Segment	Description	Required	Expected	Optional	Repeating	Grouped
MSH	Message Header	Required				
NTE	Notes and comments			Optional	Repeating	
PID	Patient identification	Required				
PID1	Patient demographics			Optional		
NTE-1	Notes and comments			Optional	Repeating	
PV1	Patient visit	Required				
PV2	Patient visit – additional info			Optional		
IN1	Insurance	Required		Optional		
IN2	Insurance additional info		Expected	Optional		
IN3	Insurance additional info certification			Optional		
GT1	Guarantor	Required				
AL1	Patient allergy information			Optional	Repeating	
ORC	Common order segment	Required		Optional		
RXO	Pharmacy prescription order segment	Required				
NTE-2	Notes and comments segment			Optional	Repeating	
RXR	Pharmacy route segment			Optional		
RXC	Pharmacy component order segment			Optional		
NTE-3	Notes and comments segment			Optional	Repeating	
RXE	Pharmacy encoded order segment	Required				
RXR-1	Pharmacy route segment				Repeating	
RXC-1	Pharmacy component order segment			Optional	Repeating	
OBX	Observation segment			Optional		
NTE-4	Notes and comments segment			Optional		
CTI	Clinical Trial Identification			Optional		

Key to symbols used in this section.

- **Brackets []** indicate that the segment is an **optional** item in the message.
- **Braces { }** indicate that the segment can be a **repeating** item in the message.

2.2. RDE Docs Segment Attribute Table Abbreviations

The abbreviated terms and their definitions, as used in the segment table headings, are as follows:

KEY - SEGMENT ATTRIBUTES	
Abbreviation	Definition
Seq	Sequence of the elements as they are numbered in the HL7 segment.
Len	Maximum length of the element. Length of an element is calculated using the following rules: Field length = (Sum of all supported component lengths) + (component number of the last supported component) – 1. Component length = (Sum of all supported sub-component lengths) + (sub-component number of the last supported component) – 1.
DT	Data type used for HL7 element. (Refer to Chapter 2A of HL7 V2.5 standard)

Use	Usage indicates that the field or sub-field is required, expected, or optional. R – Required. Must be populated. E – Expected. Must be populated if available. O – Optional. May be populated.
Card	<p>Cardinality indicates the minimum and maximum number of times the element may appear. [0..0] Element never present.</p> <p>[0..1] Element may be omitted and it can have at most, one Occurrence.</p> <p>[1..1] Element must have exactly one Occurrence.</p> <p>[0..n] Element may be omitted or may repeat up to n times.</p> <p>[1..n] Element must appear at least once, and may repeat up to n times. [0..*] Element may be omitted or repeat for an unlimited number of times.</p> <p>[1..*] Element must appear at least once, and may repeat unlimited number of times. [m..n] Element must appear at least "m" and at most "n" times.</p>
HL7 Element Name	HL7 descriptor of the element in the segment.

MSH - Message Header Segment

The message header is mandatory for every message.

MESSAGE HEADER SEGMENT (MSH)					
Seq	Len	DT	Use	Card	HL7 Element Name
1	1	ST	R	[1..1]	Field Separator
2	4	ST	R	[1..1]	Encoding Characters
3	227	HD	E	[0..1]	Sending Application
4	227	HD	R	[0..1]	Sending Facility
5	227	HD	O	[0..1]	Receiving Application
6	227	HD	O	[0..1]	Receiving Facility
7	26	TS	O	[0..1]	Date/Time Of Message
8	40	ST	O	[0..0]	Security
9	15	MSG	R	[1..1]	Message Type
9.1	3	ID	R	[1..1]	Message Code
9.2	3	ID	R	[1..1]	Trigger Event
9.3	7	ID	E	[1..1]	Message Structure
10	50	ST	O	[0..1]	Message Control ID
11	3	PT	O	[0..1]	Processing ID
12	60	VID	R	[1..1]	Version ID (v2.5)

PID – Patient Identification Segment

The Patient Identification Segment is used as the primary means of conveying patient identification information.

PATIENT IDENTIFICATION SEGMENT (PID)					
Seq	Len	DT	Use	Card	HL7 Element Name
1	4	SI	O	[0..1]	Set ID - PID
2	20	CX	E	[0..1]	Patient ID
3	250	CX	R	[1..1]	Patient Identifier List
3.1	15	ST	R	[1..1]	ID Number

PATIENT IDENTIFICATION SEGMENT (PID)					
Seq	Len	DT	Use	Card	HL7 Element Name
3.2	1	ST	O	[0..1]	Check Digit
3.3	3	ID	O	[0..1]	Check Digit Scheme
3.4	227	HD	O	[0..1]	Assigning Authority
3.5	5	ID	R	[1..1]	Identifier Type Code (default MRN)
4	20	CX	E	[0..1]	Alternate Patient ID - PID
5	250	XPN	R	[1..1]	Patient Name
6	250	XPN	E	[0..1]	Mother's Maiden Name
7	26	TS	R	[1..1]	Date/Time of Birth
8	1	IS	R	[1..1]	Administrative Sex*
9	250	XPN	E	[0..1]	Patient Alias
10	250	CE	E	[0..*]	Race
11	250	XAD	E	[0..1]	Patient Address
11.1	184	SAD	E	[0..1]	Street Address
11.2	120	ST	E	[0..1]	Other Designation
11.3	50	ST	E	[0..1]	City
11.4	50	ST	E	[0..1]	State or Province
11.5	12	ST	E	[0..1]	Zip or Postal Code
11.6	3	ID	E	[0..1]	Country
12	20	IS	O	[0..1]	County Code
13	250	XTN	E	[0..1]	Phone Number – Home
14	250	XTN	E	[0..1]	Phone Number – Business
15	250	CE	E	[0..1]	Primary Language
16	250	CE	E	[0..1]	Marital Status
17	250	CE	E	[0..1]	Religion
18	250	CX	E	[0..1]	Patient Account Number
19	16	ST	E	[0..1]	SSN Number
20	25	DLN	E	[0..1]	Driver's License Number
21	250	CX	O	[0..1]	Mother's Identifier
22	250	CE	O	[0..1]	Ethnic Group
23	250	ST	O	[0..1]	Birth Place
24	1	ID	O	[0..1]	Multiple Birth Indicator
25	2	NM	O	[0..1]	Birth Order
26	250	CE	E	[0..1]	Citizenship
27	250	CE	O	[0..1]	Veterans Military Status
28	250	CE	E	[0..1]	Nationality
29	26	TS	E	[0..1]	Patient Death Date and Time
30	1	ID	E	[0..1]	Patient Death Indicator
31	1	ID	O	[0..1]	Identity Unknown Indicator
32	20	IS	O	[0..1]	Identity Reliability Code
33	26	TS	E	[0..1]	Last Update Date/Time

PATIENT IDENTIFICATION SEGMENT (PID)					
Seq	Len	DT	Use	Card	HL7 Element Name
34	241	HD	E	[0..1]	Last Update Facility

*PID-8 Administrative Sex (IS)

Healthix uses this to determine the sex of the patient and must be contain one of the following codes:

Code	Description
F	Female
M	Male
O	Other
U	Unknown
A	Ambiguous or Not applicable
N	Not applicable

PV1 - Patient Visit Segment

The Patient Visit Segment is used to transmit encounter-specific information.

PATIENT VISIT SEGMENT (PV1)					
Seq	Len	DT	Use	Card	HL7 Element Name
1	4	SI	O	[0..1]	Set ID - PV1
2	250	CWE	R	[1..1]	Patient Class*
3	80	PL	E	[0..1]	Assigned Patient Location
3.1	20	IS	E	[0..1]	Point of Care
3.2	20	IS	E	[0..1]	Room
3.3	20	IS	E	[0..1]	Bed
4	250	CWE	E	[0..1]	Admission Type
5	250	CX	E	[0..1]	Pre-admit Number
6	80	PL	O	[0..1]	Prior Patient Location
7	250	XCN	E	[0..1]	Attending Doctor
8	250	XCN	E	[0..1]	Referring Doctor
9	250	XCN	E	[0..1]	Consulting Doctor
10	250	CWE	E	[0..1]	Hospital Service
10.1		ST	E	[0..1]	Identifier
10.2		ST	E	[0..1]	Text
11	80	PL	O	[0..1]	Temporary Location
12	2	IS	O	[0..1]	Pre-admit Test Indicator
13	2	IS	O	[0..1]	Re-admission Indicator
14	250	CWE	E	[0..1]	Admit Source
14.1		ST	E	[0..1]	Identifier
14.2		ST	E	[0..1]	Text
15	2	IS	O	[0..1]	Ambulatory Status
16	2	IS	O	[0..1]	VIP Indicator
17	250	XCN	E	[0..1]	Admitting Doctor
18	2	IS	O	[0..1]	Patient Type

PATIENT VISIT SEGMENT (PV1)					
Seq	Len	DT	Use	Card	HL7 Element Name
19	250	CX	R	[0..1]	Visit Number
20	50	FC	O	[0..1]	Financial Class
21	2	IS	O	[0..1]	Charge Price Indicator
22	2	IS	O	[0..1]	Courtesy Code
23	2	IS	O	[0..1]	Credit Rating
24	2	IS	O	[0..1]	Contract Code
25	8	DT	O	[0..1]	Contract Effective Date
26	12	NM	O	[0..1]	Contract Amount
27	3	NM	O	[0..1]	Contract Period
28	2	IS	O	[0..1]	Interest Code
29	4	IS	O	[0..1]	Transfer to Bad Debt Code
30	8	DT	O	[0..1]	Transfer to Bad Debt Date
31	10	IS	O	[0..1]	Bad Debt Agency Code
32	12	NM	O	[0..1]	Bad Debt Transfer Amount
33	12	NM	O	[0..1]	Bad Debt Recovery Amount
34	1	IS	O	[0..1]	Delete Account Indicator
35	8	DT	O	[0..1]	Delete Account Date
36	250	CWE	O	[0..1]	Discharge Disposition
37	47	DLD	E	[0..1]	Discharged to Location
38	250	CE	O	[0..1]	Diet Type
39	199	IS	O	[0..1]	Servicing Facility
40	1	IS	O	[0..1]	Bed Status
41	2	IS	O	[0..1]	Account Status
42	80	PL	O	[0..1]	Pending Location
43	80	PL	O	[0..1]	Prior Temporary Location
44	26	TS	E	[0..1]	Admit Date/Time
45	26	TS	E	[0..1]	Discharge Date/Time

***PV1-2 Patient Class (IS)**

Healthix uses this to categorize patients by class codes like the following user defined codes.

Code	Description
E	Emergency
I	Inpatient
O	Outpatient
P	Preadmit
R	Recurring Patient
B	Obstetrics
C	Commercial Account
N	Not Applicable
U	Unknown

PV2 – Patient Visit Additional Information Segment

The Patient Visit Additional Information Segment is a continuation of visit-specific information and should contain the Admit Reason, Visit Reason, Chief Complaint information.

PATIENT VISIT ADDITIONAL INFORMATION SEGMENT (PV2)					
Seq	Len	DT	Use	Card	HL7 Element Name
1	80	PL	O	[0..1]	Prior Pending Location
2	250	CE	O	[0..1]	Accommodation Code
3	250	CE	E	[0..1]	Admit Reason
3.1		ST	E	[0..1]	Identifier
3.2		ST	E	[0..1]	Text
4	250	CE	O	[0..1]	Transfer Reason
5	25	ST	O	[0..*]	Patient Valuables
6	25	ST	O	[0..1]	Patient Valuables Location
7	2	IS	O	[0..*]	Visit User Code
8	26	TS	O	[0..1]	Expected Admit Date/Time
9	26	TS	O	[0..1]	Expected Discharge Date/Time
10	3	NM	O	[0..1]	Estimated Length of Inpatient Stay
11	3	NM	O	[0..1]	Actual Length of Inpatient Stay
12	50	ST	E	[0..1]	Visit Description
45	250	CE	E	[0..*]	Transfer Reason

IN1 – Insurance Segment

The Insurance Segment contains insurance policy coverage information.

INSURANCE SEGMENT (IN1)					
Seq	Len	DT	Use	Card	HL7 Element Name
1	4	SI	O	[0..1]	Set ID - IN1
2	250	CE	R	[1..1]	Insurance Plan ID
3	250	CX	R	[1..*]	Insurance Company ID
4	250	XON	E	[0..*]	Insurance Company Name
5	250	XAD	E	[0..*]	Insurance Company Address
6	250	XPN	E	[0..*]	Insurance Co Contact Person
7	250	XTN	E	[0..*]	Insurance Co Phone Number
8	12	ST	E	[0..1]	Group Number
9	250	XON	E	[0..*]	Group Name
10	250	CX	O	[0..*]	Insured's Group Emp ID
11	250	XON	O	[0..*]	Insured's Group Emp Name
12	8	DT	E	[0..1]	Plan Effective Date
13	8	DT	E	[0..1]	Plan Expiration Date
14	250	AUI	O	[0..1]	Authorization Information
15	3	IS	E	[0..1]	Plan Type
16	250	XPN	E	[0..*]	Name of Insured
17	250	CE	E	[0..1]	Insured's Relationship to Patient

INSURANCE SEGMENT (IN1)					
Seq	Len	DT	Use	Card	HL7 Element Name
18	26	TS	O	[0..1]	Insured's DOB
19	250	XAD	E	[0..*]	Insured's Address
20	2	IS	O	[0..1]	Assignment Of Benefits
21	2	IS	O	[0..1]	Coordination Of Benefits
22	2	ST	O	[0..1]	Coordination Of Benefits Priority
23	1	ID	O	[0..1]	Notice Of Admission Flag
24	8	DT	O	[0..1]	Notice Of Admission Date
25	1	ID	O	[0..1]	Report Of Eligibility Flag
26	8	DT	O	[0..1]	Report Of Eligibility Date
27	2	IS	O	[0..1]	Release Information Code
28	15	ST	O	[0..1]	Pre-Admit Cert (PAC)
29	26	TS	O	[0..1]	Verification Date/Time
30	250	XCN	O	[0..*]	Verification By
31	2	IS	O	[0..1]	Type Of Agreement Code
32	2	IS	O	[0..1]	Billing Status
33	4	NM	O	[0..1]	Lifetime Reserve Days
34	4	NM	O	[0..1]	Delay Before L.R. Day
35	8	IS	O	[0..1]	Company Plan Code
36	15	ST	E	[0..1]	Policy Number

AL1 – Patient Allergy Information Segment

The AL1 segment contains patient allergy information of various types. This information should be derived from user-defined tables. Each AL1 segment describes a single patient allergy.

PATIENT ALLERGY INFORMATION SEGMENT (AL1)					
Seq	Len	DT	Use	Card	HL7 Element Name
1	4	SI	O	[1..1]	Set ID – AL1
2	250	CE	E	[0..1]	Allergen Type Code
3	841	CE	R	[0..1]	Allergen Code/Mnemonic/Description
3.1	20	ST	R	[1..1]	Identifier
3.2	199	ST	E	[0..1]	Text
4	250	CE	E	[0..1]	Allergy Severity Code
5	15	ST	E	[0..*]	Allergy Reaction Code
6	8	DT	E	[0..1]	Identification Date

ORC – Common order segment

The Common Order segment (ORC) is used to transmit fields that are common to all orders (all types of services that are requested). The ORC segment is required in the Order (ORM) message. ORC is mandatory in Order Acknowledgment (ORR) messages if an order detail segment is present, but is not required otherwise.

COMMON ORDER SEGMENT (ORC)

Seq	Len	DT	Use	HL7 Element Name
1	2	ID	R	Order Control
2	22	EI	E	Placer Order Number
3	22	EI	E	Filler Order Number
4	22	EI	O	Placer Group Number
5	2	ID	O	Order Status
6	1	ID	O	Response Flag
7	200	TQ	E	Quantity/Timing
8	200	EIP	O	Parent Order
9	26	TS	O	Date/Time of Transaction
10	250	XCN	O	Entered By
11	250	XCN	O	Verified By
12	250	XCN	O	Ordering Provider
13	80	PL	O	Enterer's Location
14	250	XTN	O	Call Back Phone Number
15	26	TS	O	Order Effective Date/Time
16	250	CE	O	Order Control Code Reason
17	250	CE	O	Entering Organization
18	250	CE	O	Entering Device
19	250	XCN	O	Action By
20	250	CE	O	Advanced Beneficiary Notice Code
21	250	XON	O	Ordering Facility Name
22	250	XAD	O	Ordering Facility Address
23	250	XTN	O	Ordering Facility Phone Number
24	250	XAD	O	Ordering Provider Address

25	250	CWE	O	Order Status Modifier
26	60	CWE	O	Advanced Beneficiary Notice Override Reason
27	26	TS	O	Filler's Expected Availability Date/Time
28	250	CWE	O	Confidentiality Code
29	250	CWE	O	Order Type
30	250	CNE	O	Enterer Authorization Mode
31	250	CWE	O	Parent Universal Service Identifier

RXO- Pharmacy prescription order segment

This is the "master" pharmacy/treatment order segment. It contains order data not specific to components or additives. Unlike the OBR, it does not contain status fields or other data that are results-only.

PHARMACY PRESCRIPTION ORDER SEGMENT (RXO)

Seq	Len	DT	Use	HL7 Element Name
1	250	CE	R	Requested Give Code
2	20	NM	R	Requested Give Amount - Minimum
3	20	NM	O	Requested Give Amount - Maximum
4	250	CE	R	Requested Give Units
5	250	CE	R	Requested Dosage Form
6	250	CE	O	Provider's Pharmacy/Treatment Instructions
7	250	CE	O	Provider's Administration Instructions
8	200	LA1	O	Deliver-To Location
9	1	ID	O	Allow Substitutions
10	250	CE	O	Requested Dispense Code
11	20	NM	O	Requested Dispense Amount
12	250	CE	O	Requested Dispense Units
13	3	NM	O	Number Of Refills
14	250	XCN	E	Ordering Provider's DEA Number
15	250	XCN	E	Pharmacist/Treatment Supplier's Verifier ID

16	1	ID	O	Needs Human Review
17	20	ST	E	Requested Give Per
18	20	NM	O	Requested Give Strength
19	250	CE	O	Requested Give Strength Units
20	250	CE	O	Indication
21	6	ST	O	Requested Give Rate Amount
22	250	CE	O	Requested Give Rate Units
23	10	CQ	O	Total Daily Dose
24	250	CE	O	Supplementary Code
25	5	NM	O	Requested Drug Strength Volume
26	250	CWE	O	Requested Drug Strength Volume Units
27	1	ID	O	Pharmacy Order Type
28	20	NM	O	Dispensing Interval

RXR- Pharmacy route segment

The Pharmacy/Treatment Route segment contains the alternative combination of route, site, administration device, and administration method that are prescribed as they apply to a particular order. The pharmacy, treatment staff and/or nursing staff has a choice between the routes based on either their professional judgment or administration instructions provided by the physician:

PHARMACY ROUTE SEGMENT (RXR)				
Seq	Len	DT	Use	HL7 Element Name
1	250	CE	R	Route
2	250	CWE	O	Administration Site
3	250	CE	O	Administration Device
4	250	CWE	O	Administration Method
5	250	CE	O	Routing Instruction
6	250	CWE	O	Administration Site Modifier

RXC- Pharmacy/Treatment Component Order Segment

If the drug or treatment ordered with the RXO segment is a compound drug OR an IV solution, AND there is not a coded value for OBR-4-universal service ID , which specifies the components (base and all additives), then the components (the base and

additives) are specified by two or more RXC segments. The policy of the pharmacy or treatment application on substitutions at the RXC level is identical to that for the RXO level.

PHARMACY/TREATMENT COMPONENT ORDER SEGMENT (RXC)				
Seq	Len	DT	Use	HL7 Element Name
1	1	ID	R	RX Component Type
2	250	CE	R	Component Code
3	20	NM	R	Component Amount
4	250	CE	R	Component Units
5	20	NM	O	Component Strength
6	250	CE	O	Component Strength Units
7	250	CE	O	Supplementary Code
8	5	NM	O	Component Drug Strength Volume
9	250	CWE	O	Component Drug Strength Volume Units

RXE- Pharmacy/Treatment Encoded Order Segment

The RXE segment details the pharmacy or treatment application's encoding of the order. It also contains several pharmacy-specific order status fields, such as RXE-16-number of refills remaining, RXE-17-number of refills/doses dispensed, RXE-18-D/T of most recent refill or dose dispensed, and RXE-19-total daily dose.

PHARMACY/TREATMENT ENCODED ORDER SEGMENT (RXE)				
Seq	Len	DT	Use	HL7 Element Name
1	200	TQ	R	Quantity/Timing
2	250	CE	R	Give Code
3	20	NM	R	Give Amount - Minimum
4	20	NM	O	Give Amount - Maximum
5	250	CE	R	Give Units
6	250	CE	O	Give Dosage Form
7	250	CE	O	Provider's Administration Instructions
8	200	LA1	R	Deliver-To Location

9	1	ID	O	Substitution Status
10	20	NM	E	Dispense Amount
11	250	CE	E	Dispense Units
12	3	NM	O	Number Of Refills
13	250	XCN	E	Ordering Provider's DEA Number
14	250	XCN	O	Pharmacist/Treatment Supplier's Verifier ID
15	20	ST	E	Prescription Number
16	20	NM	E	Number of Refills Remaining
17	20	NM	E	Number of Refills/Doses Dispensed
18	26	TS	E	D/T of Most Recent Refill or Dose Dispensed
19	10	CQ	E	Total Daily Dose
20	1	ID	O	Needs Human Review
21	250	CE	O	Pharmacy/Treatment Supplier's Special Dispensing Instructions
22	20	ST	E	Give Per
23	6	ST	O	Give Rate Amount
24	250	CE	O	Give Rate Units
25	20	NM	O	Give Strength
26	250	CE	O	Give Strength Units
27	250	CE	O	Give Indication
28	20	NM	O	Dispense Package Size
29	250	CE	O	Dispense Package Size Unit
30	2	ID	O	Dispense Package Method
31	250	CE	O	Supplementary Code
32	26	TS	O	Original Order Date/Time
33	5	NM	O	Give Drug Strength Volume
34	250	CWE	O	Give Drug Strength Volume Units

35	60	CWE	O	Controlled Substance Schedule
36	1	ID	O	Formulary Status
37	60	CWE	O	Pharmaceutical Substance Alternative
38	250	CWE	O	Pharmacy of Most Recent Fill
39	250	NM	O	Initial Dispense Amount
40	250	CWE	O	Dispensing Pharmacy
41	250	XAD	O	Dispensing Pharmacy Address
42	80	PL	O	Deliver-to Patient Location
43	250	XAD	O	Deliver-to Address
44	1	ID	O	Pharmacy Order Type

OBX – Observation Result Segment

The Observation Result Segment (OBX) is used to convey observations in both ADT and result messages. HealthShare supports the OBX segment in ADT messages only for the purposes of recording observations and vitals and not lab results (as with an ORU message).

OBSERVATION RESULT SEGMENT (OBX)						
Seq	Len	DT	Use	Card	HL7 Element Name	
1	4	SI	O	[0..1]	Set ID – OBX	
2	2	ID	E	[0..1]	Value Type	
3	250	CE	R	[1..1]	Observation Identifier	
3.1	20	ST	R	[1..1]	Identifier	
3.2	199	ST	E	[0..1]	Text	
3.3		ID	O	[0..1]	Name of Coding System	
3.4		ST	O	[0..1]	Alternate Identifier	
3.5		ST	O	[0..1]	Alternate Text	
3.6		ID	O	[0..1]	Name of Alternate Coding System	
4	20	ST	E	[0..1]	Observation Sub-ID	
5	no	TX	R	[1..1]	Text Data	
limit						
6	250	CE	E	[0..1]	Units	
6.1	20	ST	E	[0..1]	Identifier	
6.2	199	ST	E	[0..1]	Text	
6.3		ID	O	[0..1]	Name of Coding System	
6.4		ST	O	[0..1]	Alternate Identifier	
6.5		ST	O	[0..1]	Alternate Text	
6.6		ID	O	[0..1]	Name of Alternate Coding System	
7	60	ST	E	[0..1]	References Range	

OBSERVATION RESULT SEGMENT (OBX)					
Seq	Len	DT	Use	Card	HL7 Element Name
8	5	CWE	E	[0..5]	Abnormal Flags
9	5	NM	O	[0..1]	Probability
10	2	ID	O	[0..1]	Nature of Abnormal Test
11	1	ID	R	[1..1]	Observation Result Status
12	26	TS	O	[0..1]	Effective Date of Reference Range Values
13	20	ST	O	[0..1]	User Defined Access Checks
14	26	TS	E	[0..1]	Date/Time of the Observation
15	250	CE	E	[0..1]	Producer's ID
15.1	20	ST	E	[0..1]	Identifier
15.2		ST	O	[0..1]	Text
15.3		ID	O	[0..1]	Name of Coding System
15.4		ST	O	[0..1]	Alternate Identifier
15.5		ST	O	[0..1]	Alternate Text
15.6		ID	O	[0..1]	Name of Alternate Coding System
16	250	XCN	E	[0..*]	Responsible Observer

CTI – Clinical Trial Identification

The CTI segment is an optional segment that contains information to identify the clinical trial, phase and time point with which an order or result is associated.

CLINICAL TRIAL IDENTIFICATION (CTI)					
Seq	Len	DT	Use	Card	HL7 Element Name
1	60	EI	R		Sponsor Study ID
2	250	CE	E		Study Phase Identifier
3	250	CE	O		Study Scheduled Time Point

3. Appendix

RDE Sample Message -

Following is a sample message for HL7 v2 RDE. The message that needs to be sent to Healthix from participant might have some changes depending on the scope of integration:

Example 1:

```
MSH|^~\&|CPSI_IF_FEED_OUT|MURPHY Medical Center|||20091026120921||RDE|20091026120921|P|2.3||  
EVN||2009102612092156|||KLS  
PID||1061418|1061418||PYXIS^TEST^PATIENT 2||19240829|M||W|4130 US HWY  
64E^^MURPHY^NC^0000028906|CHE|8288378161^^^^^000000000|0000000  
000||S|OT|1061418|99999999|||1|||||N  
PV1||1^I/P^00|003^UCC12^D|||005600^HEAVNER^TERESA^MD|^^|^^|1|||||00  
5600^HEAVNER^TERESA^MD|||||||||||||||||||200910010938|  
PV2|||||U|2009093000000|||||||||||||||||  
MRG|112923  
OBX|1|ST|1010.3^Height||072|Inches  
OBX|2|ST|1010.1^Body Weight||190.00|pounds  
AL1|||9999998^No Known Drug Allergies  
DG1|||||A  
ORC|XO|0000010||IP||1^BID&1000,2200,^^200910150932^0^0^A  
RXE|1^BID&1000,2200,^^200910150932^0^0^A|361906^PROPRANOLOL 40MG TAB  
(INDERAL)|40||MG|EACH|HOLD FOR SBP #lg;90 |||1|||||||||  
RXR|^PO  
NTE|||
```

Example 2:

```
MSH|^~\&|PHARM-APP|CLINIC-FAC|INPC|REGEN|200701021302||RDE^O01|987654321|P|2.3  
PID|0001|1212121|999999999||QCOMP^Rambo^||19010121|U||123 HOME ST^INDIANAPOLIS^IN^46201  
|||||0002104398|000-00-0000  
PV1|1|O|^^DOWNTOWN_SITE|||||||||||||||||||||||||||200701021300  
ORC|NW|80031.1||NW||1^Q8S&^^200802191600^^R^^TOTAL VOLUME = 60 ML~ INFUSE OVER 30  
MINUTES^^||20080219142919|ABLY279|ABLY279|Z9999^DOE^JON^E|||200802191600|NW|||ABLY279|  
RXE|1^Q8S&^^200802191600^^R^^|00409798413^NACL 0.9%|50||ML|IV SOLN|^TOTAL VOLUME = 60 ML  
INFUSE OVER 30 MINUTES^|||1|ML|||ABLY279|80031.1|||150|  
RXR|PB  
RXC|A|60505074905^CEFAZOLIN|2|GM|2|GM|
```