

Pharmacy Connect HL7 Inbound Specification

Introduction

This document assumes that the reader is familiar with HL7 message format, transmission, and conventions. It describes HL7 Messages to Pharmacy Connect in order to support Medication Reconciliation features in Anesthesia Touch. Specifically, it describes using messages to send Dispense, Waste, and Return messages to Pharmacy Connect.

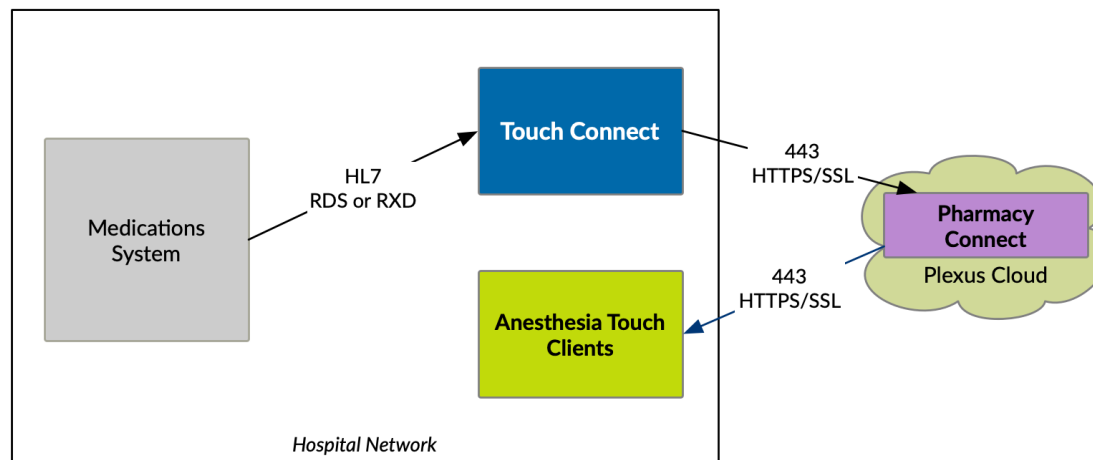
Pharmacy Connect

Pharmacy Connect receives a medication dispensing system's dispense, return and waste messages. Anesthesia Touch clients (on iOS and Windows) use this information to ensure that dispensed controlled medications' administrations, returns, and waste balance to zero; if a medication does not balance, Anesthesia Touch alerts clinicians to ensure that they correct the error before finishing the anesthesia record.

Connecting to Pharmacy Connect

In order to receive drug data from a drug dispensing cart, Anesthesia Touch requires an interface from the system. Dispensing systems—or their interface proxy—need to be able to reach the Plexus Server on the facility network (wherever Touch Connect resides).

Messages should be sent to Pharmacy Connect for each drug transaction, dispensing, wasting, or returning.



Inbound Message Types

MSH - Message Header

MSH HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
1	1	T	R			00001	Field Separator	Y		Literal
2	4	ST	R			00002	Encoding Characters	Y	^~\&	Literal
3	227	HD	O		0361	00003	Sending Application	Y	Ex. Registration	
4	227	HD	O		0362	00004	Sending Facility	Y	Ex. TestHospital	
5	227	HD	O		0361	00005	Receiving Application	Y	Plexus	Literal
6	227	HD	O		0362	00006	Receiving Facility	Y	ex. TestHospital	Literal
7	24	DTM	R			00007	Date/Time of Message	Y	YYYYMMDDHHMM	
8	40	ST	O			00008	Security			Not Used
9	15	MSG	R			00009	Message Type	Y	ex. ADT^A04	MessageType^TriggerEventType
10	199	ST	R			00010	Message Control ID	Y		Unique ID for this message
11	3	PT	R			00011	Processing ID			Not Used
12	60	VID	R			00012	Version ID	Y	ex. 2.4	Literal
13	15	NM	O			00013	Sequence Number			Not Used
14	180	ST	O			00014	Continuation Pointer			Not Used
15	2	ID	O		0155	00015	Accept Ack.Type			Not Used
16	2	ID	O		0155	00016	Application Acknowledgment Type			Not Used
17	3	ID	O		0399	00017	Country Code			Not Used
18	16	ID	O	Y	0211	00692	Character Set			Not Used
19	250	CWE	O			00693	Principal Language of Message			Not Used

MSH HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
20	20	ID	O		0356	01317	Alternate Character Set Handling Scheme			Not Used
21	427	EI	O	Y		01598	Message Profile Identifier			Not Used
22	567	XON	O			01823	Sending Responsible Organization			Not Used
23	567	XON	O			01824	Receiving Resp. Organization			Not Used
24	227	HD	O			01825	Sending Network Address			Not Used
25	227	HD	O			01826	Receiving Network Address			Not Used

PID – Patient Identifier Segment

PID HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
1	4	SI	O			00104	Set ID - PID	Y	NM	Literal
2	20	CX	B			00105	Patient ID	Y		Alternate ID/Account Number/Patient External ID
3	250	CX	R	Y		00106	Patient Identifier List	Y		MRN
4	20	CX	B	Y		00107	Alternate Patient ID - PID	O		Optionally captured if available. Originating system MRN
5	250	XPN	R	Y	0200	00108	Patient Name	Y	Last^First^Middle	
6	250	XPN	O	Y		00109	Mother's Maiden Name			Optionally captured if available
7 – 39 Not Used by Pharmacy Connect										

PV1 – Patient Visit

The entire PV1 segment is optional when communicating with Pharmacy Connect.

PV1 HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
1	4	SI	O			00131	Set ID - PV1	Y	NM	Literal
								O		Value: Meaning E: Emergency I: Inpatient O: Outpatient P: Preadmit R: Recurring Pat B: Obstetrics
2	1	IS	R		0004	00132	Patient Class			Optionally captured if available
3	80	PL	O			00133	Assigned Patient Location	O		Optionally captured if available
4	2	IS	O		0007	00134	Admission Type			Not Used
5	250	CX	O			00135	Preadmit Number			Not Used
6	80	PL	O			00136	Prior Patient Location	O		Optionally captured if available
								O		If for OR appointment, surgeon is the attending doctor.
7	250	XCN	O	Y	0010	00137	Attending Doctor			Optionally captured if available
8	250	XCN	O	Y	0010	00138	Referring Doctor			Not Used
9	250	XCN	B	Y	0010	00139	Consulting Doctor			Not Used
10	3	IS	O		0069	00140	Hospital Service			Not Used
11	80	PL	O			00141	Temporary Location			Not Used
12	2	IS	O		0087	00142	Preadmit Test Indicator			Not Used
13	2	IS	O		0092	00143	Re-admission Indicator			Not Used
14	6	IS	O		0023	00144	Admit Source			Not Used
15	2	IS	O	Y	0099	00145	Ambulatory Status			Not Used
16	2	IS	O		0099	00146	VIP Indicator			Not Used
17	250	XCN	O	Y	0010	00147	Admitting Doctor			Not Used
18	2	IS	O		0018	00148	Patient Type	O		Optionally captured if available
19	250	CX	O			00149	Visit Number	O		Optionally captured if available. Account Number
20	50	FC	O	Y	0064	00150	Financial Class			Not Used
21	2	IS	O		0032	00151	Charge Price Indicator			Not Used

PV1 HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
22	2	IS	O		0045	00152	Courtesy Code			Not Used
23	2	IS	O		0046	00153	Credit Rating			Not Used
24	2	IS	O	Y	0044	00154	Contract Code			Not Used
25	8	DT	O	Y		00155	Contract Effective Date			Not Used
26	12	NM	O	Y		00156	Contract Amount			Not Used
27	3	NM	O	Y		00157	Contract Period			Not Used
28	2	IS	O		0073	00158	Interest Code			Not Used
29	4	IS	O		0110	00159	Transfer to Bad Debt Code			Not Used
30	8	DT	O			00160	Transfer to Bad Debt Date			Not Used
31	10	IS	O		0021	00161	Bad Debt Agency Code			Not Used
32	12	NM	O			00162	Bad Debt Transfer Amount			Not Used
33	12	NM	O			00163	Bad Debt Recovery Amount			Not Used
34	1	IS	O		0111	00164	Delete Account Indicator			Not Used
35	8	DT	O			00165	Delete Account Date			Not Used
36	3	IS	O		0112	00166	Discharge Disposition			Not Used
37	47	DLD	O		0113	00167	Discharged to Location			Not Used
38	705	CWE	O		0114	00168	Diet Type			Not Used
39	2	IS	O		0115	00169	Servicing Facility			Not Used
40	1	IS	B		0116	00170	Bed Status			Not Used
41	2	IS	O		0117	00171	Account Status	O		Optionally captured if available
42	80	PL	O			00172	Pending Location			Not Used
43	80	PL	O			00173	Prior Temporary Location			Not Used
44	24	DT M	O			00174	Admit Date/Time			Not Used
45	24	DT M	O			00175	Discharge Date/Time	O		Optionally captured if available
46	12	NM	O			00176	Current Patient Balance			Not Used
47	12	NM	O			00177	Total Charges			Not Used

PV1 HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
48	12	NM	O			00178	Total Adjustments			Not Used
49	12	NM	O			00179	Total Payments			Not Used
50	250	CX	O		0203	00180	Alternate Visit ID	O		Optionally captured if available. Account Number
51	1	IS	O		0326	01226	Visit Indicator			Not Used
52	250	XCN	B	Y	0010	01274	Other Provider			Not Used

RXD – Pharmacy Dispense

RXD HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
1	4	NM	R			00334	Dispense Sub-ID Counter	Y		
2	250	CWE	R		0292	00335	Dispense/Give Code	Y		Item identifier and description
3	24	DTM	R			00336	Date/Time Dispensed	Y		Transaction time
4	20	NM	R			00337	Actual Dispense Amount	Y		Required
5	250	CWE	C		9999	00338	Actual Dispense Units	Y		Used for package matching
6	250	CWE	O		9999	00339	Actual Dosage Form	Y		Used for package matching
7	20	ST	R			00325	Prescription Number			Not Used
8	20	NM	C			00326	Number. of Refills Remaining			Not Used
9	200	ST	O	Y		00340	Dispense Notes			Not Used
10	200	XCN	O	Y		00341	Dispensing Provider	O		Optionally captured if available
11	1	ID	O		0167	00322	Substitution Status			Not Used
12	10	CQ	O			00329	Total Daily Dose			Not Used
13	200	LA2	B			01303	Dispense-to Location	O		Optionally captured if available
14	1	ID	O		0136	00307	Needs Human Review			Not Used
15	250	CWE	O	Y	9999	00330	Pharmacy/Treatment Supplier's Special Dispensing Instructions			Not Used
16	20	NM	O			01132	Actual Strength	Y		Used for package matching

RXD HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
17	250	CWE	O			01133	Actual Strength Unit	Y		Units, e.g., mcg
18	20	ST	O			01129	Substance Lot Number	O		Optionally captured if available
19	24	DTM	O			01130	Substance Expiration Date	O		Used for expiration information
20	250	CWE	O		0227	01131	Substance Manufacturer Name			Not Used
21	250	CWE	O		9999	01123	Indication			Not Used
22	20	NM	O			01220	Dispense Package Size	Y		Used for package matching
23	250	CWE	O		9999	01221	Dispense Package Size Unit	Y		Units, e.g., ml
24	2	ID	O			01222	Dispense Package Method	O		Optionally captured if available
25	250	CWE	O			01476	Supplementary Code			Not Used
26	250	CWE	O			01477	Initiating Location	Y		Device or named location of transaction
27	250	CWE	O			01478	Packaging/Assembly Location			Not Used
28	5	NM	O			01686	Actual Drug Strength Volume	Y		Used for package matching
29	250	CWE	O			01687	Actual Drug Strength Volume Units	Y		Optionally captured if available
30	180	CWE	O			01688	Dispense to Pharmacy			Not Used
31	106	XAD	O			01689	Dispense to Pharmacy Address			Not Used
32	1	ID	O			01690	Pharmacy Order Type			Not Used
33	250	CWE	O			01691	Dispense Type			Not Used

Example Z Segment

Pharmacy Connect is capable of parsing necessary information from a custom Z segment (e.g., a ZPM). The below is an example segment, though custom segments may be submitted to PTG with a sample and brief text description to determine suitability.

Example Z-Segment HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
0	3		R				Segment ID = "ZPM"	Y		
1	1	ST	R				Pocket Code	Y		Used to categorize activity
2	10	ST	O				Console Name System	O		Optionally captured if available
3	10	ST	R				Station Name	Y		Used for tracking
4	2	NM	R				Drawer Number			Not Used
5	5	NM	R				Pocket Descriptor			Note Used
6	25	TS	R				Item ID	Y		Used for package matching
7	30	ST	R				Item Name	Y		Used for package matching
8	1	ST	O				Item Class			Not Used
9	8	NM	O				EBC (Expected Begin Count)			Not Used
10	8	NM	R				ABC (Actual Begin Count)			Not Used
11	8	NM	R				Transaction Amount	Y		Number of packages
12	10	ST	O				User ID			Not used
13	20	ST	O				User Name			Not used
14	10	ST	O				Witness ID			Not used
15	20	ST	O				Witness Name			Not used
16	26	NM	R				Total Count of item in Station			Not Used
17	25	ST	O				Alternate Item ID			Not Used
18	15	ST	O				Facility Code			Not Used
19	30	ST	O				Alternate Item ID 2			Not Used
20	25	ST	O				Nursing Unit			Not Used
21	2	NM	O				Subdrawer			Not Used
22	8	NM	O				Full Count in pocket			Not Used
23	8	NM	O				Par Count in pocket			Not Used

Example Z-Segment HL7 Information								Anesthesia Touch Platform Comments		
SEQ	LEN	DT	OPT	RP#	TBL#	ITEM#	Element Name	Req'd	Format	Comments
24	12	TS	O				Transaction Time	O		Used if the transaction time in the RXD is not sent or should be overridden
25 – 60 Not Used by Pharmacy Connect										
61	50	ST	O	Y			Product ID (NDC)	O		Optional support for NDC
62		ST	X	Y			Full NDC Code	Y		Used to support tracking and billing features
63		ST	O	Y			Item Expiration Date	Y		Used for expiration information
64	1	ST	O	Y			Expiration Year Month Only Flag	Y		Used for expiration information
65	250	ST	O				Undocumented Waste Reason	O		Optionally captured if available