



# INTERFACE FUNCTIONAL SPECIFICATION

## HL7 MDM ORDERS INTERFACE-EMBEDDED PDF

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## INTERFACE GENERAL OVERVIEW

### SUMMARY

Homecare Homebase (HCHB) will transmit order reports (e.g. Plan of Care, Physician Verbal Orders) to a designated location for subsequent review by the appropriate physician. HCHB will receive the physician's approval or rejection of the order, and update the HCHB EMR accordingly.

The Physician Office associated to the patient must have 'INTERFACE' as the communication method and the approval of the patient order in HCHB will trigger the transmission of the order. The 'Process New Order to Physician' workflow in HCHB will be suppressed for physicians who have the 'INTERFACE' communication method.

### OUTBOUND MESSAGE

The orders will be sent as base64 encoded PDF attachments, embedded within an HL7 MDM message. The message will include the following segments:

Segment	Name
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PV1	Patient Visit
TXA	Document Notification Segment
OBX	Observation Segment
NTE	Notes and Comments

### MSH – MESSAGE HEADER

**Status:** Mandatory

**Description:** The MSH segment defines the intent, source, destination, and some specifics of the message.

Seq	Len	Fmt	Opt	Field Name	Comment
0	3		R	Segment ID = "MSH"	MSH
1	1	ST	R	Field Separator	Always " " (HL7 standard)
2	4	ST	R	Encoding Characters	Always "~&" (HL7 standard)
3	20	HD	R	Sending Application	Agency ID
4	20	HD	R	Sending Facility	Transaction ID
5	20	HD	R	Receiving Application	Vendor Name
6	20	HD	R	Receiving Facility	Blank
7	14	TS	R	Date/Time Of Message	Current date and time in <b>yyyymmddhhmm</b>
8	40	ST	O	Security	Not Currently Used
9	7	CM	R	Message Type	HL7 message type – must be in the supported list of events for outbound messages  MDM^T02
10	20	ST	R	Message Control ID	Current Date/Time formatted in <b>yyyymmddhhmm</b> + Medical Record Number
11	3	PT	O	Processing ID	P
12	8	ID	R	Version ID	2.5
13	15	NM	O	Sequence Number	Not Currently Used
14	180	ST	O	Continuation Pointer	Not Currently Used

<b>15</b>	2	ID	O	Accept Acknowledgment Type	Not Currently Used
<b>16</b>	2	ID	O	Application Acknowledgment Type	Not Currently Used
<b>17</b>	2	ID	O	Country Code	Not Currently Used
<b>18</b>	6	ID	O	Character Set	ASCII
<b>19</b>	60	CE	O	Principal Language Of Message	Not Currently Used
<b>20</b>	20	ID	O	Alternate Character Set Handling Scheme	Not Currently Used
<b>21</b>	427	ST	O	Message Profile Identifier	Not Currently Used

## EVN – EVENT TYPE

**Status:** Mandatory

**Description:** The EVN segment defines event type information. It features event type, update of patient record.

Seq	Len	Fmt	Opt	Field Name	Comment
<b>0</b>	5	ST	R	Segment ID = "EVN"	EVN
<b>1</b>	15	ST	R	Event Type Code	T02
<b>2</b>	14	TS	R	Recorded Date Time	Date/time of event in <b>yyyymmddhhmm</b>
<b>3</b>	14	TS	O	Date Time Planned Event	Date/time of event in <b>yyyymmddhhmm</b>
<b>4</b>			R	Event Reason Code	
<b>6</b>	14	TS	R	Event Occurred	Transaction date – Date order was approved

## PID – PATIENT IDENTIFICATION

**Status:** Mandatory

**Description:** The PID segment is used as the primary means of communicating patient demographic information.

Seq	Len	Fmt	Opt	Field Name	Comments
<b>0</b>	3		R	Segment ID = "PID"	PID
<b>1</b>	4	SI	O	Set ID	HL7 numeric identifying field
<b>2</b>	12	CX	O	Patient ID (External ID)	Epic MRN
<b>3</b>	16	CX	R	Patient ID (Internal ID)	HCHB Patient ID ^^^ HCHB ^ PN ~ HCHB Admission ID ^^^ HCHB ^ PI
<b>1<sup>st</sup> Occurrence:</b>					
3.1 HCHB Patient ID					
3.4 "HCHB"					
3.5 PN					
<b>2<sup>nd</sup> Occurrence:</b>					
3.1 HCHB Admission ID					
3.4 "HCHB"					
3.5 PI					
<b>4</b>	20	CX	O	Alternate Patient ID – PID	HCHB Episode ID ^^^ HCHB ^ PI
4.1 HCHB Episode ID					
4.4 "HCHB"					
4.5 PI					

<b>5</b>	48	PN	R	Patient Name	Last Name ^ First Name ^ Middle Initial  Family Name (Surname) – Last Name Given Name – First Name Second and Further Given Names or Initials Thereof – Middle Initial
<b>6</b>	48	PN	O	Mother's Maiden Name	Not Currently Used
<b>7</b>	14	TS	O	Date/Time of Birth	Date of birth: YYYYMMDD
<b>8</b>	1	IS	O	Sex	Female ( <b>F</b> ) Male ( <b>M</b> ) otherwise Unknown ( <b>U</b> )
<b>9</b>	48	PN	O	Patient Alias	Not Currently Used
<b>10</b>	1	IS	O	Race	Text description of race, uncoded
<b>11</b>	106	AD	O	Patient Address	Address ^ ^ City ^ State ^ Zip ^ ^ Facility Type ^ Facility Name ^ Facility ID  Street Address (Street or Mailing Address) – Address City – City State or Province – State Zip or Postal Code – Zip Address Type – Facility Type Other Geographic Designation – Facility Name County Parish Code – Facility ID
<b>12</b>	4	IS	O	County Code	Not Currently Used
<b>13</b>	20	TN	O	Phone Number – Home	Patient home telephone number, formatted as <b>(nnn) nnn-nnnn</b>
<b>14</b>	20	TN	O	Phone Number – Business	Patient business telephone number, formatted as <b>(nnn) nnn-nnnn</b>
<b>15</b>	20	CE	O	Primary Language	Patient Primary Language
<b>16</b>	1	IS	O	Marital Status	Patient Marital Status
<b>17</b>	3	IS	O	Religion	Not Currently Used
<b>18</b>	12	CX	R	Patient Account Number	HCHB Medical Record Number
<b>19</b>	11	ST	O	SSN Number – Patient	Social security number
<b>20</b>	25	ST	O	Driver's License Number – Patient	Not Currently Used
<b>21</b>	9	CX	O	Mother's Identifier	Not Currently Used
<b>22</b>	3	IS	O	Ethnic Group	Not Currently Used
<b>23</b>	20	ST	O	Birth Place	Not Currently Used
<b>24</b>	2	ID	O	Multiple Birth Indicator	Not Currently Used
<b>25</b>	2	NM	O	Birth Order	Not Currently Used
<b>26</b>	4	IS	O	Citizenship	Not Currently Used
<b>27</b>	60	CE	O	Veterans Military Status	Not Currently Used
<b>28</b>	80	CE	O	Nationality	Not Currently Used
<b>29</b>	8	TS	O	Patient Death Date and Time	If PID 30 = Y, formatted as <b>yyyymmddhhmmss</b>
<b>30</b>	1	ID	O	Patient Death Indicator	Y/N

### PV1 – PATIENT VISIT SEGMENT

**Status:** Required

**Description:** The PV1 segment is used to convey additional information about the patient's admission/registration that is unique to this visit.

Seq	Len	Fmt	Opt	Element Name	Comments
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<b>0</b>	3	R	Segment ID = "PV1"	PV1
<b>1</b>	4	SI	O Set ID	HL7 numeric identifying field
<b>2</b>	1	IS	R Patient Class	Always "O" – Outpatient
<b>3</b>	40	PL	O Assigned Patient Location	Agency Name ^ Room Number ^ ^ Branch Code & Branch Name ^ ^ ^ ^ Team Name  Point Of Care – Agency Name Facility (Namespace ID) – Branch Code Facility (Universal ID) – Branch Name Location Description – Team Name
<b>4</b>	2	IS	O Admission Type	Admit Type to HCHB  <u>Possible values:</u>  NEW ADMISSION READMISSION RECERTIFICATION BEREAVEMENT TRANSITION (a client transitioned from another software/EMR system to HCHB)
<b>5</b>	20	CX	O Pre-admit Number	Not Currently Used
<b>6</b>	40	PL	O Prior Patient Location	Not Currently Used
<b>7</b>	60	CN	O Attending Doctor	This field maps to the primary physician in HCHB  NPI ^ Last Name ^ First Name  Id Number – NPI Family Name (Surname) – Last Name Given Name – First Name
<b>8</b>	60	CN	O Referring Doctor	This field will contain the medical director from HCHB NPI ^ Last Name ^ First Name ^ ^ ^ Degree  ID Number – NPI FamilyName (Surname) – Last Name Given Name – First Name Degree – Degree
<b>9</b>	60	CN	O Consulting Doctor	This field will contain the secondary physician from HCHB NPI ^ Last Name ^ First Name ^ ^ ^ Degree  ID Number – NPI FamilyName (Surname) – Last Name Given Name – First Name Degree – Degree
<b>10</b>	3	IS	O Hospital Service	Not Currently Used
<b>11</b>	80	PL	O Temporary Location	Not Currently Used
<b>12</b>	2	IS	O Pre-admit test Indicator	Not Currently Used
<b>13</b>	2	IS	O Readmission Indicator	Not Currently Used
<b>14</b>	3	IS	O Admit Source	Not Currently Used
<b>15</b>	2	IS	O Ambulatory Status	Not Currently Used

<b>16</b>	2	IS	O	VIP Indicator	Not Currently Used
<b>17</b>	60	CN	O	Admitting Doctor	Not Currently Used
<b>18</b>	2	IS	O	Patient Type	Service Line Description  Possible Values: HOME HEALTH HOSPICE PRIVATE DUTY (Agency can have custom Service Lines as well)
<b>19</b>	20	CX	O	Visit Number	HCHB Episode ID
<b>20</b>	4	FC	O	Financial Class	Not Currently Used
<b>21</b>	2	IS	O	Charge Price Indicator	Not Currently Used
<b>22</b>	2	IS	O	Courtesy Code	Not Currently Used
<b>23</b>	2	IS	O	Credit Rating	Not Currently Used
<b>24</b>	2	IS	O	Contract Code	Not Currently Used
<b>25</b>	8	DT	O	Contract Effective Date	Not Currently Used
<b>26</b>	12	NM	O	Contract Amount	Not Currently Used
<b>27</b>	3	NM	O	Contract Period	Not Currently Used
<b>28</b>	2	IS	O	Interest Code	Not Currently Used
<b>29</b>	1	IS	O	Transfer to Bad Debt Code	Not Currently Used
<b>30</b>	8	DT	O	Transfer to Bad Debt Date	Not Currently Used
<b>31</b>	10	IS	O	Bad Debt Agency Code	Not Currently Used
<b>32</b>	12	NM	O	Bad Debt Transfer Amt.	Not Currently Used
<b>33</b>	12	NM	O	Bad Debt Recovery Amt.	Not Currently Used
<b>34</b>	1	IS	O	Delete Account Indicator	Not Currently Used
<b>35</b>	8	DT	O	Delete Account Date	Not Currently Used
<b>36</b>	3	IS	O	Discharge Disposition	Text of Discharge Reason
<b>37</b>	25	CM	O	Discharged to Location	Episode Discharge Code
<b>38</b>	2	IS	O	Diet Type	Not Currently Used
<b>39</b>	2	IS	O	Servicing Facility	Not Currently Used
<b>40</b>	1	IS	O	Bed Status	Not Currently Used
<b>41</b>	2	IS	O	Account Status	Episode Status (CURRENT, PENDING, DISCHARGED, NON-ADMIT, RECERTIFIED, DELETED)
<b>42</b>	80	PL	O	Pending Location	Not Currently Used
<b>43</b>	80	PL	O	Prior Temporary Location	Not Currently Used
<b>44</b>	14	TS	O	Admit Date/Time	Patient Start Of Care (SOC) Date, formatted as yyyyymmddhhmmss
<b>45</b>	14	TS	O	Discharge Date/Time	Episode Discharge Date
<b>46</b>	12	NM	O	Current Patient Balance	Not Currently Used
<b>47</b>	12	NM	O	Total Charges	Not Currently Used

<b>48</b>	12	NM	O	Total Adjustments	Not Currently Used
<b>49</b>	12	NM	O	Total Payments	Not Currently Used
<b>50</b>	20	CX	O	Alternate Visit ID	Not Currently Used
<b>51</b>	1	IS	O	Visit Indicator	Not Currently Used
<b>52</b>	60	CN	O	Other Healthcare Provider	Not Currently Used

## TXA – DOCUMENT NOTIFICATION SEGMENT

**Status:** Required

**Description:** The TXA segment is used to convey information about the document.

Seq	Len	Fmt	Opt	Element Name	Comments
<b>0</b>	3		R	Segment ID = "TXA"	TXA
<b>1</b>	4	SI	O	Set ID	HL7 numeric identifying field
<b>2</b>	60	IS	R	Document Type	Order Type Id
<b>3</b>	40	ID	O	Document Content Presentation	PDF
<b>4</b>	14	TS	O	Activity Date/TM	Order Approval Date
<b>5</b>	60	XCN	O	Primary Activity Provider Code/Name	Not Currently Used
<b>6</b>	14	TS	O	Origination Date/Time (TS)	Order Date
<b>7</b>	14	TS	O	Transcription Date/Time	Not Currently Used
<b>8</b>	14	TS	O	Edit Date/Time	Not Currently Used
<b>9</b>	60	XCN	O	Originator Code/Name	Not Currently Used
<b>10</b>	60	XCN	O	Assigned Document Authenticator	Physician Order was written for NPI^ Physician Last Name ^ Physician First Name
<b>11</b>	80	XCN	O	Transcriptionist Code/Name	HCHB Branch Code
<b>12</b>	60	EI	O	Unique Document Number	Unique Document Identifier (BranchCode_ordertypeid_orderID)
<b>13</b>	60	EI	O	Parent Document Number	Not Currently Used
<b>14</b>	60	EI	O	Placer Order Number	Not Currently Used
<b>15</b>	60	EI	O	Filler Order Number	HCHB Order ID
<b>16</b>	60	ST	O	Unique Document File Name	Not Currently Used
<b>17</b>	60	ID	O	Document Completion Status	"UNAUTH"

## OBX – OBSERVATION/RESULT SEGMENT

**Status:** Required

**Description:** The OBX Segment is used to communicate the Observation or Result information. In the case of an MDM this is the document contents.

Seq	Len	Fmt	Opt	Element Name	Comments
0	3		R	Segment ID = "OBX"	OBX
1	4	SI	O	Set ID	HL7 numeric identifying field
2	60	ID	R	Value Type	ED
3	40	ID	O	Observation Identifier	Order Type Id ^ Order Type Code ^ Order Type Description Identifier – Order Type Id Text – Order Type Code Name of Coding System – Order Type Description
4		CE	O	Observation Sub-ID	Not Currently Used
5		ST	O	Observation Value	^^PDF^^ Base64 encoded Document

## NTE – NOTES AND COMMENTS SEGMENT

**Status:** Optional

**Description:** The NTE segment is used to for notes

Seq	Len	Fmt	Opt	Element name	Comments
0	3		R	Segment ID = "NTE"	NTE
0	4	SI	O	Set ID – NTE	HL7 numeric identifier
1	8	ID	O	Source of Comment	Hardcoded to 'HCHB'
2		FT	O	Comment	ph:<Ordering physician Id>; db: <database route Id>; tx:<Transaction Id>
3				Comment Type	Not Currently Used