

Ontario Enterprise Master Patient Index (EMPI) Passive Integration - HL7 Specification Guide

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|--|---|
| HL7 Interface: System to EMPI | Revision Date: November 30, 2006 (v8.3) |
| Data Type: ADT^A28 Add Patient ADT^A30 Merge Patient ADT^A31 Update Patient | |

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Note to Reader:

The purpose of the specification is to help outline the translation and mapping required to ensure clear communication between the sending and receiving systems. For the A28 (Add person) trigger event, please translate any current trigger events equal to Adding a patient within the source system, such as A04 for Register Patient. For A30 (Merge Person) trigger event, please translate any current trigger events equal to Merge patient within the source system. For A31 (Update Person) trigger event, please translate any update triggers such as A08 (Update Patient Information) and A03, if used for expired patients.

- All values that are **mandatory** and **required** are in Bold and Underlined
- All field notes indicating “Not Used” are fields not processed by the EMPI.

1. Data Format

| 1.1 Inbound Data Format – Inbound System | 1.2 Outbound Data Format (EMPI) ADT^A28^ADT A05 |
|--|--|
| <p>Where inbound system is the hospital registration system, the following triggers map to the A28 trigger (Add Person): For example, if the trigger events A01 (Admit/visit notification) or A04 (Register a Patient) is used when a new patient is entered into the hospital system, it should be translated to A28.</p> <p>Note: The EMPI is setup that if a person already exists and an “Add Person” message (A28) is received; it will treat the message similar to an update (A31).</p> | <p>MSH EVN PID [PD1] [{}NK1] PV1</p> |
| 1.3 Inbound Data Format – Inbound System | 1.4 Outbound Data Format (EMPI) ADT^A30^ADT A30 |
| <p>Where inbound system is the hospital registration system, the following triggers map to the A30 (Merge Person) trigger: For example, if the trigger events A34 (Merge Patient ID information) is used in the hospital system for merging, translate A34 to A30 in the hospital engine.</p> | <p>MSH EVN PID [PD1] MRG</p> <p>Note: According to Infoway’s HL7 Client Registry specification (Nov 17, 2005), A30 is use instead of A40 for backwards compatibility.</p> |
| 1.5 Inbound Data Format – Inbound System | 1.6 Outbound Data Format (EMPI) ADT^A31^ADT A05 |
| <p>Where inbound system is the hospital registration system, the following triggers map to the A31 (Update Person) trigger: For example, A08 is translated to A31.</p> <p>Note: if a patient is new to EMPI but an update message</p> | <p>MSH EVN PID [PD1] [{}NK1] PV1</p> |

was sent, the EMPI will treat the A31 trigger event similar to A28 Add person.

1.7 Acknowledgment Messages from EMPI to Source Systems

MSH
MSA
[**{ERR}**]

Note: [] – denotes an optional segment or group
{ } – denotes a repeating segment or group

1.8 Message Delimiters

| Level | Delimiter | Usage | Attributes |
|-------|-----------|----------------------------|---------------|
| 1 | \r | Segment Terminator | End of record |
| 2 | | Field Separator | |
| 3 | ~ | Repetition Separator | Array |
| 4 | ^ | Component Separator | |
| 5 | & | Subcomponent Separator | |
| 6 | \ | Escape Character Delimiter | |

2. Segment Translations

This section will describe the fields in each segment. Any segment which is not detailed in a table in this document does not come across the interface.

For the R/O/Rep column, R denotes a required field, O denotes an optional field, and Rep denotes a repeating field.

For the Data Type column,

| | | | |
|------------|--|------------|---|
| AD | Address | PL | Person location |
| CD | Channel definition | PN | Person name |
| CE | Coded element | PPN | Performing person time stamp |
| CF | Coded element with formatted values | PT | Processing type |
| CK | Composite ID with check digit | QIP | Query input parameter list |
| CM | Composite | QSC | Query selection criteria |
| CN | Composite ID number and name | RCD | Row column definition |
| CNE | Coded with no exceptions | RI | Repeat interval |
| CP | Composite price | RP | Reference pointer |
| CQ | Composite quantity with units | SAD | Street Address |
| CWE | Coded with exceptions | SCV | Scheduling class value pair |
| CX | Extended composite ID with check digit | SI | Sequence ID |
| DLN | Driver's license number | SN | Structured numeric |
| DR | Date/time range | SRT | Sort order |
| DT | Date | ST | String |
| ED | Encapsulated data | TM | Time |
| EI | Entity identifier | TN | Telephone number |
| FC | Financial class | TQ | Timing/quantity |
| FN | Family name | TS | Time stamp |
| FT | Formatted text | TX | Text data |
| HD | Hierarchic designator | VH | Visiting hours |
| ID | Coded values for HL7 tables | VID | Version identifier |
| IS | Coded value for user-defined tables | XAD | Extended address |
| JCC | Job code/class | XCN | Extended composite ID number and name |
| MA | Multiplexed array | XON | Extended composite name & ID number for organizations |
| MO | Money | XPN | Extended person name |
| NA | Numeric array | XTN | Extended telecommunications number |
| NM | Numeric | | |

2.1 MSH (Message Header Segment)

| Seq # | HL7 Name | Max Length | R/O/Rep | Item # | Date Type | Field Notes |
|-------|-----------------------|------------|---------|--------|-----------|--|
| 0 | Segment Name | | | | | MSH |
| 1 | Field Separator | 1 | R | 00001 | ST | ↓ |
| 2 | Encoding Characters | 4 | R | 00002 | ST | ^~\& |
| 3 | Sending Application | 180 | R | 00003 | HD | This field identifies the source system/application sending the message (i.e. Misys, Cerner, Meditech, McKesson, etc.) |
| 4 | Sending Facility | 40 | R | 00004 | HD | <p>Site number</p> <p><u><namespace ID (IS)> ^ <universal ID (ST)> ^ <universal ID type (ID)></u></p> <p>For example: Grand River Hospital would sent the following format 4107^Grand River Hospital^</p> <p>The only value that is mandatory is the site number.</p> <p>The Max Length for this field is 40 characters.</p> <p>This site number is issued by the EMPI Office.</p> |
| 5 | Receiving Application | 180 | R | 00005 | HD | <p>The value expected for this field is:</p> <p>Provincial EMPI</p> |
| 6 | Receiving Facility | 180 | R | 00006 | HD | <p>The value expected for this field is:</p> <p>MOHLTC</p> |
| 7 | Date/Time Of Message | 19 | R | 00007 | TS | <p><u>YYYYMMDDHHMM</u></p> <p>This field provides the Date and Time of when the hospital system created the message.</p> |
| 8 | Security | 40 | O | 00008 | ST | Not Used |
| 9 | Message Type | 13 | R | 00009 | CM | <p><u>Message Code ^ Trigger Event ^ Message Structure</u></p> <p>For example:</p> <p>ADT^A28^ADT_A05</p> <p>ADT^A30^ADT_A30</p> <p>ADT^A31^ADT_A05</p> |

| Seq # | HL7 Name | Max Length | R/O/Rep | Item # | Date Type | Field Notes |
|-------|-------------------------------|------------|---------|--------|-----------|--|
| 10 | Message Control ID | 20 | R | 00010 | ST | This is the message control count that is unique per message |
| 11 | Processing ID | 3 | R | 00011 | PT | D^T = Development P^T = Production |
| 12 | Version ID | 60 | R | 00012 | VID | 2.4 |
| 13 | Sequence Number | 15 | O | 00013 | NM | Not Used |
| 14 | Continuation Pointer | 180 | O | 00014 | ST | Not Used |
| 15 | Accept Acknowledgment Type | 2 | O | 00015 | ID | Not Used |
| 16 | Application AckType | 2 | O | 00016 | ID | Not Used |
| 17 | Country Code | 3 | O | 00017 | ID | Not Used |
| 18 | Character Set | 16 | O/Rep | 00692 | ID | Not Used |
| 19 | Principal Language Of Message | 250 | O | 00693 | CE | Not Used |
| 20 | Alt Char Set Handling Scheme | 20 | O | 01317 | ID | Not Used |
| 21 | Conformance Statement ID | 10 | O/Rep | 01598 | ID | Not Used |

2.2 EVN (Event Type Segment)

| Seq # | HL7 Name | Max Length | R/O/Rep | Item # | Date Type | Field Notes |
|-------|-------------------------|------------|---------|--------|-----------|--|
| 0 | Segment Name | | | | | EVN |
| 1 | Event Type Code | 3 | B | 00099 | ID | Not Used |
| 2 | Recorded Date/Time | 19 | R | 00100 | TS | <u>YYYYMMDDHHMM</u> This field provides the Date and Time of when the hospital system creates the event. |
| 3 | Date/Time Planned Event | 26 | O | 00101 | TS | Not Used |
| 4 | Event Reason Code | 3 | O | 00102 | IS | Not Used |
| 5 | Operator ID | 128 | R | 00103 | XCN | Components: <ID number (ST)> Operator ID is used for audit purposes. For this field, include the Hospital User ID that triggered or generated the message. |
| 6 | Event Occurred | 26 | O | 01278 | TS | Not Used |
| 7 | Event Facility | 180 | O | 01534 | HD | Not Used |

2.3 PID (Patient Identification Segment)

| Seq # | HL7 Name | Max Length | R/O/Rep | Item # | Date Type | Field Notes |
|-------|-------------------------|------------|---------|--------|-----------|---|
| 0 | Segment Name | | | | | PID |
| 1 | Set ID - PID | 4 | O | 00104 | SI | |
| 2 | Patient ID | 20 | O | 00105 | CX | Not Used |
| 3 | Patient Identifier List | 250 | R/Rep | 00106 | CX | <p>Sequence:</p> <p>Primary ID ~ Identifier #2~ Identifier #3</p> <p>Components: <u><ID (ST)></u> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <u>< assigning authority (HD)></u> ^ <u><identifier type code (ID)></u> ^ < assigning facility (HD) ^ <effective date (DT)> ^ <expiration date (DT)></p> <p>Three variables that are to be included in this field are:</p> <ol style="list-style-type: none"> (1) MRN (Medical Record Number) (2) Corporate ID (3) Health Card Number <p>Note: Full Descriptions are provided below</p> <p>IMPORTANT: The sequence of identifiers will determine which identifier (MRN, Corporate ID, Health Card Number) is the Primary Patient Identifier (Primary ID). The first identifier in the sequence must be the Primary ID. (Note: The order of the Identifier #2 and Identifier #3 is indifferent).</p> <p>Examples:</p> <p>If MRN is the Unique Primary Patient Identifier, then the sequence will be: 123456^^^4107^PI ~999999999^^^CANON^HC~ 11111111^^^4107^FI</p> <p>If Corporate ID is the Unique Primary Patient Identifier, then the sequence will be: 11111111^^^4107^FI~123456^^^4107^PI ~999999999^^^CANON^HC</p> <p>If HCN is the Unique Primary Patient Identifier, then the sequence will be: 999999999^^^CANON^HC~11111111^^^4107^FI</p> |

| | | | | | |
|--|--|--|--|--|--|
| | | | | | <p>~123456^^^4107^PI</p> <p>Note: All three identifiers must be present (regardless if the field is empty (i.e., blank)).</p> <p>Example:</p> <p>If MRN is the Unique Primary Patient Identifier, and Corporate ID is not supported (i.e., blank), then the sequence will be:</p> <p>123456^^^4107^PI ~99999999^^^CANON^HC~^^^FI</p> <p>Note: the field length for each of the ID(ST) is 60 character lengths</p> <p>IMPORTANT: If an Identifier is included, it must be accompanied with an Assigning Authority.</p> <p>(1) MRN (Medical Record Number)</p> <p>Example: 123456^^^4107^PI</p> <p>'PI' stands for the Patient Institution. The EMPI will associate this PI code with the MRN Number. In this example, 4107 is the value used in MSH-4, indicating that the assigning authority of the MRN identifier is the sending facility/site. Note: Inclusion of PI code is mandatory.</p> <p>(2) Corporate ID</p> <p>Example: 11111111^^^4107^FI</p> <p>'FI' stands for the Facility ID. The EMPI will associate this FI code with the Corporate ID. In this example, 4107 is the value used in MSH-4, indicating that the assigning authority of the corporate ID is the sending facility/site. Note: Inclusion of FI code is mandatory. Note: If system does not support Corporate ID, then this element is to remain empty.</p> <p>(3) Health Card Number</p> <p>Example: 99999999^^^CANON^HC</p> <p>'HC' stands for the Health Card Number. The EMPI will associate this HC</p> |
|--|--|--|--|--|--|

| | | | | | |
|--|--|--|--|--|--|
| | | | | | <p>code with the Health Card Number. In this example, CANON is the provincial assigning authority of the Health Card .</p> <p>IMPORTANT: All Health Card Numbers must be accompanied with an Assigning Authority.</p> <p><u>Note:</u> This field is to include the Health Card Number only. DO NOT include the Version Code within the Health Card Number data field.</p> <p>Note: Inclusion of HC code is mandatory.</p> <p>The following are the accepted values for Health Card Assigning Authority (Note: Values based on HL-7 v2.4):</p> <p>AUSDVA – Australia – Dept. of Veterans Affairs</p> <p>AUSHIC – Australia – Health Insurance Commission</p> <p>CANAB - Alberta</p> <p>CANBC - British Columbia</p> <p>CANMB - Manitoba</p> <p>CANNB - New Brunswick</p> <p>CANNF - Newfoundland</p> <p>CANNS - Nova Scotia</p> <p>CANNT - Northwest Territories</p> <p>CANNU - Nunavut</p> <p>CANON - Ontario</p> <p>CANPE - Prince Edward Island</p> <p>CANQC - Quebec</p> <p>CANSK - Saskatchewan</p> <p>CANYT - Yukon Territories</p> <p>NLVWS – NL Ministerie van Volksgezondheid</p> <p>USCDC – US Center for Disease Control</p> <p>USHCFA – US Healthcare Finance Authority</p> <p>USSSA – US Social Security Administration</p> |
|--|--|--|--|--|--|

| | | | | | | |
|---|----------------------------|-----|--------|-------|-----|--|
| 4 | Alternate Patient ID - PID | 20 | O /Rep | 00107 | CX | Not Used |
| 5 | Patient Name | 250 | R/Rep | 00108 | XPN | <p><u>Patient's Name</u> ~ Alias1 ~ Alias 2</p> <p>Components: <family name (FN)> ^ <given name (ST)> ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <name type code (ID) > ^ <name representation code (ID)> ^ <name context (CE)> ^ <name validity range (DR)> ^ <name assembly order (ID)></p> <p>Note:</p> <ol style="list-style-type: none"> 1. Alias can be patient's maiden name or any other name the patient may use. 2. The EMPI is configured to store two Aliases for each person from each site. 3. For both Patient's Name and Aliases the maximum field lengths available in EMPI database are: <ol style="list-style-type: none"> a. Family Name – 75 char b. Given (First) Name – 30 char c. Second or Further given name (Middle) Name – 30 char d. Prefix – 10 char 4. Data will be processed in sequence, only as data is present in the repeating fields. For instance, for "Patient's Name ~ Alias1 ~ Alias 2", if Alias1 is blank, Alias 2 will not be processed. |
| 6 | Mother's Maiden Name | 250 | O/Rep | 00109 | XPN | Field Not Used |
| 7 | Date/Time of Birth | 19 | R | 00110 | TS | <u>YYYYMMDD</u> |
| 8 | Administrative Sex | 1 | R | 00111 | IS | F – Female M – Male U – Unknown |
| 9 | Patient Alias | 250 | O /Rep | 00112 | XPN | Not Used |

| | | | | | | |
|----|-----------------|-----|-------|-------|-----|--|
| 10 | Race | 250 | O/Rep | 00113 | CE | Not Used |
| 11 | Patient Address | 250 | O/Rep | 00114 | XAD | <p>Address 1 ~ Address 2 ~ Address 3</p> <p>Components: <u><street address (ST)></u> ^ <u><other designation (ST)></u> ^ <u><city (ST)></u> ^ <u><state or province (ST)></u> ^ <u><zip or postal code (ST)></u> ^ <u><country (ID)></u> ^ <u><address type (ID)></u> ^ <other geographic designation (ST)> ^ <county/parish code (IS)> ^ <census tract (IS)> ^ <address representation code (ID)> ^ <address validity range (DR)></p> <p>Note: If any address field values are provided, then all underlined items above must be included.</p> <p><u><state or province (ST)></u> - This field only applies for Canadian and US countries. The only accepted values for State or Province are contained in TABLE A (Please see below). For any values not found in TABLE A, this field is to remain empty and treated as <blank></p> <p>(Note: HL7 does not define provincial abbreviations. Values based on OHISC (ISO 3166-2) standards)</p> <p><u><zip or postal code (ST)></u> -</p> <p>Accepted values:</p> <p>For Canada (CAN) – format A9A9A9 (no spaces)</p> <p>For United States (USA) – format 99999 or 99999-9999</p> <p><Blank> - For any values not Canada or the United States, this field is to remain empty.</p> <p><u><country (ID)></u> - The only accepted values for country are contained in TABLE B (Please see below). For any values not found in TABLE B, this field is to remain empty and treated as <blank></p> <p>(Note: Values based on ISO 3166-1 Alpha-3)</p> <p><u><Address type></u> - type codes are defined by HL7 Table 0190 - Address type. Note: Address Type is mandatory</p> <p>H – Home (Primary);</p> <p>M – Mailing;</p> <p>C – Current or Temporary;</p> |

| | | | | | | |
|----|---------------------|----|-------|-------|-----|---|
| | | | | | | <p>Maximum Field Lengths supported in EMPI database:</p> <p><street address (ST)> (Address Line 1) – 75 char</p> <p><other designation (ST)> (Address Line 2) – 75 char</p> <p><city (ST)> (City) – 30 char</p> <p><state or province (ST)> (Province) – 15 char</p> <p><zip or postal code (ST)> - 10 char</p> <p><country (ID)> - 3 Char</p> <p><i>Note: Data will be processed in sequence, only as data is present in the repeating fields. For instance, for “Address1 ~ Address2 ~ Address3”, if Address2 is blank, Address3 will not be processed.</i></p> |
| 12 | County Code | 4 | O | 00115 | IS | Not Used. |
| 13 | Phone Number - Home | 50 | O/Rep | 00116 | XTN | <p>Telephone 1 ~ Telephone 2 ~ Telephone 3</p> <p><u><Telephone Number (ST)></u> ^ <u><Telecommunication Use Code></u> ^ <Telecommunication Equipment type (ID)> ^ <e-mail address (ST)> ^ <country code (NM)> ^ <u><area/city code (NM)></u> ^ <Local number (NM)> ^ <extension (NM)> ^ <any text (ST)> ^ <Extension Prefix (ST)> ^ <Speed Dial Code (ST)> ^ <Unformatted Telephone number (ST)></p> <p>Note: If any phone number field values are provided, then all underlined items above must be included.</p> <p>Telecommunication Use Code values are: (Note: these codes are required even if only one telephone number is sent.)</p> <p>PRN – Primary Residence Number</p> <p>EMR – Emergency Number</p> <p>ORN – Other Residence Number (Including Cellular/Mobile Number)</p> <p>Format: Numeric values only. Do not include brackets ‘()’, spaces or dash ‘-’ separators.</p> <p>Maximum Field Lengths:</p> <p><Telecommunication Use Code> – 3 char</p> |

| | | | | | | |
|----|-------------------------|----|-------|-------|-----|---|
| | | | | | | <p><area/city code (NM)> – 5 char <Telephone Number (ST)> – 20 char For example: Primary Residence Number: (444) 555-6666 Emergency Number: (777) 888-9999 Mobile Number: (111) 222-3333 <u>5556666^PRN^^^^444^^~</u> <u>8889999^EMR^^^^777^^~</u> <u>2223333^ORN^^^^111^^</u></p> <p><i>Note: If system cannot support the separation of area code and local number or cannot support the exclusion of text values, place the entire Phone Record in the <Telephone Number (ST)> field. (max field length: 20)</i></p> <p>For example: Primary Residence Number: (444) 555-6666 Emergency Number: (777) 888-9999 Mobile Number: (111) 222-3333 <u>(444)555-6666^PRN^^^^^^~</u> <u>(777)888-9999^EMR^^^^^^~</u> <u>(111)222-3333^ORN^^^^^^</u></p> <p><i>Note: Data will be processed in sequence, only as data is present in the repeating fields. For instance, for “Telephone1 ~ Telephone2 ~ Telephone3”, if Telephone2 is blank, Telephone3 will not be processed.</i></p> |
| 14 | Phone Number - Business | 50 | O/Rep | 00117 | XTN | <p><u><Telephone Number (ST)></u> ^ <u><Telecommunication Use Code></u> ^ <Telecommunication Equipment type (ID)> ^ <e-mail address (ST)> ^ <country code (NM)> ^ <u><area/city code (NM)></u> ^ <Local number (NM)> ^ <u><extension (NM)></u> ^ <any text (ST)> ^ <Extension Prefix (ST) > ^ <Speed Dial Code (ST)> ^ <Unformatted Telephone number (ST)></p> <p>Note: If any phone number field values are provided, then all underlined items above must be included.</p> |

| | | | | | | |
|----|--------------------------------|-----|-------|-------|-----|--|
| | | | | | | <p>Telecommunication Use Code values are:</p> <p>WPN – Work Number (Required value)</p> <p>Format: Numeric values only. Do not include brackets ‘()’, spaces or dash ‘-‘ separators. Extension Number is optional, but must include number value only (i.e., do not include ‘Ext’ or ‘x’)</p> <p>Maximum Field Lengths:</p> <p><Telecommunication Use Code> – 3 char</p> <p><area/city code (NM)> – 5 char</p> <p><Telephone Number (ST)> – 20 char</p> <p><extension (NM)> - 6 char</p> <p>For example:</p> <p><u>5556666^WPN^^^^444^^333</u></p> <p><i>Note: If system cannot support the separation of area code and local number or cannot support the exclusion of text values, place the entire Phone Record in the <Telephone Number (ST)> field. (max field length: 20)</i></p> <p>For example:</p> <p><u>(444)555-6666 Ext.333^WPN^^^^^^</u></p> |
| 15 | Primary Language | 250 | O | 00118 | CE | Not Used. |
| 16 | Marital Status | 250 | O | 00119 | CE | Not Used |
| 17 | Religion | 250 | O | 00120 | CE | Not Used |
| 18 | Patient Account Number | 250 | O | 00121 | CX | Not Used |
| 19 | SSN Number - Patient | 16 | O | 00122 | ST | Not Used |
| 20 | Driver's License Num - Patient | 25 | O | 00123 | DLN | Not Used |
| 21 | Mother's Identifier | 250 | O/Rep | 00124 | CX | Not Used |
| 22 | Ethnic Group | 250 | O/Rep | 00125 | CE | Not Used |

| | | | | | | |
|----|-----------------------------|-----|------------|-------|----|--|
| 23 | Birth Place | 250 | O | 00126 | ST | Not Used |
| 24 | Multiple Birth Indicator | 1 | O | 00127 | ID | Not Used |
| 25 | Birth Order | 2 | O | 00128 | NM | Not Used |
| 26 | Citizenship | 250 | O/Rep | 00129 | CE | Not Used |
| 27 | Veterans Military Status | 250 | O | 00130 | CE | Not Used |
| 28 | Nationality | 250 | O | 00739 | CE | Not Used |
| 29 | Patient Death Date and Time | 19 | O | 00740 | TS | YYYYMMDD |
| 30 | Patient Death Indicator | 1 | O | 00741 | ID | N – the patient is not deceased Y – the patient is deceased |
| 31 | Identity Unknown Indicator | 1 | O | 01535 | ID | Not Used |
| 32 | Identity Reliability Code | 20 | O/Rep | 01536 | IS | Not Used |
| 33 | Last Update Date/Time | 19 | O | 01537 | TS | YYYYMMDD |
| 34 | Last Update Facility | 241 | O | 01538 | HD | Not Used |
| 35 | Species Code | 250 | O | 01539 | CE | Not Used |
| 36 | Breed Code | 250 | O | 01540 | CE | Not Used |
| 37 | Strain | 80 | O | 01541 | ST | Not Used |
| 38 | Production Class Code | 250 | O/Rep 2 | 01542 | CE | Not Used |

2.4 PD1 (Patient Additional Demographic Segment)

| Seq # | HL7 Name | Max Length | R/O/Rep | Item # | Date Type | Field Notes |
|-------|--------------------------|------------|---------|--------|-----------|---|
| 0 | Segment Name | | R | | | PD1 |
| 1 | Living Dependency | 2 | O | 00755 | IS | Not Used |
| 2 | Living Arrangement | 2 | O | 00742 | IS | Not Used |
| 3 | Patient Primary Facility | 250 | O | 00756 | XON | Not Used |
| 4 | Patient Primary Care | 250 | O | 00757 | XCN | Not Used |
| 5 | Student Indicator | 2 | O | 00745 | IS | Not Used |
| 6 | Handicap | 2 | O | 00753 | IS | Not Used |
| 7 | Living Will | 2 | O | 00759 | IS | Not Used |
| 8 | Organ Donor | 2 | O | 00760 | IS | Not Used |
| 9 | Separate Bill | 2 | O | 00761 | ID | Not Used |
| 10 | Duplicate Patient | 250 | O | 00762 | CX | Not Used |
| 11 | Publicity Indicator | 250 | O | 00743 | CE | Not Used |
| 12 | Protection Indicator | 1 | O | 00744 | ID | <p>This field acts similarly or the same as the Confidentiality Flag.</p> <p>Y – protect access to information N – normal access</p> <p>Definition: This field identifies the patient’s protection that determines, in turn, whether access to information about this person should be kept from users who do not have adequate authority for the patient.</p> <p>Note: If system does not support a Confidentiality Flag, then this field is to remain empty. To be treated as <blank></p> |

2.5 NK1 (Next of Kin / Associated Parties Segment)

| Seq# | HL7 Name | Max Length | OPT | ITEM# | DT | Field Notes |
|------|---|------------|-------|-------|-----|---|
| 0 | Segment Name | | | | | NK1 |
| 1 | Set ID - NK1 | 4 | R | 00190 | SI | |
| 2 | Name | 250 | O/Rep | 00191 | XPN | <p><family name (FN)> ^ <given name (ST)> ^ <second and further given names or initials thereof (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (IS)> ^ <name type code (ID) > ^ <name representation code (ID)> ^ <name context (CE)> ^ <name validity range (DR)> ^ <name assembly order (ID)></p> <p>The field lengths available in EMPI database are:</p> <ol style="list-style-type: none"> 1. Family Name – 75 char 2. Given Name – 30 char 3. Second or Further given name (Middle) Name – 30 char 4. Prefix – 10 char |
| 3 | Relationship | 250 | O | 00192 | CE | Not Used |
| 4 | Address | 250 | O/Rep | 00193 | XAD | Not Used |
| 5 | Phone Number | 250 | O/Rep | 00194 | XTN | Not Used |
| 6 | Business Phone Number | 250 | O/Rep | 00195 | XTN | Not Used |
| 7 | Contact Role | 250 | O | 00196 | CE | Not Used |
| 8 | Start Date | 8 | O | 00197 | DT | Not Used |
| 9 | End Date | 8 | O | 00198 | DT | Not Used |
| 10 | Next of Kin / Associated Parties Job Title | 60 | O | 00199 | ST | Not Used |
| 11 | Next of Kin / Associated Parties Job Code/Class | 20 | O | 00200 | JCC | Not Used |

| Seq# | HL7 Name | Max Length | OPT | ITEM# | DT | Field Notes |
|------|--|------------|-------|-------|-----|-------------|
| 12 | Next of Kin / Associated Parties Employee Number | 250 | O | 00201 | CX | Not Used |
| 13 | Organization Name - NK1 | 250 | O/Rep | 00202 | XON | Not Used |
| 14 | Marital Status | 250 | O | 00119 | CE | Not Used |
| 15 | Administrative Sex | 1 | O | 00111 | IS | Not Used |
| 16 | Date/Time of Birth | 26 | O | 00110 | TS | Not Used |
| 17 | Living Dependency | 2 | O/Rep | 00755 | IS | Not Used |
| 18 | Ambulatory Status | 2 | O/Rep | 00145 | IS | Not Used |
| 19 | Citizenship | 250 | O/Rep | 00129 | CE | Not Used |
| 20 | Primary Language | 250 | O | 00118 | CE | Not Used |
| 21 | Living Arrangement | 2 | O | 00742 | IS | Not Used |
| 22 | Publicity Code | 250 | O | 00743 | CE | Not Used |
| 23 | Protection Indicator | 1 | O | 00744 | ID | Not Used |
| 24 | Student Indicator | 2 | O | 00745 | IS | Not Used |
| 25 | Religion | 250 | O | 00120 | CE | Not Used |
| 26 | Mother's Maiden Name | 250 | O/Rep | 00109 | XPN | Not Used |
| 27 | Nationality | 250 | O | 00739 | CE | Not Used |
| 28 | Ethnic Group | 250 | O/Rep | 00125 | CE | Not Used |
| 29 | Contact Reason | 250 | O/Rep | 00747 | CE | Not Used |
| 30 | Contact Person's Name | 250 | O/Rep | 00748 | XPN | Not Used |
| 31 | Contact Person's Telephone Number | 250 | O/Rep | 00749 | XTN | Not Used |

| Seq# | HL7 Name | Max Length | OPT | ITEM# | DT | Field Notes |
|------|--|------------|-------|-------|-----|-------------|
| 32 | Contact Person's Address | 250 | O/Rep | 00750 | XAD | Not Used |
| 33 | Next of Kin/Associated Party's Identifiers | 250 | O/Rep | 00751 | CX | Not Used |
| 34 | Job Status | 2 | O | 00752 | IS | Not Used |
| 35 | Race | 250 | O/Rep | 00113 | CE | Not Used |
| 36 | Handicap | 2 | O | 00753 | IS | Not Used |
| 37 | Contact Person Social Security Number | 16 | O | 00754 | ST | Not Used |

2.6 PV1 (Patient Visit)

This segment is a mandatory segment according to HL7 v2.4. However, the EMPI does not capture patient visit information. Therefore any data contained in this segment will be ignored and not processed.

2.7 MRG (Merge Patient Information Segment)

| Seq # | HL7 Name | LEN | OPT | ITEM# | DT | Field Notes |
|-------|-------------------------------|-----|-----|-------|-----|--|
| 0 | Segment Name | | | | | MRG |
| 1 | Prior Patient Identifier List | 250 | R | 00211 | CX | <p>Prior Patient Identifier List (CX)</p> <p>Components: <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ < assigning authority (HD)> ^ <identifier type code (ID)> ^ < assigning facility (HD) ^ <effective date (DT)> ^ <expiration date (DT)></p> <p>Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)></p> <p>Subcomponents of assigning facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)></p> <p>Note: The same Primary Patient Identifier (Primary ID) identified in PID-3 must be used in this field. (first identifier in the PID-3 sequence) For instance if the Primary ID is defined to be MRN, then an example of this field would be: 123456^^^4107^PI</p> |
| 2 | Prior Alternate Patient ID | 250 | O | 00212 | CX | Not Used |
| 3 | Prior Patient Account Number | 250 | O | 00213 | CX | Not Used |
| 4 | Prior Patient ID | 250 | O | 00214 | CX | Not Used |
| 5 | Prior Visit Number | 250 | O | 01279 | CX | Not Used |
| 6 | Prior Alternate Visit ID | 250 | O | 01280 | CX | Not Used |
| 7 | Prior Patient Name | 250 | O | 01281 | XPN | Not Used |

2.8 MSA (Message Acknowledgment Segment)

| Seq # | HL7 Name | LEN | OPT | ITEM# | DT | Field Notes |
|-------|-----------------------------|-----|-----|-------|----|---|
| 1 | Acknowledgement Code | 2 | R | 00018 | ID | AA Original mode: Application Accept - Enhanced mode: Application acknowledgment: Accept AE Original mode: Application Error - Enhanced mode: Application acknowledgment: Error AR Original mode: Application Reject - Enhanced mode: Application acknowledgment: Reject |
| 2 | Message Control ID | 20 | R | 00010 | ST | |
| 3 | Text Message | 80 | O | 00020 | ST | |
| 4 | Expected Sequence Number | 15 | O | 00021 | NM | |
| 5 | Delayed Acknowledgment Type | | O | 00022 | | |
| 6 | Error Condition | 250 | O | 00023 | CE | Components: <identifier (ST)> ^ <text (ST)> ^ <name of coding system (IS)> ^ <alternate identifier (ST)> ^ <alternate text (ST)> ^ <name of alternate coding system (IS)> |

TABLE A – Acceptable State and Province Values (For PID-11 <state or province ST>)

| Value | State / Province |
|--------------|---------------------------|
| CA-AB | Alberta |
| CA-BC | British Columbia |
| CA-MB | Manitoba |
| CA-NB | New Brunswick |
| CA-NL | Newfoundland and Labrador |
| CA-NS | Nova Scotia |
| CA-NT | Northwest Territories |
| CA-NU | Nunavut |
| CA-ON | Ontario |
| CA-PE | Prince Edward Island |
| CA-QC | Quebec |
| CA-SK | Saskatchewan |
| CA-YT | Yukon Territories |
| US-AK | Alaska |
| US-AL | Alabama |
| US-AR | Arkansas |
| US-AZ | Arizona |
| US-CA | California |
| US-CO | Colorado |
| US-CT | Connecticut |
| US-CZ | Canal Zone |
| US-DC | District Of Columbia |
| US-DE | Delaware |
| US-FL | Florida |
| US-GA | Georgia |
| US-GU | Guam |
| US-HI | Hawaii |
| US-IA | Iowa |
| US-ID | Idaho |
| US-IL | Illinois |
| US-IN | Indiana |
| US-KS | Kansas |
| US-KY | Kentucky |
| US-LA | Louisiana |
| US-MA | Massachusetts |
| US-MD | Maryland |

| Value | State / Province |
|---------|--------------------------------|
| US-ME | Maine |
| US-MI | Michigan |
| US-MN | Minnesota |
| US-MO | Missouri |
| US-MS | Mississippi |
| US-MT | Montana |
| US-NC | North Carolina |
| US-ND | North Dakota |
| US-NE | Nebraska |
| US-NH | New Hampshire |
| US-NJ | New Jersey |
| US-NM | New Mexico |
| US-NV | Nevada |
| US-NY | New York |
| US-OH | Ohio |
| US-OK | Oklahoma |
| US-OR | Oregon |
| US-PA | Pennsylvania |
| US-PR | Puerto Rico |
| US-RI | Rhode Island |
| US-SC | South Carolina |
| US-SD | South Dakota |
| US-TN | Tennessee |
| US-TX | Texas |
| US-UT | Utah |
| US-VA | Virginia |
| US-VI | Virgin Islands |
| US-VT | Vermont |
| US-WA | Washington |
| US-WI | Wisconsin |
| US-WV | West Virginia |
| US-WY | Wyoming |
| <blank> | For any values not found above |

TABLE B – Acceptable Country Values (For PID-11 <country (ID)>)

| Value | Country |
|-------|--------------------------------|
| AFG | AFGHANISTAN |
| ALA | ÅLAND ISLANDS |
| ALB | ALBANIA |
| DZA | ALGERIA |
| ASM | AMERICAN SAMOA |
| AND | ANDORRA |
| AGO | ANGOLA |
| AIA | ANGUILLA |
| ATA | ANTARCTICA |
| ATG | ANTIGUA AND BARBUDA |
| ARG | ARGENTINA |
| ARM | ARMENIA |
| ABW | ARUBA |
| AUS | AUSTRALIA |
| AUT | AUSTRIA |
| AZE | AZERBAIJAN |
| BHS | BAHAMAS |
| BHR | BAHRAIN |
| BGD | BANGLADESH |
| BRB | BARBADOS |
| BLR | BELARUS |
| BEL | BELGIUM |
| BLZ | BELIZE |
| BEN | BENIN |
| BMU | BERMUDA |
| BTN | BHUTAN |
| BOL | BOLIVIA |
| BIH | BOSNIA AND HERZEGOVINA |
| BWA | BOTSWANA |
| BVT | BOUVET ISLAND |
| BRA | BRAZIL |
| IOT | BRITISH INDIAN OCEAN TERRITORY |
| BRN | BRUNEI DARUSSALAM |
| BGR | BULGARIA |
| BFA | BURKINA FASO |

| Value | Country |
|-------|---------------------------------------|
| BDI | BURUNDI |
| KHM | CAMBODIA |
| CMR | CAMEROON |
| CAN | CANADA |
| CPV | CAPE VERDE |
| CYM | CAYMAN ISLANDS |
| CAF | CENTRAL AFRICAN REPUBLIC |
| TCD | CHAD |
| CHL | CHILE |
| CHN | CHINA |
| CXR | CHRISTMAS ISLAND |
| CCK | COCOS (KEELING) ISLANDS |
| COL | COLOMBIA |
| COM | COMOROS |
| COG | CONGO |
| COD | CONGO, THE DEMOCRATIC REPUBLIC OF THE |
| COK | COOK ISLANDS |
| CRI | COSTA RICA |
| CIV | CÔTE D'IVOIRE |
| HRV | CROATIA |
| CUB | CUBA |
| CYP | CYPRUS |
| CZE | CZECH REPUBLIC |
| DNK | DENMARK |
| DJI | DJIBOUTI |
| DMA | DOMINICA |
| DOM | DOMINICAN REPUBLIC |
| ECU | ECUADOR |
| EGY | EGYPT |
| SLV | EL SALVADOR |
| GNQ | EQUATORIAL GUINEA |
| ERI | ERITREA |
| EST | ESTONIA |
| ETH | ETHIOPIA |
| FLK | FALKLAND ISLANDS (MALVINAS) |
| FRO | FAROE ISLANDS |
| FJI | FIJI |

| Value | Country |
|-------|-----------------------------------|
| FIN | FINLAND |
| FRA | FRANCE |
| GUF | FRENCH GUIANA |
| PYF | FRENCH POLYNESIA |
| ATF | FRENCH SOUTHERN TERRITORIES |
| GAB | GABON |
| GMB | GAMBIA |
| GEO | GEORGIA |
| DEU | GERMANY |
| GHA | GHANA |
| GIB | GIBRALTAR |
| GRC | GREECE |
| GRL | GREENLAND |
| GRD | GRENADA |
| GLP | GUADELOUPE |
| GUM | GUAM |
| GTM | GUATEMALA |
| GGY | GUERNSEY |
| GIN | GUINEA |
| GNB | GUINEA-BISSAU |
| GUY | GUYANA |
| HTI | HAITI |
| HMD | HEARD ISLAND AND MCDONALD ISLANDS |
| VAT | HOLY SEE (VATICAN CITY STATE) |
| HND | HONDURAS |
| HKG | HONG KONG |
| HUN | HUNGARY |
| ISL | ICELAND |
| IND | INDIA |
| IDN | INDONESIA |
| IRN | IRAN, ISLAMIC REPUBLIC OF |
| IRQ | IRAQ |
| IRL | IRELAND |
| IMN | ISLE OF MAN |
| ISR | ISRAEL |
| ITA | ITALY |
| JAM | JAMAICA |

| Value | Country |
|-------|--|
| JPN | JAPAN |
| JEY | JERSEY |
| JOR | JORDAN |
| KAZ | KAZAKHSTAN |
| KEN | KENYA |
| KIR | KIRIBATI |
| PRK | KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF |
| KOR | KOREA, REPUBLIC OF |
| KWT | KUWAIT |
| KGZ | KYRGYZSTAN |
| LAO | LAO PEOPLE'S DEMOCRATIC REPUBLIC |
| LVA | LATVIA |
| LBN | LEBANON |
| LSO | LESOTHO |
| LBR | LIBERIA |
| LBY | LIBYAN ARAB JAMAHIRIYA |
| LIE | LIECHTENSTEIN |
| LTU | LITHUANIA |
| LUX | LUXEMBOURG |
| MAC | MACAO |
| MKD | MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF |
| MDG | MADAGASCAR |
| MWI | MALAWI |
| MYS | MALAYSIA |
| MDV | MALDIVES |
| MLI | MALI |
| MLT | MALTA |
| MHL | MARSHALL ISLANDS |
| MTQ | MARTINIQUE |
| MRT | MAURITANIA |
| MUS | MAURITIUS |
| MYT | MAYOTTE |
| MEX | MEXICO |
| FSM | MICRONESIA, FEDERATED STATES OF |
| MDA | MOLDOVA, REPUBLIC OF |
| MCO | MONACO |
| MNG | MONGOLIA |

| Value | Country |
|-------|---------------------------------|
| MNE | MONTENEGRO |
| MSR | MONTSERRAT |
| MAR | MOROCCO |
| MOZ | MOZAMBIQUE |
| MMR | MYANMAR |
| NAM | NAMIBIA |
| NRU | NAURU |
| NPL | NEPAL |
| NLD | NETHERLANDS |
| ANT | NETHERLANDS ANTILLES |
| NCL | NEW CALEDONIA |
| NZL | NEW ZEALAND |
| NIC | NICARAGUA |
| NER | NIGER |
| NGA | NIGERIA |
| NIU | NIUE |
| NFK | NORFOLK ISLAND |
| MNP | NORTHERN MARIANA ISLANDS |
| NOR | NORWAY |
| OMN | OMAN |
| PAK | PAKISTAN |
| PLW | PALAU |
| PSE | PALESTINIAN TERRITORY, OCCUPIED |
| PAN | PANAMA |
| PNG | PAPUA NEW GUINEA |
| PRY | PARAGUAY |
| PER | PERU |
| PHL | PHILIPPINES |
| PCN | PITCAIRN |
| POL | POLAND |
| PRT | PORTUGAL |
| PRI | PUERTO RICO |
| QAT | QATAR |
| REU | RÉUNION |
| ROU | ROMANIA |
| RUS | RUSSIAN FEDERATION |
| RWA | RWANDA |

| Value | Country |
|-------|--|
| SHN | SAINT HELENA |
| KNA | SAINT KITTS AND NEVIS |
| LCA | SAINT LUCIA |
| SPM | SAINT PIERRE AND MIQUELON |
| VCT | SAINT VINCENT AND THE GRENADINES |
| WSM | SAMOA |
| SMR | SAN MARINO |
| STP | SAO TOME AND PRINCIPE |
| SAU | SAUDI ARABIA |
| SEN | SENEGAL |
| SRB | SERBIA |
| SYC | SEYCHELLES |
| SLE | SIERRA LEONE |
| SGP | SINGAPORE |
| SVK | SLOVAKIA |
| SVN | SLOVENIA |
| SLB | SOLOMON ISLANDS |
| SOM | SOMALIA |
| ZAF | SOUTH AFRICA |
| SGS | SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS |
| ESP | SPAIN |
| LKA | SRI LANKA |
| SDN | SUDAN |
| SUR | SURINAME |
| SJM | SVALBARD AND JAN MAYEN |
| SWZ | SWAZILAND |
| SWE | SWEDEN |
| CHE | SWITZERLAND |
| SYR | SYRIAN ARAB REPUBLIC |
| TWN | TAIWAN, PROVINCE OF CHINA |
| TJK | TAJIKISTAN |
| TZA | TANZANIA, UNITED REPUBLIC OF |
| THA | THAILAND |
| TLS | TIMOR-LESTE |
| TGO | TOGO |
| TKL | TOKELAU |
| TON | TONGA |

| Value | Country |
|---------|--------------------------------------|
| TTO | TRINIDAD AND TOBAGO |
| TUN | TUNISIA |
| TUR | TURKEY |
| TKM | TURKMENISTAN |
| TCA | TURKS AND CAICOS ISLANDS |
| TUV | TUVALU |
| UGA | UGANDA |
| UKR | UKRAINE |
| ARE | UNITED ARAB EMIRATES |
| GBR | UNITED KINGDOM |
| USA | UNITED STATES |
| UMI | UNITED STATES MINOR OUTLYING ISLANDS |
| URY | URUGUAY |
| UZB | UZBEKISTAN |
| VUT | VANUATU |
| VEN | VENEZUELA |
| VNM | VIET NAM |
| VGB | VIRGIN ISLANDS, BRITISH |
| VIR | VIRGIN ISLANDS, U.S. |
| WLF | WALLIS AND FUTUNA |
| ESH | WESTERN SAHARA |
| YEM | YEMEN |
| ZMB | ZAMBIA |
| ZWE | ZIMBABWE |
| <blank> | For any values not found above |

Additional Notes

Revision Notes

| Name of Reviser | Date of Revision | Revision Description |
|-----------------|------------------|--|
| Andrew Asa | Nov 30 2006 | <p><u>Note:</u> For all pervious Revision Notes, please refer to the Ontario Enterprise Master Patient Index (EMPI) Passive Integration - HL7 Specification Guide May 26 2006 ver 7.1.</p> <ol style="list-style-type: none"> 1. Updated notes for Patient Identifier, PID-3, Section 3 - Health Card Number. Added Clarification statement regarding Health Card Version Code. (Note: Data requirements remain unchanged from ver 7.1) 2. Updated notes for Patient Identifier, PID-11 <state and province (ST)>. Reference to TABLE A for acceptable state and province values. (Note: Data requirements remain unchanged from ver 7.1) (Note: applies to all repeating address fields) 3. Added: TABLE A – Acceptable State and Province Values (For PID-11 <state or province ST>) 4. Updated specific data structure for Patient Identifier, PID-11 <country (ID)> Reference to TABLE B for acceptable country values. (Note: applies to all repeating address fields) 5. Added: TABLE B – Acceptable Country Values (For PID-11 <country (ID)>) |
| | | |