**Integrating the Healthcare Enterprise**



**IHE IT Infrastructure(ITI)**

**Technical Framework**

**Volume 4**

**IHE ITI TF-4**

**National Extensions**

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*<Authors’ instructions:*

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Use of capitalization: Please follow standard English grammar rules – only proper nouns and names are upper case. For example, “Modality Actor” is upper case, but “an actor which fulfills the role of a modality” is lower case. Do not use upper case to emphasize a word/topic.>

# Introduction

This document, Volume 4, of the IHE IT Infrastructure (ITI) Technical Framework describes the country-based extensions to ITI transactions and content modules.

## Introduction to IHE

Integrating the Healthcare Enterprise (IHE) is an international initiative to promote the use of standards to achieve interoperability among health information technology (HIT) systems and effective use of electronic health records (EHRs). IHE provides a forum for care providers, HIT experts and other stakeholders in several clinical and operational domains to reach consensus on standards-based solutions to critical interoperability issues.

The primary output of IHE is system implementation guides, called IHE profiles. IHE publishes each profile through a well-defined process of public review and Trial Implementation and gathers profiles that have reached Final Text status into an IHE Technical Framework, of which this volume is a part.

For more general information regarding IHE, refer to [www.ihe.net](http://www.ihe.net). It is strongly recommended that, prior to reading this volume, the reader familiarizes themselves with the concepts defined in the *IHE Technical Frameworks General Introduction* <insert GI link>.

## Intended Audience

The intended audience of IHE Technical Frameworks Volume 4 is:

* Those interested in integrating healthcare information systems and workflows on an international or country basis
* IT departments of healthcare institutions
* Technical staff of vendors participating in the IHE initiative
* Experts involved in standards development

## Overview of Volume 4

This volume contains information about the scope of national extensions to the transactions and/or content modules defined in the IHE IT Infrastructure (ITI) Technical Framework. Section 2 describes the permitted scope of national extensions and the process by which national IHE initiatives can propose such extensions for approval by the IHE Technical Committee and documentation in the IHE Technical Framework. Section 3 and beyond describe the national extensions, per country, which have been defined. Examples include specific transaction or content changes for IHE Canada, IHE Germany, IHE Japan, etc.

## Comment Process

IHE International welcomes comments on this document and the IHE initiative. They can be submitted by sending an email to the co-chairs and secretary of the IT Infrastructure domain committees at iti@ihe.net.

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## History of Document Changes

This section provides a brief summary of changes and additions to this document.

*<The author/technical committee will complete the Change Summary column each time that the document is re-published as final text. The IHE Publication Specialist will complete the Date and Document Revision columns.>*

|  |  |  |
| --- | --- | --- |
| Date | Document Revision | Change Summary |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Overview of National Extensions to the Technical Framework

The goal of IHE is to promote implementation of standards-based solutions to improve workflow and access to information in support of optimal patient care. To that end, IHE encourages the development of IHE National Deployment Committees to address issues specific to local health systems, policies and traditions of care. The role of these organizations and information about how they are formed is available at <http://www.ihe.net/Governance/#National_Deployment>.

## Scope of National Extensions

National extensions to the IHE Technical Framework are allowed in order to address specific local healthcare needs and promote the implementation of the IHE Technical Frameworks. They may add (though not relax) requirements that apply to the Technical Framework generally or to specific transactions, actors and integration profiles. Some examples of appropriate national extensions are:

* Require support of character sets and national languages
* Provide translation of IHE concepts or data fields from English into other national languages
* Extensions of patient or provider information to reflect policies regarding privacy and confidentiality
* Changes to institutional information and financial transactions to conform to national health system payment structures and support specific local care practices

All national extensions shall include concise descriptions of the local need they are intended to address. They shall identify the precise transactions, actors, integration profiles and sections of the Technical Framework to which they apply. And they must provide technical detail equivalent to that contained in the Technical Framework in describing the nature of the extension.

## Process for Developing National Extensions

National extension documents are to be developed, approved and incorporated in the Technical Framework in coordination with the IHE Technical Committee and its annual cycle of activities in publishing and maintaining the Technical Framework. The first prerequisite for developing a national extension document is to establish a national IHE initiative and make information regarding its composition and activities available to other IHE initiatives.

Established IHE national initiatives may draft a document describing potential national extensions containing the general information outlined above. This draft document is submitted to the IHE Technical Committee for review and comment. Based on discussion with the Technical Committee, they prepare and submit finalized version of the document in appropriate format for incorporation into the Technical Framework. The publication of National Extensions is to be coordinated with the annual publication cycle of other Technical Framework documents in the relevant domain.

## Process for Proposing Revisions to the Technical Framework

In addition to developing national extension documents to be incorporated in the Technical Framework, national IHE initiatives may also propose revisions to the global Technical Framework. These may take the form of changes to existing transactions, actors or integration profiles or the addition of new ones. Such general changes would be subject to approval by the IHE Technical and Planning Committees.

National extensions that are minor in scope, such as suggestions for clarifications or corrections to documentation, may be submitted throughout the year via the ongoing errata tracking process, called the [Change Proposal Process](http://wiki.ihe.net/index.php?title=Change_Proposal_Process).

More substantial revision proposals, such as proposals to add new integration profiles or major country-based extensions, should be submitted directly to the IHE Technical and Planning Committees via the process for submitting new proposals called the [Profile Proposal Process.](http://wiki.ihe.net/index.php?title=Profile_Proposal_Process)

# National Extensions for IHE United States

<This section should be repeated for each set of additional extensions. Add 3rd order sub-paragraphs as necessary. Instructions may be given in both English and the native language.>

The national extensions documented in this section shall be used in conjunction with the definitions of integration profiles, actors and transactions provided in Volumes 1 through 3 of the IHE ITI Technical Framework. This section includes extensions and restrictions to effectively support the regional practice of healthcare in United States.

This ITI national extension document was authored under the sponsorship and supervision of Patient Care Coordination Committee and the IHE USA initiative.

<name, organization, title, email address>

## IHE United States Scope of Changes

The extensions, restrictions and extensions specified apply to the following IHE ITI Integration profiles:

* ITI: Patient Administration Module
* ITI: Patient Demographics Query

<See Supplement Template for structure of rest of sections>

HL7 v2.5.1 events and segments used by the PAM Profile are detailed in the IHE ITI Technical Framework which will be referred to as ITI TF-2 in the remainder of this section.

This section describes constraints on HL7 v2.5 events and segments used for the AHIMA Patient Registration use case. Some of these constraints apply to all HL7 transactions. Others only affect the ITI-30 and ITI-31 transactions.

The document narrows or specifies the use of events and segments mentioned in ITI TF-2. It also specifies the use of HL7 v2.5.1 events and segments that are not detailed in ITI TF-2.

Each segment is displayed as a table which rows are the items and which “Usage” and “Card.” Columns respectively specify the use of the item and its cardinalities for the AHIMA patient registration use case environment.

The “Usage” column follows the common codification to HL7 and IHE:

* R Required. The item must be provided for the AHIMA patient registration use case environment
* RE Must be provided if the sending application owns the information. The sending application must be able to supply that item.
* Optional: This extension doesn’t impose any restriction on that item which may or may not be managed by sending and receiving applications.
* C Conditional. The condition for using the item is specified below the table.
* X Forbidden for this extension.

The “Card.” column includes the bracketed highest and lowest cardinalities.

Some of the items are detailed below the data type table with value sets for some of those items. These lists (restricted, extended or even edited as compared with the original ones established by HL7) include values that are permitted with this extension. None of these lists can be edited without having to update the present document.

### Requirements on all HL7 V2.x transactions

#### Patient Identification segment

Standard Reference: HL7 Version 2.5.1, Chapter 3 (Section 3.4.2)

The PID segment is used by all applications as the primary means of communicating patient identification information. This segment contains permanent patient identifying and demographic information that, for the most part, is not likely to change frequently.

**Table 1: PID - Patient Identification segment**

| **SEQ** | **LEN** | **DT** | **Usage** | **Card.** | **RP/#** | **TBL#** | **ITEM#** | **ELEMENT NAME** | **Notes** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 4 | SI | O | [0..1] |  |  | 00104 | Set ID – PID |  |
| 2 | 20 | CX | B | [0..0] |  |  | 00105 | Patient ID |  |
| 3 | 250 | CX | R | [1..\*] | Y |  | 00106 | Patient Identifier List | See Note 1: |
| 4 | 20 | CX | B | [0..0] | Y |  | 00107 | Alternate Patient ID – PID |  |
| 5 | 250 | XPN | R | [1..\*] | Y |  | 00108 | Patient Name | See Note 2 |
| 6 | 250 | XPN | O | [0..1] | Y |  | 00109 | Mother’s Maiden Name | See Note 3 |
| 7 | 26 | TS | R | [1..1] |  |  | 00110 | Date/Time of Birth | See Note 4 |
| 8 | 1 | IS | R | [1..1] |  | 0001 | 00111 | Administrative Sex | See Note 5 |
| 9 | 250 | XPN | B | [0..\*] | Y |  | 00112 | Patient Alias |  |
| 10 | 250 | CE | R | [1..\*] | Y | 0005 | 00113 | Race | See Note 6 |
| 11 | 250 | XAD | R | [1..\*] | Y |  | 00114 | Patient Address | See Note 7 |
| 12 | 4 | IS | B | [0..1] |  | 0289 | 00115 | County Code |  |
| 13 | 250 | XTN | RE | [0..\*] | Y |  | 00116 | Phone Number – Home | See Note 8 |
| 14 | 250 | XTN | RE | [0..\*] | Y |  | 00117 | Phone Number – Business | See Note 9 |
| 15 | 250 | CE | R | [1..1] |  | 0296 | 00118 | Primary Language | See Note 10 |
| 16 | 250 | CE | O | [0..1] |  | 0002 | 00119 | Marital Status |  |
| 17 | 250 | CE | O | [0..1] |  | 006 | 00120 | Religion |  |
| 18 | 250 | CX | O | [0..1] |  |  | 00121 | Patient Account Number | See Note 11 |
| 19 | 16 | ST | B | [0..1] |  |  | 00122 | SSN Number – Patient |  |
| 20 | 25 | DLN | B | [0..1] |  |  | 00123 | Driver’s License Number |  |
| 21 | 250 | CX | RE | [0..\*] | Y |  | 00124 | Mother’s Identifier | See Note 12 |
| 22 | 250 | CE | R | [1..\*] | Y | 0189 | 00125 | Ethnic Group | See Note 13 |
| 23 | 250 | ST | O | [0..1] |  |  | 00126 | Birth Place |  |
| 24 | 1 | ID | RE | [0..1] |  | 0136 | 00127 | Multiple Birth Indicator | See Note 14 |
| 25 | 2 | NM | RE | [0..1] |  |  | 00128 | Birth Order | See Note 15 |
| 26 | 250 | CE | O | [0..\*] | Y | 0171 | 00129 | Citizenship |  |
| 27 | 250 | CE | O | [0..1] |  | 0172 | 00130 | Veterans Military Status |  |
| 28 | 250 | CE | B | [0..0] |  | 0212 | 00730 | Nationality |  |
| 29 | 26 | TS | RE | [0..1] |  |  | 00740 | Patient Death Date and Time | See Note 16 |
| 30 | 1 | ID | RE | [0..1] |  | 0136 | 00741 | Patient Death Indicator | See Note 17 |
| 31 | 1 | ID | RE | [0..1] |  | 0136 | 01535 | Identity Unknown Indicator | See Note 18 |
| 32 | 20 | IS | O | [0..\*] | Y | 0445 | 01536 | Identity Reliability Code |  |
| 33 | 26 | TS | O | [0..1] |  |  | 01537 | Last Update Date/Time |  |
| 34 | 241 | HD | O | [0..1] |  |  | 01538 | Last Update Facility |  |
| 35 | 250 | CE | RE | [0..1] |  | 0446 | 01539 | Species Code |  |
| 36 | 250 | CE | RE | [0..1] |  | 0447 | 01540 | Breed Code |  |
| 37 | 80 | ST | O | [0..1] |  |  | 01541 | Strain |  |
| 38 | 250 | CE | O | [0..2] | 2 | 0429 | 01542 | Production Class Code |  |
| 39 | 250 | CWE | O | [0..\*] | Y | 0171 | 01840 | Tribal Citizenship |  |

In accordance with the HL7 Version 2.5.1 usage of this segment, fields PID-2 (Patient ID), PID-4 (Alternate Patient ID), PID-19 (SSN patient number) and PID-20 (Driver’s license number) are superseded by field PID-3; field PID-9 (Patient Alias) is superseded by field PID-5 (Patient Name); field PID-12 (County Code) is supported by county/parish component (PID-11 – Patient Address); field PID-28 (Nationality) is superseded by field PID-26 (Citizenship) as shown below.

**PID-3 – Patient Identifier List (CX)**, required. This field contains a list of identifiers (one or more) used by the healthcare facility to uniquely identify a patient.

Note 1: As shown in the constrained profile definition of data type CX in ITI TF-2x: Appendix N.1, subfields CX-1 “ID number”, CX-4 “Assigning authority” are required, and CX-5 “Identifier Type Code” is required if known for each identifier.

This field may be populated with various identifiers assigned to the patient by various assigning authorities.

The authorized values for subfield CX-5 “Identifier Type Code” are given in HL7 Table 0203 (HL7 Version 2.5.1, Chapter 2A, Section 2A.14.5).

Values commonly used for Identifier Type Code in the context of PID-3 for this extension are as follows:

* AN Account Number.
* BR Birth Certificate number. Assigning authority is the birth state or national. government that issues the Birth Certificate.
* DL Driver’s license number. Assigning authority is the state.
* PI Patient Internal Identifier assigned by the healthcare organization.
* PPN Passport number.
* PRC Permanent Resident Card Number.
* SL State License. Assigning authority is the birth state or national.
* SS Social Security Number.
* VN Visit Number.

Additional Requirements:

* *Medical Record Number (MRN) [[1]](#footnote-1), required*. This is a unique number assigned to patient’s medical record, maintained by the healthcare facility’s information system.
* *Visit/Encounter[[2]](#footnote-2) Number (account number), required*. A unique number assigned to patient’s individual visit /encounter at the healthcare facility with unique start and end time; may be a part of a series of visits within the episode of care. This visit number should be recorded in PID 18. See Note 11 below.
* *Enterprise Master Patient Index[[3]](#footnote-3) (EMPI) Identifier, required but may be empty*. A unique number issued by the health institution to its various facilities and their information systems to enable access to patient’s information across facilities’ information systems. The EMPI is a patient identifier that is not encounter-specific. It allows for the management of multiple patient identifiers across organizations and encounters.
* *Episode of Care[[4]](#footnote-4) Number, required but may be empty*. A unique number assigned to patient’s records associated with the continuous period of care related to a clinical problem. Episode of care may include several visits/encounters over a period; care may be provided at various facilities/specialists within the institution or outside of the institution. Important for quality and population health use cases.
* *Pre-Visit Number, required but may be empty*. A unique number assigned when scheduling patient’s individual visit /encounter at the healthcare facility.

The following will be used for visual verification only and may also be entered into the system:

* *Photo, optional.* Image of patient, or patient identity such as passport, driver’s license, state ID card, military ID to be used as identifier.
* *Social Security Number, required but may be empty*. Numerical identifier entered in the record with restricted access. 9 digits from 0 to 9
* *Student ID, optional*. For college clinics
* *Insurance Card, required but may be empty*. All uppercase.
* *Passport, optional*. For international patients, visual verification for patient demographics validation.
* *Green card, optional*. For international patients, visual verification for patient’ demographics validation.
* *Visa, optional*. For international patients, visual verification for patient’ demographics validation.

**PID-5 – Patient Name (XPN)**, required. This field contains one or more names for the patient. Note 2: At least one name must be provided, with at least the first and second subfields “Family Name” and “Given Name” valued. See the constrained profile definition of data type XPN in Table XXX1 below.

**Table XXX1: XPN Data Type – extended person name**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SEQ** | **LEN** | **DT** | **USAGE** | **CARD** | **TBL#** | **COMPONENT NAME** |
| 1 | 194 | FN | R | [0..1] |  | Family Name |
| 2 | 30 | ST | R | [0..1] |  | Given Name |
| 3 | 30 | ST | O | [0..1] |  | Second and Further Given Names or Initials Thereof |
| 4 | 20 | ST | O | [0..1] |  | Suffix |
| 5 | 20 | ST | O | [0..1] |  | Prefix |
| 6 | 6 | IS | X | [0..0] (See Note1) | 0360 | Degree |
| 7 | 1 | ID | R | [1..1] | 0200 | Name Type Code |
| 8 | 1 | ID | O | [0..1] | 0465 | Name Representation Code |
| 9 | 483 | CE | O | [0..1] | 0448 | Name Context |
| 10 | 53 | DR | X | [0..0] (See Note1) |  | Name Validity Range |
| 11 | 1 | ID | O | [0..1] | 0444 | Name Assembly Order |
| 12 | 26 | TS | O | [0..1] |  | Effective Date |
| 13 | 26 | TS | O | [0..1] |  | Expiration Date |
| 14 | 199 | ST | O | [0..1] |  | Professional Suffix |

Note1: In accordance with the HL7 Version 2.5.1 usage of this data type, “Degree” and “Name Validity Range” are provided here for completeness, but must not be used.

Additional Requirements:

* *Family Name, required*. Separate data entry field. Do not capture prefix or suffix in the last name field. All uppercase. Digits from 0 to 9. No special characters: hyphen (-), apostrophe (‘) and space character. NOTE: If the patient’s legal name is only one name, e.g. Lightfeather, Cher, this name will go in the **Family Name** field.
* *Prefix, optional*. Separate data entry field. Do not capture prefix in the last name field. All uppercase; Digits from 0 to 9. No special characters (such as hyphens (-), apostrophes (‘) and space characters). Use code table[[5]](#footnote-5),[[6]](#footnote-6)
* *Suffix, optional*. Separate data entry field. Do not capture in the last name field. All uppercase. Digits from 0 to 9. No special characters: hyphen (-), apostrophe (‘) and space character. Use code table[[7]](#footnote-7),[[8]](#footnote-8)
* *Given Name, required*. Separate data entry field. All uppercase. No special characters: hyphen (-), apostrophe (‘) and space character. NOTE: If the patient’s legal name is only one name, e.g. Lighfeather, Cher, this name will go in the **Family Name** field.
* *Second and Further Given Names or Initials Thereof, optional*. Separate data entry field. All uppercase. No special characters: hyphen (-), apostrophe (‘) and space character.
* Patient may also provide a preferred patient name, which must also follow the above guidelines.

**PID-6 – Mother’s Maiden Name (XPN),** conditional: Condition predicate:

Note 3: This field is required if known. It serves to help link records when other demographic data and search criteria are not the same.

**PID-7 – Date/Time of Birth (TS)**, required.

Note 4: Date of Birth[[9]](#footnote-9) format is Month, Day, Year. If the exact date of birth is not known, it can be truncated to the year of birth (e.g. 1954), or to the month and year of birth (e.g. 111954). If Time of Birth[[10]](#footnote-10) is entered (e.g., for newborn), format is Hours, Minutes.

**PID-8 – Administrative Sex (IS)**, required.

Note 5: The authorized values are shown in Table XXX2.

**Table XXX2: Administrative Sex Values**

| **Value** | **Description** | **Comment** |
| --- | --- | --- |
| F | Female |  |
| M | Male |  |
| O | Other |  |
| U | Unknown |  |
| A | Ambiguous |  |
| N | Not Applicable |  |

**PID-10 – Race (CE)**, required.

Note 6: The authorized values are shown in the user-defined Race Values Table XXX3.

**Table XXX3: Race Values**

| **Value** | **Description** | **Comment** |
| --- | --- | --- |
| AI | American Indian |  |
| AN | Alaskan Native |  |
| A | Asian |  |
| AA | Black or African American |  |
| NH | Native Hawaiian |  |
| PI | Other Pacific Islander |  |
| W | White |  |
| O | Other Race |  |
| PD | Patient Declined to Answer |  |

**PID-11 – Patient Address (XAD)**, required.

Note 7: This field contains one or more addresses for the patient. At least one address must be provided, with at least the “Street Address”, “City”, “State”, and “Zip or Postal Code” subfields valued. See the constrained profile definition of data type XAD in Table XXX4 below.

**Table XXX4: XAD Data Type – extended address**

| **SEQ** | **LEN** | **DT** | **USAGE** | **CARD** | **TBL#** | **COMPONENT NAME** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 |  | SAD | R | [1..\*] |  | Street Address |
| 2 | 120 | ST | O | [0..\*] |  | Other Designation |
| 3 | 50 | ST | R | [1..1] |  | City |
| 4 | 50 | ST | R | [0..1] |  | State |
| 5 | 12 | ST | R | [0..1] |  | Zipcode or Postal Code |
| 6 | 3 | ID | O | [1..1] | 0399 | Country |
| 7 | 3 | ID | R | [1..1] | 0190 | Address Type |
| 8 |  | ST | O | [0..\*] |  | Other Geographic Designation |
| 9 |  | IS | O | [0..1] |  | County/Parish Code |
| 10 |  | IS | O | [0..1] |  | Census Tract |
| 11 |  | ID | O | [0..1] |  | Address Representation Code |

Additional Requirements:

* *Address Type, required.* Use the HL7 Address Types Table 0190. For the primary address, use the constrained values in table XXX5 below.
* *Address subfields*. All uppercase. Digits from 0 to 9. US Postal Standard[[11]](#footnote-11)
* *Country, required*. All uppercase. Use HL7 Country Code table 0399.

**Table XXX5: Address Types – Primary Address**

| **Value** | **Description** | **Comment** |
| --- | --- | --- |
| C | Current |  |
| H | Temporary Home |  |
| L | Legal Address |  |
| M | Mailing |  |
| P | Permanent |  |

**PID-13 – Home Phone Number (XTN**), required but may be empty.

Note 8: This field is required if known. This field contains one or more contact methods for the patient. It serves to help locate records when other demographic data and search criteria are not exactly the same. See the constrained profile definition of data type XTN in Table XXX6 below.

**Table XXX6: XTN Data Type – extended telecommunication number**

| **SEQ** | **LEN** | **DT** | **USAGE** | **CARD** | **TBL#** | **COMPONENT NAME** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 199 | TN | RE | [0..1] |  | Telephone Number |
| 2 | 3 | ID | C | [0..1] | 0185 | Telecommunication Use Code |
| 3 | 8 | ID | O | [0..1] |  | Telecommunication Equipment Type |
| 4 | 199 | ST | O | [0..1] |  | Email Address |
| 5 | 3 | SNM | O | [0..1] |  | Country Code |
| 6 | 5 | SNM | O | [0..1] |  | Area/City Code |
| 7 | 9 | SNM | O | [0..1] |  | Phone Number |
| 8 | 5 | SNM | O | [0..1] |  | Extension |
| 9 |  | ST | O | [0..1] |  | Any Text |

Note: A change proposal has been submitted to ITI - CP#977 for XTN datatype clarification for phone number. This change proposal may affect the datatypes shown above in this table.

Additional Requirements:

* *Telecommunication Use Code, conditional*. Must provide preferred method of contact code if telephone number is available. See the values from HL7 Table 0185 Preferred Method of Contact below.

**Table XXX7: Preferred Method of Contact Values**

| **Value** | **Description** | **Comment** |
| --- | --- | --- |
| B | Beeper Number |  |
| C | Cellular Phone Number |  |
| E | E-mail Address |  |
| F | Fax Number |  |
| H | Home Phone Number |  |
| O | Office Phone Number |  |

**PID-14 – Business Phone Number (XTN**), required but may be empty.

Note 9: This field is required if known. It serves to help locate records when other demographic data and search criteria are not exactly the same. Follow same guidelines as for Home Phone Number above.

**PID-15 – Primary Language (CE)**, required.

Note 10: Use HL7 Language table 0296.

**PID-18 – Patient Account Number (CX)**: Required but may be empty.

Note 11: HL7 Definition: This field contains the patient account number assigned by accounting to which all charges, payments, etc., are recorded. It is used to identify the patient’s account. Relationship to encounter: A patient account can span more than one enterprise encounter.

Condition predicate: At least one of the fields PID-18 “Patient Account Number” or PV1-19 “Visit Number” shall be valued in the messages of transaction ITI-31 that use the PV1 segment. Patient Visit Number should be entered here and not in PID-3 above.

**PID-21 – Mother’s Identifier (CX),** optional.

Note 12: Link field for newborns. Typically, a patient ID or account number may be used. This field can contain multiple identifiers for the same mother. This field is optional.

**PID-22 – Ethnic Group (CE),** required.

Note 13: Use User-defined table below, extended from the HL7 Ethnic Group table 0189.

**Table XXX8: Ethnic Group Values**

| **Value** | **Description** | **Comment** |
| --- | --- | --- |
| H | Hispanic or Latino |  |
| NH | Not Hispanic |  |
| U | Unknown |  |
| PD | Patient Declined to Answer |  |

**PID-24 – Multiple Birth Indicator (ID),** conditional.

Note 14: Condition predicate:

This field is required if known for the Pediatrics Demographic Option. It serves to help avoid linking records for twins, which are often nearly identical.

**PID-25 – Birth Order (NM),** conditional.

Note 15: Condition predicate:

This field is required if known for the Pediatrics Demographic Option. It serves to help avoid linking records for twins, which are often nearly identical.

**PID-29 – Patient Death Date and Time (TS)**, conditional:

Note 16: Condition predicate:

* This field is required in the Patient Discharge message of transaction ITI-31 if the encounter is terminated by the patient’s death and the death date is known. It provides the date/time of the patient’s death.
* In all other Patient Discharge messages, it shall not be populated.

**PID-30 – Patient Death Indicator (ID)**, conditional:

Note 17: Condition predicate:

* This field is required to be populated with value “Y” in the Patient Discharge message of transaction ITI-31 when the encounter is terminated by the patient’s death.
* Otherwise it is optional.

**PID-31 – Identity Unknown Indicator (ID)**, conditional:

Note 18: Condition predicate:

• This field is required if available (i.e., known to the sender) in the following messages: Creation of a new patient (A28 in ITI-30), inpatient admitted (A01 in ITI-31), registration of an outpatient (A04 in ITI-31), update patient demographics (A31 in ITI-30), update patient demographics in the context of an encounter (A08 in ITI-31).

In all other messages, it is optional. The possible values are “Y”, and “N” which is the default.

The value “Y” means that the patient identity is unknown. In this case, the field PID-3 shall contain one single patient identifier, which is a temporary identifier, and the field PID-32 will contain the value “AL” indicating that the patient name is an alias.

Appendices

Appendix A – Informative: Introduction to AHIMA Patient Registration Use Case

The Patient Registration Content Profile defines the data elements that should be collected and exchanges for patient registration during the emergency visit at the healthcare organization. They include patient demographics, encounter demographics, insurance and payment. The patient registration content from this use case is specified in this Volume 4 as an IHE US National Extension to the IHE ITI Patient Administration Management (PAM) integration profile for the message-based data exchange.

A.1 Patient Registration Use Case Overview

Patient Registration is the process of checking-in a person to initiate the episode of care. Patient registration takes place in various healthcare settings and at the various functions of the episode of care. The Registration Department, Patient Access, Admitting Departments, Call Centers, or Online Scheduling Services, is responsible for management of patient registration activities. In some emergent situations when the identity of a patient is unknown, for example, trauma unknown patient, unconscious patient, patient with acute condition (stroke, heart attack), child who was brought up to the emergency department without a representative, patient registration can be conducted by other authorized staff, e.g., clinicians. In some cases, pre-registration may take place prior to the actual registration process at the healthcare organization. Pre-registration may happen as a part of EMS transport of the patient, pre-registration of the patient before arriving to the emergency department, scheduling a procedure prior to the episode of care, a follow-up visit, etc.

During the patient registration, insurance verification and pre-authorization may take place. In this case, insurance verifier is involved in verifying payment information as a part of the patient registration process.

Patient registration information is provided by the patient/and or by the designated (authorized, legal) patient’s representative (guardian) (parent, caregiver, decision-maker, etc.) to the registration staff. Information may also be received/uploaded from various data sources, e.g., Electronic Health Record (EHR) systems, Payor systems, Health Information Exchanges (HIE).

The patient registration information can be provided verbally, via facility registration portal/kiosk, or phone interview.

Information collected at the registration initiates the creation of a new episode of care record. This information will be further used at the next functions of the episode of care (triage/assessment, testing, treatment, medication management and discharge/transfer).

The following is the list of scenarios that involve patient registration:

1. Emergency department visit:
2. Registration of walk-in/patient presentation in ED
3. Registration initiated/conducted by clinicians for life threatening situations
4. Registration for diagnostic testing during ED stay
5. Registration for medication administration
6. Registration for pre-admission of patients into the hospital
7. Registration for follow-up care
8. In-patient setting visit (hospitals,):
9. Registration for planned admission
10. Registration for unplanned admission
11. Registration for diagnostic testing during hospital stay
12. Registration for medication administration
13. Registration for treatment during hospital stay
14. Registration/Scheduling for post-acute care follow-up
15. Out-patient setting visit:
16. Registration for walk-in/patient presentation
17. Registration/Scheduling for planned visit
18. Registration/Scheduling for diagnostic testing (during the visit, and after the visit)
19. Registration/Scheduling for treatment (during the visit, and after the visit)
20. Registration for medication administration
21. Registration for post-visit follow-up

In this extension, we focus on the ***Scenario A1: Registration of walk-in/patient presentation in ED***

A.1.1 Patient Registration Use Case Concepts

The following information items (documents/records/data) are collected during patient registration:

**Table A.1.1-1: Patient Registration information**

|  |  |
| --- | --- |
| Patient Registration Information   * Patient demographics (e.g., name, DoB, address, biometrics) * Visit demographics (enterprise medical record number, date/time of encounter, reason for visit, list of barcodes, etc.) * Physician demographics (name, PID, department/service) * Chief complaint, Reason for visit, ABN * Consent for visit * Consent for information sharing * eSignature for Registration Staff * Wristband (patient ID bracelet with barcodes) | Insurance information   * Payor demographic * Insurance ID * Coverage * Co-pay * eSignature for Insurance Verifier   Payment information   * Invoice for service * Payment receipt * Payment plan, if needed * eSignature for Billing Staff |
| Risk Management/Infection Control/Public Health/ Population Health Information   * Have you been out of the country in the last three weeks? | * Notification of Record Availability * Acknowledgement of Receipt * Audit Record: Who, When, Why, What |

Please note that during patient registration, clinical information may be collected, however this information is out of scope for the Patient Registration Use Case.

A.1.2 Patient Registration Use Cases

A.1.2.1 Use Case #1: Registration of Walk-in/Patient Presentation in ED

Patient presents themselves to the ED, conscious and able to provide identification. Registration staff collects identifying information necessary to register patient. Registration is completed, patient registration is submitted to EHR.

#### A.1.2.1.1 Use Case Description

Table below presents the description of the use case from the user perspectives. It describes business actors (humans) and technical actors (information systems) involved in the patient registration; process flow; information collected; entry and exit conditions and quality requirements.

**Table A.2.1.1-1: Patient Registration Use Case Workflow and Corresponding Data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case Name: Registration of Walk-in/Patient Presentation in ED**  *Italic font and grey highlights indicate steps performed/data created by Technical Actors* | | | | |
| Actors | | **Business Actors**: Patient (or patient’s legal representative), Registration staff, Billing staff (Insurance verifier registrar), Payor, Clinician | | |
|  | | |
| ***Technical Actors****: R-ADT System, HIS, Financial System, Payor System, EHR, EDMS, HIE, PHR, mHealth app* | | |
| # of Step | | Workflow Steps | | Information Items  (Documents/Records/Data) |
| 1 | Patient enters ED and presents to the Registration staff | | | Patient Registration Record   1. Patient demographics (e.g., name, DoB, address) 2. Visit demographics (e.g., enterprise medical record number, date/time of encounter, reason for visit, list of barcodes, etc.), 3. Physician demographics (name, PID, department/service 4. Reason for visit 5. Consent for visit 6. Consent for information sharing 7. eSignature for Registration Staff 8. Wristband (patient ID bracelet)   Risk Management (RM)/Infection Control (IC)/ Public Health/ Population Health (PH) information  *Audit record: Who, When, Why, Wh****a****t* | |
| 2 | Registration staff identifies patient, asks patient to complete necessary forms (paper or electronic), and checks in/register the visit in R-ADT System. In the case of “trauma/unidentified patient”, registration staff assigns a tag with the ID number to be used in the episode of care. | | |
| *3* | *HIS creates an audit record of the encounter* | | |
| *4* | *R-ADT System searches and obtains patient and visit-relevant information from various systems (HIS, EHR, Financial Systems, EDMS, HIE, PHR, mHealth app)* | | |
| 5 | Registration staff validates patient information, prints ID bracelet and correspondent labels with barcodes for the patient, and signs the record with e-signature or in ink. | | |
| 6 | Registration staff sends patient to Insurance verifier registrar. Insurance verification may be done by the Registration staff. | | | Insurance information:   1. Payor demographic 2. Insurance ID 3. Coverage 4. Co-pay/deductible 5. eSignature for Insurance Verifier   Payment information:  1. Invoice for service  2. Payment receipt  3. Payment plan, if needed  4. eSignature for Billing Staff  *Audit record: Who, When, Why, Wh****a****t* | |
| 7 | Insurance verifier registrar verifies patient insurance information; contacts payor, if needed; obtains authorization; and requests/collects co-pay or makes payment arrangements – Need to be developed at more granular level | | |
| *8* | *R-ADT System communicates with the payor system directly or via HIE to obtain patient insurance information. Patient information is updated in the Financial System* | | |
| *9* | *R-ADT System updates patient information in PHR via mHealth app* | | | Updated Patient Registration Record  *Audit record: Who, When, Why, Wh****a****t* | |
| 10 | Registration staff assembles all documents necessary for the episode of care and completes the registration by signing the Episode of Care Record with e-Signature in EHR. This may be done automatically when the staff completes the record (all data are entered and verified) and closes the registration record for this patient. Staff sends patient to clinician for assessment. Clinician opens patient record to begin assessment and sends the acknowledgement of receipt. | | | Updated Patient Registration Record  eSignature for Registration Staff  Notification of Record Availability  including notification to Care Team  Acknowledgement of Receipt | |
| *11* | *Registration information is uploaded into EHR. EHR sends Notification of Record Availability to clinician.* | | | *Updated Patient Registration Record*  *Notification of Record Availability* | |
| *12* | *EHR sends back to the R-ADT the Acknowledgement of Receipt.* | | | *Acknowledgement of Receipt* | |
| *13* | *Audit trail for the personnel and systems involved in patient registration is completed in HIS* | | | *Audit Record: Who, When, Why, What* | |
| Entry Condition | | | R-ADT System | |
| Exit Condition | | | HIS with record for assessment function and with audit trail record | |
| Quality Requirements | | | Real time patient information verification | |

Please note that during patient registration, clinical information may be collected, however this information is out of scope for the Patient Registration Use Case.

#### A.1.2.1.2 Process Flow

This case covers the process of registering a walk-in patient upon presentation in the Emergency Department. The patient may be new or known to the current healthcare facility. The following sequence of steps describes the typical process flow when a request is made to register the patient.

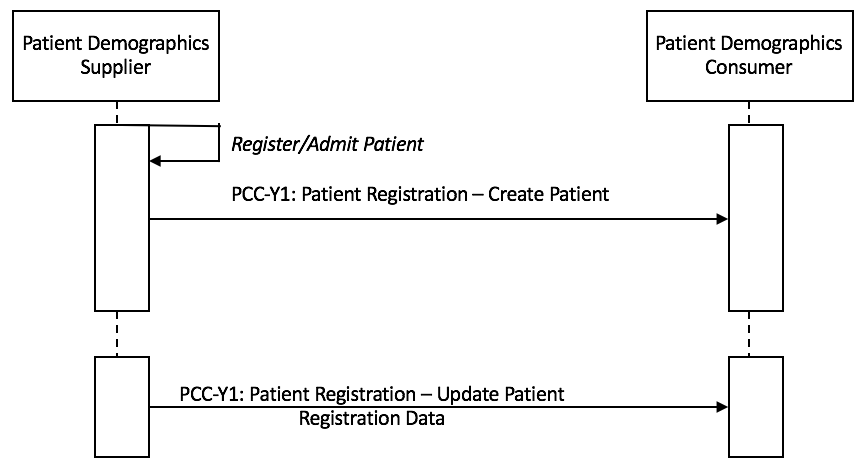


Figure A.1.2.1.2 -1: Basic Process Flow in Patient Registration Use Case

**Pre-conditions:**

Pre-registration may happen as a part of EMS transport of the patient, pre-registration of the patient before arriving to the emergency department, scheduling a procedure prior to the episode of care, a follow-up visit, etc.

**Post-conditions:**

After this content module has been created, the HIS will contain a record that can be used for the assessment function with audit trail record generated.

#### A.1.2.1.3 Patient Registration Demographics

The AHIMA Patient Registration Use Case data requirements that formed the basis of the above national extension are below:

***NNN*** –Bold, italic font, shaded row indicates the data element that contains additional data element components.

| **Data Element** | **Opt** | **Format** | **Data Definition** |
| --- | --- | --- | --- |
| ***Visit/Encounter Identification*** | | | |
| Enterprise Master Patient Index[[12]](#footnote-12) (EMPI) Identifier | C | Alphanumeric | A unique number issued by the health institution to its various facilities and their information systems to enable access to patient’s information across facilities’ information systems |
| Medical Record Number (MRN) | R | Alphanumeric | A unique number assigned to patient’s medical record maintained by the healthcare facility’s information system[[13]](#footnote-13) |
| Episode of Care[[14]](#footnote-14) Number | C | Alphanumeric | A unique number assigned to patient’s records associated with the continuous period of care related to a particular clinical problem. Episode of care may include several visits/encounters over a period of time; care may be provided at various facilities/specialists within the institution or outside of the institution. Important for quality and population health use cases. Possible gap in HL7 Stds |
| Visit/Encounter[[15]](#footnote-15) Number (account number) | R | Alphanumeric | A unique number assigned to patient’s individual visit /encounter at the healthcare facility with unique start and end time; may be a part of a series of visits within the episode of care. |
| Pre-Visit Number | C | Alphanumeric | A unique number assigned when scheduling patient’s individual visit /encounter at the healthcare facility |
| ***Forms of Patient Identification (examples, alphabetically)*** | | | Use HL7 Identifier Type table [[16]](#footnote-16) |
| Photo | O | Image, PDF, other |  |
| Social Security Number | C | Digits from 0 to 9 | Number entered in the record with restricted access |
| Medicare Beneficiary Identifier (MBI) | C | All UPPERCASE  Digits from 0 to 9 | Out of Scope in 2017  In case if, MBI is enacted, collect for medicare beneficiary– Possible gap in HL7 |
| Driver’s License Number | C | photocopy, scanned copy |  |
| State ID Card | C | photocopy, scanned copy |  |
| Military ID | C | photocopy, scanned copy |  |
| Passport | C | NA | For international patients, visual verification for patient’ demographics validation |
| Green Card | C | NA | For international patients, visual verification for patient’ demographics validation |
| Visa | C | NA | For international patients, visual verification for patient’ demographics validation |
| Student ID | C | Digits from 0 to 9 | For college clinics – HL7 0203 gap |
| Insurance Card | C | All UPPERCASE  Digits from 0 to 9, scanned copy | For medicare beneficiary -- MBI |
| Biometrics | C | Iris scan, fingerprint, palm scan, etc. | Out of scope for 2017.  4/25 – IHE PCC thinks this would need to be an observation type, since it needs to be a different structure to represent the biometric data. |
| Newborn identification | C |  | Out of scope for 2017  Use mother identity – see section below Check IHE Labor and Delivery summary and Neo natal care profiles  Children’s Association newborn identification (K.Lusk) |
| ***Legal Patient Name*** | ***R*** |  | Use HL7 XPN-Extended Person Name table[[17]](#footnote-17) |
| Name, Prefix | O | Separate data entry field.  Do not capture prefix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character | Use code table[[18]](#footnote-18),[[19]](#footnote-19)  Possible Gap - Ask HL7 to review |
| Name, Last | R | Separate data entry field.  Do not capture prefix or suffix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character.  NOTE: If the patient’s legal name is only one name, e.g. Lightfeather, Cher, this name will go in the **Last Name** field. | To be further discussed on 5/1:  Need further discussion:  1.How to enter data – need low cases 2.How to manage/exchange data in EHR – may be all upper cases.  Need more vendors to discuss!  3.What if the first name field is required/ Why not to enter in both Cher Cher: Asked Registar to authorize blank first name field |
| Name, Suffix | C | Separate data entry field.  Do not capture in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character | Use code table[[20]](#footnote-20),[[21]](#footnote-21)  Possible Gap - Ask HL7 to review |
| Name, First | R | Separate data entry field.  All UPPERCASE  No special characters: hyphen (-), apostrophe (‘) and space character.  NOTE: If the patient’s legal name is only one name, e.g. Lighfeather, Cher, this name will go in the **Last Name** field. | To be further discussed on 5/1:  Need further discussion:  1.How to enter data – need low cases 2.How to manage/exchange data in EHR – may be all upper cases.  Need more vendors to discuss!  3.What if the first name field is required/ Why not to enter in both Cher: Asked Registrar to authorize blank first name field |
| Name, Middle | C | Separate data entry field.  All UPPERCASE  No special characters: hyphen (-), apostrophe (‘) and space character. |  |
| ***Preferred Patient Name*** | ***C*** |  | Use HL7 XPN-Extended Person Name table[[22]](#footnote-22) |
| Name, Prefix | C | Separate data entry field.  Do not capture prefix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character | Use code table[[23]](#footnote-23),[[24]](#footnote-24) Possible HL7 gap |
| Name, Last | C | Separate data entry field.  Do not capture prefix or suffix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character.  NOTE: If the patient’s legal name is only one name, e.g. Lightfeather, Cher, this name will go in the **Last Name** field. |  |
| Name, Suffix | C | Separate data entry field.  Do not capture in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character | Use code table[[25]](#footnote-25),[[26]](#footnote-26)  Possible HL7 gap |
| Name, First | C | Separate data entry field.  All UPPERCASE  No special characters: hyphen (-), apostrophe (‘) and space character. |  |
| Name, Middle | C | Separate data entry field.  All UPPERCASE  No special characters: hyphen (-), apostrophe (‘) and space character. |  |
| Mother Maiden Last Name | O | Separate data entry field.  Do not capture prefix or suffix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character.  NOTE: If the patient’s legal name is only one name, e.g. Lighfeather, Cher, this name will go in the **Last Name** field. |  |
| Date of Birth[[27]](#footnote-27) | R | MM/DD/YYYY | Month, Day, Year, HL7 Time Stamp |
| Time of Birth[[28]](#footnote-28) (e.g., newborn) | C | HH:MM | Hours, Minutes |
| Administrative Gender | R | F, M, O, U, A, N | Use HL7 Admin Sex table:[[29]](#footnote-29) Female, Male, Other, Unknown, Ambiguous, Not Applicable |
| ***Patient Alias*** | ***O*** |  | Use HL7 XPN-Extended Person Name table[[30]](#footnote-30) |
| Alias, Prefix | O | Separate data entry field.  Do not capture prefix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character | Use code table[[31]](#footnote-31),[[32]](#footnote-32) |
| Alias, Last | O | Separate data entry field.  Do not capture prefix or suffix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character.  NOTE: If the patient’s legal name is only one name, e.g. Lighfeather, Cher, this name will go in the **Last Name** field. |  |
| Alias, Suffix | O | Separate data entry field.  Do not capture in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character | Use code table[[33]](#footnote-33),[[34]](#footnote-34) |
| Alias, First | O | Separate data entry field.  All UPPERCASE  No special characters: hyphen (-), apostrophe (‘) and space character.  NOTE: If the patient’s legal name is only one name, e.g. Lighfeather, Cher, this name will go in the **Last Name** field. |  |
| Alias, Middle | O | Separate data entry field.  All UPPERCASE  No special characters: hyphen (-), apostrophe (‘) and space character. |  |
| Race | R | AI, AN, A, B, AA, NH, PI, W, O, Patient declined to answer | Use HL7 Race table:[[35]](#footnote-35)  American Indian or Alaskan Native  Asian  Black or African American  Native Hawaiian or other Pacific Islander  White  Other Race  Patient declined to answer Possible Gap - Ask HL7 to review |
| Ethnic Group | R | H, L, NH, NL, U, Patient declined to answer | Use HL7 Ethnic Group table:[[36]](#footnote-36)  Hispanic or Latino  Not Hispanic or Latino  Unknown  Patient declined to answer Possible Gap - Ask HL7 to review |
| ***Primary Address*** | ***R*** | C, H, L, M, P | Use HL7 Address Type table:[[37]](#footnote-37)  Current or Temporary, Home, Legal Address, Mailing, Permanent  Unclear address types - Ask HL7 to review |
| Line 1 (Street Number, Street Name) | R | All UPPERCASE  Digits from 0 to 9 | US Postal Standard[[38]](#footnote-38) |
| Line 2 (Apt. No or Unit No) | O | All UPPERCASE  Digits from 0 to 9 | US Postal Standard[[39]](#footnote-39) |
| City | R | All UPPERCASE | US Postal Standard[[40]](#footnote-40) |
| County | R | All UPPERCASE |  |
| State/Province | R | All UPPERCASE  2 Letter Code | US Postal Standard[[41]](#footnote-41) |
| Zip Code | R | Alphanumeric  All UPPERCASE  Digits from 0 to 9 | US Postal Standard[[42]](#footnote-42) |
| Country | R | All UPPERCASE | Use HL7 Country Code table[[43]](#footnote-43) |
| ***Preferred Method of Contact*** | ***C*** | B, C, E, F, H, O | Use HL7 Preferred Method of Contact table: [[44]](#footnote-44),[[45]](#footnote-45)  Beeper Number, Cellular Phone Number, e-mail Address, Fax Number, Home Phone Number, Office Phone Number |
| Phone Number – Home | C | H, Numeric | Home Phone Number |
| Phone Number – Cell | C | C, Numeric | Cellular Phone Number |
| Email Address – Home | O | E, Alphanumeric | e-mail Address |
| Phone Number – Business | C | O, Numeric | Office Phone Number |
| Phone Number – Fax | C | F, Numeric | Fax Number |
| Email Address – Business | O | E, Alphanumeric | e-mail Address |
| ***Alternate Address*** | C | C, B, H, L, M, O, P | Use HL7Address Type table:[[46]](#footnote-46)  Current or Temporary, Firm/Business, Home, Legal Address, Mailing, Office, Permanent |
| Line 1 (Street Number, Street Name) | R | All UPPERCASE  Digits from 0 to 9 | US Postal Standard[[47]](#footnote-47) |
| Line 2 (Apt. No or Unit No) | O | All UPPERCASE  Digits from 0 to 9 | US Postal Standard[[48]](#footnote-48) |
| City | R | All UPPERCASE | US Postal Standard[[49]](#footnote-49) |
| County | R | All UPPERCASE |  |
| State/Province | R | All UPPERCASE  2 Letter Code | US Postal Standard[[50]](#footnote-50) |
| Zip Code | R | Digits from 0 to 9 | US Postal Standard[[51]](#footnote-51) |
| Country | R | All UPPERCASE | Use HL7 Country Code table[[52]](#footnote-52) |
| ***Alternate Method of Contact*** | ***C*** | B, C, E, F, H, O | Use HL7 Preferred Method of Contact table: [[53]](#footnote-53),[[54]](#footnote-54)  Beeper Number, Cellular Phone Number, e-mail Address, Fax Number, Home Phone Number, Office Phone Number |
| Phone Number – Home | C | H, Numeric | Home Phone Number |
| Phone Number – Cell | C | C, Numeric | Cellular Phone Number |
| Email Address – Home | O | E, Alphanumeric | e-mail Address |
| Phone Number – Business | C | O, Numeric | Office Phone Number |
| Phone Number – Fax | C | F, Numeric | Fax Number |
| Email Address – Business | O | E, Alphanumeric | e-mail Address |
| Primary(Preferred) Language | R |  | Use HL7 Language table[[55]](#footnote-55) |
| Marital Status | O | A, D, M, S, W, S, U…..Spouse,  Patient declined to answer | Use HL7 Marital Status table[[56]](#footnote-56) Possible Gap - Ask HL7 to review |
| Religion | O |  | Use HL7 Religion table[[57]](#footnote-57) |
| Mother’s Identifier (for newborn)[[58]](#footnote-58) | C | Demographics? Identifier? | Out of scope in 2017  Discuss New JCAHO reqs – Gap discuss with JCAHO, AAP, Children’s Assoc., NIST |
| ***Place of Birth*** | ***O*** | C, H, L, M, P | Use HL7 Address Type table:[[59]](#footnote-59) Current or Temporary, Home, Legal Address, Mailing, Permanent |
| City | O | All UPPERCASE |  |
| State/Province | O | All UPPERCASE  2 Letter Code | US Postal Standard[[60]](#footnote-60) |
| Country | O | All UPPERCASE | Use HL7 Country Code table[[61]](#footnote-61) |
| Multiple Birth Indicator (for newborn) | C | Yes/No | Out of scope in 2017  Twins/triplets; MU Immunization Reporting  Discuss New JCAHO reqs – Gap discuss with JCAHO, AAP, Children’s Assoc., NIST |
| Birth Order (for newborn) | C | A, B, C, D, E…  All UPPERCASE  Digits 1-9 | Out of scope in 2017  Twins/triplets; MU Immunization Reporting  Discuss New JCAHO reqs – Gap discuss with JCAHO, AAP, Children’s Assoc., NIST |
| ***Other Information*** |  |  |  |
| Citizenship | O | All UPPERCASE | Use HL7 Country Code table[[62]](#footnote-62) |
| Military Status | O | ACT, RET, DEC | Use HL7 Military Status table:[[63]](#footnote-63)  Active Duty, Retired, Deceased  Military may have dual insurance may use civil clinics as well  Veteran=Retired. Discuss with VA |
| ***Occupational Information[[64]](#footnote-64)-*** *Data Elements in RED - TO BE REVIEWED BY CDC NIOSH* | | | |
| Employment Status | O | 1, 2, 4, C, L, T, 3, 5, 6, O, 9 | Use HL7 Employment Status table:[[65]](#footnote-65)  Full time employed, Part time employed, Self-employed, Contract, per diem, leave of absence, Temporarily unemployed, Unemployed, Retired, On active military duty, Other, Unknown |
| ***Employer Organization*** | ***C*** | ***Text*** |  |
| Organization Name | C | Text |  |
| Organization Number | C | Numeric |  |
| Organization Identifier | C | Numeric |  |
| ***Employer Person*** | ***C*** | ***Alphanumeric*** |  |
| Name, Prefix | C | Separate data entry field.  Do not capture prefix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character |  |
| Name, Last | C | Separate data entry field.  Do not capture prefix or suffix in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character.  NOTE: If the patient’s legal name is only one name, e.g. Lighfeather, Cher, this name will go in the **Last Name** field. |  |
| Name, Suffix | C | Separate data entry field.  Do not capture in the last name field.  All UPPERCASE  Digits from 0 to 9  No special characters: hyphen (-), apostrophe (‘) and space character |  |
| Name, First | C | Separate data entry field.  All UPPERCASE  No special characters: hyphen (-), apostrophe (‘) and space character.  NOTE: If the patient’s legal name is only one name, e.g. Lighfeather, Cher, this name will go in the **Last Name** field. |  |
| Name, Middle | C | Separate data entry field.  All UPPERCASE  No special characters: hyphen (-), apostrophe (‘) and space character. |  |
| ***Employer Address*** | C | C, B, H, L, M, O, P | Use HL7 Address Type table:[[66]](#footnote-66) Current or Temporary, Firm/Business, Home, Legal Address, Mailing, Office Permanent |
| Line 1 (Street Number, Street Name) | R | All UPPERCASE  Digits from 0 to 9 | US Postal Standard[[67]](#footnote-67) |
| Line 2 (Apt. No or Unit No) | O | All UPPERCASE  Digits from 0 to 9 | US Postal Standard[[68]](#footnote-68) |
| City | R | All UPPERCASE | US Postal Standard[[69]](#footnote-69) |
| County | R | All UPPERCASE |  |
| State/Province | R | All UPPERCASE  2 Letter Code | US Postal Standard[[70]](#footnote-70) |
| Zip Code | R | Alphanumeric  All UPPERCASE  Digits from 0 to 9 | US Postal Standard[[71]](#footnote-71) |
| Country | R | All UPPERCASE | Use HL7 Country Code table[[72]](#footnote-72) |
| Occupation | O | Text |  |
| Industry | O | Text |  |

Glossary

The IHE Glossary can be found as an appendix to the *IHE Technical Frameworks General Introduction* <insert GI link>.

1. American Health Information Management Association (AHIMA). Pocket Glossary of Health Information Management and Technology. Chicago, IL. 2014. p.70: “*A unique numeric or alphanumeric identifier assigned to each patient’s record upon admission to a healthcare facility*” [↑](#footnote-ref-1)
2. American Health Information Management Association (AHIMA). Pocket Glossary of Health Information Management and Technology. Chicago, IL. 2014. p.151: “*A single encounter with a healthcare professional that includes all the services supplied within the encounter*” [↑](#footnote-ref-2)
3. American Health Information Management Association (AHIMA). Pocket Glossary of Health Information Management and Technology. Chicago, IL. 2014. p.55: “*EMPI: an index that provides access to multiple repositories of information from overlapping patient populations that are maintained in separate systems and databases*” [↑](#footnote-ref-3)
4. American Health Information Management Association (AHIMA). Pocket Glossary of Health Information Management and Technology. Chicago, IL. 2014. p.55: “*A period of relatively continuous medical care performed by healthcare professionals in relation to a particular clinical problem or situation”* [↑](#footnote-ref-4)
5. Weber State University Data Standards. URL: <http://departments.weber.edu/qsupport&training/Data_Standards/Name.htm> [↑](#footnote-ref-5)
6. Middlebury Library &ITS Wiki: Name Standards. URL: <https://mediawiki.middlebury.edu/wiki/LIS/Name_Standards> [↑](#footnote-ref-6)
7. Weber State University Data Standards. URL: <http://departments.weber.edu/qsupport&training/Data_Standards/Name.htm> [↑](#footnote-ref-7)
8. Middlebury Library &ITS Wiki: Name Standards. URL: <https://mediawiki.middlebury.edu/wiki/LIS/Name_Standards> [↑](#footnote-ref-8)
9. ISO 8601 Numeric Date and Time format. URL: <https://www.iso.org/iso-8601-date-and-time-format.html> [↑](#footnote-ref-9)
10. ISO 8601 Numeric Date and Time format. URL: <https://www.iso.org/iso-8601-date-and-time-format.html> [↑](#footnote-ref-10)
11. Postal Addressing Standards. 2015 URL: <http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf> [↑](#footnote-ref-11)
12. American Health Information Management Association (AHIMA). Pocket Glossary of Health Information Management and Technology. Chicago, IL. 2014. p.55: “*EMPI: an index that provides access to multiple repositories of information from overlapping patient populations that are maintained in separate systems and databases*” [↑](#footnote-ref-12)
13. American Health Information Management Association (AHIMA). Pocket Glossary of Health Information Management and Technology. Chicago, IL. 2014. p.70: “*A unique numeric or alphanumeric identifier assigned to each patient’s record upon admission to a healthcare facility*” [↑](#footnote-ref-13)
14. American Health Information Management Association (AHIMA). Pocket Glossary of Health Information Management and Technology. Chicago, IL. 2014. p.55:“*A period of relatively continuous medical care performed by healthcare professionals in relation to a particular clinical problem or situation”* [↑](#footnote-ref-14)
15. American Health Information Management Association (AHIMA). Pocket Glossary of Health Information Management and Technology. Chicago, IL. 2014. p.151: “*A single encounter with a healthcare professional that includes all the services supplied within the encounter*” [↑](#footnote-ref-15)
16. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Identifier Type -Table 0203) [↑](#footnote-ref-16)
17. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Extended Person Name - XPN Table) [↑](#footnote-ref-17)
18. Weber State University Data Standards. URL: <http://departments.weber.edu/qsupport&training/Data_Standards/Name.htm> [↑](#footnote-ref-18)
19. Middlebury Library &ITS Wiki: Name Standards. URL: <https://mediawiki.middlebury.edu/wiki/LIS/Name_Standards> [↑](#footnote-ref-19)
20. Weber State University Data Standards. URL: <http://departments.weber.edu/qsupport&training/Data_Standards/Name.htm> [↑](#footnote-ref-20)
21. Middlebury Library &ITS Wiki: Name Standards. URL: <https://mediawiki.middlebury.edu/wiki/LIS/Name_Standards> [↑](#footnote-ref-21)
22. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Extended Person Name - XPN Table) [↑](#footnote-ref-22)
23. Weber State University Data Standards. URL: <http://departments.weber.edu/qsupport&training/Data_Standards/Name.htm> [↑](#footnote-ref-23)
24. Middlebury Library &ITS Wiki: Name Standards. URL: <https://mediawiki.middlebury.edu/wiki/LIS/Name_Standards> [↑](#footnote-ref-24)
25. Weber State University Data Standards. URL: <http://departments.weber.edu/qsupport&training/Data_Standards/Name.htm> [↑](#footnote-ref-25)
26. Middlebury Library &ITS Wiki: Name Standards. URL: <https://mediawiki.middlebury.edu/wiki/LIS/Name_Standards> [↑](#footnote-ref-26)
27. ISO 8601 Numeric Date and Time format. URL: <https://www.iso.org/iso-8601-date-and-time-format.html> [↑](#footnote-ref-27)
28. ISO 8601 Numeric Date and Time format. URL: <https://www.iso.org/iso-8601-date-and-time-format.html> [↑](#footnote-ref-28)
29. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Sex -Table 0001) [↑](#footnote-ref-29)
30. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Extended Person Name - XPN Table) [↑](#footnote-ref-30)
31. Weber State University Data Standards. URL: <http://departments.weber.edu/qsupport&training/Data_Standards/Name.htm> [↑](#footnote-ref-31)
32. Middlebury Library &ITS Wiki: Name Standards. URL: <https://mediawiki.middlebury.edu/wiki/LIS/Name_Standards> [↑](#footnote-ref-32)
33. Weber State University Data Standards. URL: <http://departments.weber.edu/qsupport&training/Data_Standards/Name.htm> [↑](#footnote-ref-33)
34. Middlebury Library &ITS Wiki: Name Standards. URL: <https://mediawiki.middlebury.edu/wiki/LIS/Name_Standards> [↑](#footnote-ref-34)
35. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Race -Table 0005) [↑](#footnote-ref-35)
36. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Ethnic Group -Table 0189) [↑](#footnote-ref-36)
37. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Address Type and use Table 0190) [↑](#footnote-ref-37)
38. Postal Addressing Standards. 2015 URL: <http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf> [↑](#footnote-ref-38)
39. Ibid [↑](#footnote-ref-39)
40. Ibid [↑](#footnote-ref-40)
41. Ibid [↑](#footnote-ref-41)
42. Ibid [↑](#footnote-ref-42)
43. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Country Code -Table 0399) [↑](#footnote-ref-43)
44. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Phone Number - No Table Number) [↑](#footnote-ref-44)
45. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Phone Number/Preferred Method of Contact- Table 0185) [↑](#footnote-ref-45)
46. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Address Type - Table 0190) [↑](#footnote-ref-46)
47. Postal Addressing Standards. 2015 URL: <http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf> [↑](#footnote-ref-47)
48. Ibid [↑](#footnote-ref-48)
49. Postal Addressing Standards. 2015 URL: <http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf> [↑](#footnote-ref-49)
50. Ibid [↑](#footnote-ref-50)
51. Ibid [↑](#footnote-ref-51)
52. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Country Code -Table 0399) [↑](#footnote-ref-52)
53. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Phone Number - No Table Number) [↑](#footnote-ref-53)
54. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Phone Number/Preferred Method of Contact- Table 0185) [↑](#footnote-ref-54)
55. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Language - Table Language-Language) [↑](#footnote-ref-55)
56. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Marital Status - Table 0002) [↑](#footnote-ref-56)
57. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Religion -Table 0006) [↑](#footnote-ref-57)
58. Naming convention for children - it includes the Mother’s last name and first name – e.g. MOTHER’S LASTNAME,BABYGIRL (MOTHER’S NAME). URL: <https://www.jointcommission.org/issues/article.aspx?Article=B7m8UUbXo1zc9Kx%2fsYHIKtc5JxWzumvlTZZmsphVx1w%3d&j=2689317&e=joy.dickinson@ahcmedia.com&l=9552_HTML&u=57939061&mid=1064717&jb=0> [↑](#footnote-ref-58)
59. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Address Type - Table 0190) [↑](#footnote-ref-59)
60. Postal Addressing Standards. 2015 URL: <http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf> [↑](#footnote-ref-60)
61. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Country Code - Table 0399) [↑](#footnote-ref-61)
62. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Country Code - Table 0399) [↑](#footnote-ref-62)
63. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Military Status - Table 0142) [↑](#footnote-ref-63)
64. 1.25.2.1.253 Value Set http://hl7.org/fhir/ValueSet/anzsco-occupations

    https://www.hl7.org/fhir/valueset-anzsco-occupations.html Occupational Information is not collected in HL7 PID. It is collected in insurance section HL7 IN1. AHIMA NEEDS TO DECIDE – where to have Occupational Information ( in Pt Registration Information or Insurance information) [↑](#footnote-ref-64)
65. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Employment Status - Table 0066) [↑](#footnote-ref-65)
66. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Address Type - Table 0190) [↑](#footnote-ref-66)
67. Postal Addressing Standards. 2015 URL: <http://pe.usps.gov/cpim/ftp/pubs/Pub28/pub28.pdf> [↑](#footnote-ref-67)
68. Ibid [↑](#footnote-ref-68)
69. Ibid [↑](#footnote-ref-69)
70. Ibid [↑](#footnote-ref-70)
71. Ibid [↑](#footnote-ref-71)
72. HL7 Definition. URL: <http://hl7-definition.caristix.com:9010/Default.aspx> (Search by Country Code -Table 0399) [↑](#footnote-ref-72)