

Appendix A

Patient Identification Data Integrity Glossary

Data Attribute	Requirement Level	Recommendation	HL7 Message	References/Comments
Name		<p>Separate data entry field for all components of the name</p> <p>Legal name as documented on the birth certificate, passport or equivalent documents from another nation</p>	<p>HL7 version 2.6 PID-5, length 48, Date Type: XPN (Extended person name)</p> <p>HL7 Format: Family Name^Given Name^Middle Initial or Name^Suffix^Prefix ^Degree^NameType Code^NameRepresentationCode</p> <p>Example: Doe^John^T^II^Mr ^^</p>	<p>NCVHS, “Core Health Data Elements”</p> <p>NCVHS: Name = Last name, first name, middle initial, suffix (e.g., Jr., III, etc.)</p> <p>HIMSS, <i>Patient Identity Integrity</i></p>
First Name	Primary	<p>Legal first name</p> <ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 • Special characters: hyphen (-) and space character 		<p>CAQH, <i>Core 258: Eligibility and Benefits 270/271 Normalizing Patient Last Name Rule Version 2.1.0</i></p> <p>ASC X12 Basic Character Set</p>

Middle Name	Primary	<p>Full legal middle name</p> <ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 • Special characters: hyphen (-) and space character 		<p>CAQH, <i>Core 258: Eligibility and Benefits 270/271 Normalizing Patient Last Name Rule Version 2.1.0</i></p> <p>ASC X12 Basic Character Set</p> <p>NCVHS, “Core Health Data Elements”</p>
Last Name	Primary	<p>Legal last name</p> <ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 • Special characters: hyphen (-) and space character 		<p>CAQH, <i>Core 258: Eligibility and Benefits 270/271 Normalizing Patient Last Name Rule Version 2.1.0</i></p> <p>ASC X12 Basic Character Set</p>
Prefix	Secondary	<p>Separate data entry field, all uppercase letters; do not include as a portion of last name.</p> <ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 • Special characters: hyphen (-) and space character <p>Use lookup entries, no free text.</p>		<p>CAQH, <i>Core 258: Eligibility and Benefits 270/271 Normalizing Patient Last Name Rule Version 2.1.0</i></p> <p>ASC X12 Basic Character Set</p> <p>HIMSS, <i>Patient Identity Integrity</i></p>
Suffix	Primary	<p>Separate data entry field, all uppercase letters; do not include as a portion of last name.</p> <ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 • Special characters: comma (,), hyphen (-), period (.), and space character <p>Use lookup entries, no</p>		<p>CAQH, <i>Core 258: Eligibility and Benefits 270/271 Normalizing Patient Last Name Rule Version 2.1.0</i></p> <p>ASC X12 Basic Character Set</p> <p>HIMSS, <i>Patient Identity Integrity</i></p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p>

		free text.		
Date of Birth	Primary	Capture month by selection, displaying the complete name of month as best practice. best practice. Use lookup selection entries, no free text.	HL7, version 2.6 PID-7, Length 26, Data type: Time Stamp YYYYMMDD (hhmmss)	ONC, <i>Patient Identification and Matching Final Report</i> NCVHS, Core Health Data Set, Uniform Hospital Discharge Data Set NCVHS, Core Health Data Set, Uniform Ambulatory Care Data Set HIMSS, <i>Patient Identity Integrity</i>
Date and Time of Death	Secondary	Capture month by selection, displaying the complete name of month as best practice. Use lookup selection entries, no free text.	HL7, version 2.6 PID-29, Length 26, Data type: Time Stamp UHDDS: YYYYMMDD	Department of Veterans Affairs, <i>Master Patient Index Patient Demographics (MPI/PD) User Manual</i>
Birth Place	Secondary	City State (2-letter authorized state abbreviation) Or Country of birth Use lookup selection entries, no free text.	HL7, version 2.6 PID-23, Length 60, Data type: String Maximum length of 250 characters	USPS, “Complete Address Definition” HIMSS, <i>Patient Identity Integrity</i> ONC, <i>Patient Identification and Matching Final Report</i>
Multiple Birth	Secondary	Y = Yes N = No U = Unknown	HL7, version 2.6 PID-24, Length 2, Data type: coded values	Identification of multiple-birth persons
Birth Order	Secondary	Digits from 0 to 9	HL7, version 2.6 PID-25, Length 2, Data type: Numeric	ASC X12 Basic Character Set Allows identification of multiple birth persons
Sex/Gender	Primary	M = Male F = Female U = Unknown	HL7, version 2.6 PID-8, Length 1, Data type: coded value Format: Identifier^Text^CodingSystem^Alternat	Uniform Hospital Discharge Data Set Uniform Ambulatory Care Data Set Stage 1 Meaningful Use demographics “gender”; Stage

			<p>eIdentifier^AlternateText^NameOfAlternateCodingSystem</p> <p>Example: M^Male^0001</p>	<p>2 Meaningful Use demographics “sex”</p>
Race	Primary	<ul style="list-style-type: none"> • American Indian or Alaskan Native • Asian • Black or African American • Native Hawaiian or Other Pacific Islander • White • Declined • Unknown 	<p>HL7, version 2.6 PID-10, Length 1, Data type: coded element</p> <p>Format: Identifier^Text^CodingSystem^AlternateIdentifier^AlternateText^NameOfAlternateCodingSystem</p> <p>Example: 2131-1^Other Race^HL70005</p>	<p>NCVHS, Core Health Data Set, Uniform Hospital Discharge Data Set</p> <p>NCVHS, Core Health Data Set, Uniform Ambulatory Care Data Set</p> <p>OMB, “Revisions to the Standards for Classification of Federal Data on Race and Ethnicity”</p> <p>American Indian or Alaska Native: A person having origins in any of the original peoples of North and South America (including Central America) who maintains that tribal affiliation or community attachment</p> <p>Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent; examples include Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam</p> <p>Black or African American: A person having origins in any of the black racial groups of Africa</p> <p>Native Hawaiian or Other Pacific Islander: A person having origins in any of the</p>

				<p>original peoples of Hawaii, Guam, Samoa, or other Pacific Islands</p> <p>White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa</p>
Ethnicity	Primary	<p>H= Hispanic origin N = Not of Hispanic origin U = Unknown</p>	<p>HL7, version 2.6 PID- 22, Length 3, Data type: coded element</p> <p>Format: Identifier^Text^CodingSystem^AlternateIdentifier^AlternateText^NameOfAlternateCodingSystem</p> <p>Example: U^Unknown^0189</p>	<p>Uniform Hospital Discharge Data Set</p> <p>OMB, “Revisions to the Standards for Classification of Federal Data on Race and Ethnicity”</p> <p>Hispanic or Latino: A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture origin, regardless of race</p>
Marital Status	Secondary	<p>A = Separated D = Divorced M = Married S = Single W = Widowed D = Divorced U = Unknown</p>	<p>HL7, version 2.6 PID-16, Length 1, Data type: coded element</p> <p>Format: Identifier^Text^CodingSystem^AlternateIdentifier^AlternateText^NameOfAlternateCodingSystem</p> <p>Example: M^Married^0002</p>	<p>NCVHS, “Core Health Data Elements”</p> <p>NCVHS:</p> <ol style="list-style-type: none"> 1. Married <p>A person currently married. Classify common law marriage as married.</p> <ul style="list-style-type: none"> • A) living together • B) not living together 2. Never married <p>A person who has never been married or whose only marriages have been annulled.</p> 3. Widowed <p>A person widowed and not remarried.</p> 4. Divorced <p>A person divorced and not remarried.</p> 5. Separated <p>A person legally separated.</p>

				6. Unknown/not stated
Phone Numbers		<ul style="list-style-type: none"> • Digits from 0 to 9 • Special characters: parentheses and space character 	<p>HL7, version 2.6 PID-13, Length 40, Data type: Extended telecom number</p> <p>Format: [(999)] 999-9999 [x99999] [c Any Text]^TelecomUse Code^TelecomEqui pType(ID)^EmailA ddress^CountryCod e^Area/CityCode^P honeNumber^Exten sion^AnyText</p> <p>Example: (214)111- 1234^CP^^^214^11 11234</p>	ASC X12 Basic Character Set
Primary phone number	Primary	<p>Category list for type of phone:</p> <ul style="list-style-type: none"> • Nonmobile • Mobile • No phone 		ONC, <i>Patient Identification and Matching Final Report</i>
Secondary phone number	Secondary	<p>Category list for type of phone:</p> <ul style="list-style-type: none"> • Nonmobile • Mobile • No phone 		ONC, <i>Patient Identification and Matching Final Report</i>
Tertiary phone number	Secondary	<p>Category list for type of phone:</p> <ul style="list-style-type: none"> • Nonmobile • Mobile • No phone 		ONC, <i>Patient Identification and Matching Final Report</i>

Historical phone numbers	Secondary	<p>May enter up to five numbers</p> <ul style="list-style-type: none"> • Digits from 0 to 9 <p>Special characters: parentheses and space character</p>	<p>HL7, version 2.6 PID-13, Length 40, Data type: Extended telecom number</p> <p>Format: [(999)] 999-9999 [x99999] [c Any Text]^TelecomUse Code^TelecomEquipType(ID)^EmailAddress^CountryCode^Area/CityCode^PhoneNumber^Extension^AnyText</p> <p>Example: (214)111-1234^CP^^^214^111234</p>	<p>ONC, <i>Patient Identification and Matching Final Report</i></p>
All Previous Last Names	Primary	<p>Separate data entry field that allows multiple entries up to five.</p> <p>Ability to enter “No previous last names”</p> <ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 • Special characters: hyphen (-) and space character 	<p>HL7, version 2.6 PID Sequence 9, Length 48, Data type: XPN</p>	<p>CAQH, <i>Core 258: Eligibility and Benefits 270/271 Normalizing Patient Last Name Rule Version 2.1.0</i></p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p>
All Previous First Names	Primary	<p>Separate data entry field that allows multiple entries up to five.</p> <p>Ability to enter “No previous first names”</p>	<p>HL7, version 2.6 PID-9, Length 48, Data type: XPN</p> <p>Format: Family Name^Given Name^Middle Initial or Name^Suffix^Prefix^Degree^NameType Code^NameRepresentationCode</p> <p>Example: Doe^Johnny^T^II^Mr^^</p>	<p>ONC, <i>Patient Identification and Matching Final Report</i></p>

<p>All Previous Nicknames</p>	<p>Secondary</p>	<p>Separate data entry field that allows multiple entries up to five.</p> <p>Ability to enter “No previous first names”</p>	<p>HL7, version 2.6 PID-9, Length 48, Data type: XPN</p> <p>Format: Family Name^Given Name^Middle Initial or Name^Suffix^Prefix ^Degree^NameType Code^NameRepresentationCode</p> <p>Example: Doe^Johnny^T^II^Mr^^</p>	<p>ONC, <i>Patient Identification and Matching Final Report</i></p>
<p>Mother’s Maiden Name</p>	<p>Primary</p>	<p>Legal name</p> <ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 • Special characters: hyphen (-) and space character 	<p>HL7, version 2.6 PID-6 Sequence 19, Length 16, Data type: String</p>	<p>ONC, <i>Patient Identification and Matching Final Report</i></p> <p>Family name under which the mother was born.</p>
<p>Social Security Number</p>	<p>Secondary</p>	<ul style="list-style-type: none"> • Digits from 0 to 9 	<p>HL7, version 2.6 PID-6, Length 48, Data type: String</p> <p>Format: Maximum string of 16 characters</p>	<p>ASC X12 Basic Character Set</p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p> <p>Tricare Provider Handbook: requirement to determine if patient is eligible for benefits.</p> <p>Pseudo–Social Security numbers may be utilized at times when Social Security number is unknown or is not yet available.</p>
<p>Driver’s License Number</p>	<p>Secondary</p>	<ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 	<p>HL7, version 2.6 PID-20, Length 25, Data type: Driver’s License Number</p> <p>Format: DriversLicenseNumber^IssuingStateProvinceOrCountry^ExpirationDate</p>	<p>ASC X12 Basic Character Set</p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p>

			Example: 12345678^TX^2016 0101	
Passport Number	Secondary	<ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 		<p>ASC X12 Basic Character Set</p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p>
Current Address		<ul style="list-style-type: none"> • Uppercase letters from A to Z • Digits from 0 to 9 <p>Separate data entry fields:</p> <p>City</p> <p>State (2-letter authorized abbreviation)</p> <p>Zip code (5-digit or Zip+4)</p> <p>Approved abbreviations: BLVD = Boulevard CTR = Center CIR = Circle CT = Court DR = Drive LN = Lane PL = Place RD = Road SQ = Square ST = Street TER = Terrace TRL = Trail APT = Apartment FL = Floor RM = Room STE = Suite</p>	<p>HL7, version 2.6 PID Sequence 11, Length 106, Data type: Extended Address</p>	<p>ASC X12 Basic Character Set</p> <p>NCVHS, “Core Health Data Elements”</p> <p>USPS, “Complete Address Definition”</p> <p>USPS, “Abbreviations & Standards”</p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p> <p>Library of Congress, ISO 3166-1 alpha-2 for country abbreviations is a Meaningful Use requirement. Examples: Brazil – BR, New Zealand – NZ, and Switzerland – CH.</p>
Current Street Address	Primary	<p>Street number and name of street = Street number and name (including predirectional, suffix, and postdirectional as shown in USPS ZIP+4 Product for the delivery address or rural route and box number (RR 5 BOX</p>		<p>NCVHS, “Core Health Data Elements”</p> <p>USPS, “Complete Address Definition”</p> <p>USPS, “Abbreviations & Standards”</p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p>

		10), highway contract route and box number (HC 4 BOX 45), or post office box number (PO BOX 458), as shown in USPS ZIP+4 Product for the delivery address). (“PO Box” is used incorrectly if preceding a private box number, e.g., a college mailroom.)		
Current	Primary	Secondary address = Secondary address unit designator and number (such as an apartment or suite number, e.g., APT 202, STE 100).		<p>NCVHS, “Core Health Data Elements”</p> <p>USPS, “Complete Address Definition”</p> <p>USPS, “Abbreviations & Standards”</p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p>
Current City	Primary	Use of lookup selection entries, no free text.		<p>HIMSS, <i>Patient Identity Integrity</i></p> <p>NCVHS, “Core Health Data Elements”</p> <p>USPS, “Complete Address Definition”</p> <p>USPS, “Abbreviations & Standards”</p> <p>ONC, <i>Patient Identification and Matching Final Report</i></p>
Current State	Primary	Use of lookup selection entries, no free text.		<p>HIMSS, <i>Patient Identity Integrity</i></p> <p>NCVHS, “Core Health Data Elements”</p> <p>USPS, “Complete Address Definition”</p> <p>USPS, “Abbreviations &</p>

				Standards” <i>ONC, Patient Identification and Matching Final Report</i>
Current Country	Primary	Use of lookup selection entries, no free text.	HL7, version 2.6 PID Sequence 12, Length 4, Data type: Coded value for user defined table	ISO 3166-1 alpha-2 codes <i>HIMSS, Patient Identity Integrity</i> NCVHS, “Core Health Data Elements” USPS, “Complete Address Definition” USPS, “Abbreviations & Standards” <i>ONC, Patient Identification and Matching Final Report</i>
Historical Addresses	Secondary	Street number and name of street = Street number and name (including predirectional, suffix, and postdirectional as shown in USPS ZIP+4 Product for the delivery address or rural route and box number (RR 5 BOX 10), highway contract route and box number (HC 4 BOX 45), or post office box number (PO BOX 458), as shown in USPS ZIP+4 Product for the delivery address). (“PO Box” is used incorrectly if preceding a private box number, e.g., a college mailroom.)		<i>ONC, Patient Identification and Matching Final Report</i>
E-mail Address	Secondary	<ul style="list-style-type: none"> • Primary • Secondary • Tertiary 		<i>ONC, Patient Identification and Matching Final Report</i>

Biometrics	Secondary	<ul style="list-style-type: none">• Eye color• Handprint• Fingerprint• Cornea scan• Footprint		<p>ONC, <i>Patient Identification and Matching Final Report</i></p> <p>Data gathered from driver's license and passport—government-issued documents.</p> <p>This area is growing and changing as technology evolves.</p>
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