

# Orion Health ADT Implementation Guide

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# **Orion Health ADT Implementation Guide**

# **Revision Summary**

<b>Document Version</b>	Date	Nature of Amendment		
1.0	September 25, 2014	First release.		



# **About the Orion Health ADT Implementation Guide**

## **Purpose of this Implementation Guide**

This document provides the technical specifications required to implement ADT messaging for a participant hospital connecting to a Orion Health HIE. It details Orion Health specific requirements and is based on HL7 version 2.5.1 ADT messages entering an Orion Health HIE configured with:

- Orion Health CDR 8.14
- EMPI
- Standard Orion Health CDR6 extensions
- Standard Orion Health codeset configuration.

This document assumes that the structure and content of all inbound messages conform to general HL7 2.5.1 message specifications. It does not reiterate the general HL7 standards for ADT messages, segments and components, but it specifies any differing and/or additional requirements for Orion Health HIEs. For more information about HL7 standards, refer to www.hl7.org.

Some Orion Health HIEs may vary from this specification in their use of codesets and, in some cases, message structure requirements. Orion Health HIE participants should consult the project team for the specific HIE to confirm any deviations from this specification.

#### **Intended Audience**

This document is intended for use by HIE participant technical staff and EMR/EHR vendors seeking to connect to Orion Health HIEs, as well as for internal Orion Health HIE Implementation and on-boarding teams. Readers are expected to have a thorough background understanding of HL7 2.x messages, segments, and components.

The following table shows how each reader category would use this document:

Reader Category	Intended Usage
HIE Participant Technical	Configure participant systems so that outbound ADT messaging to an Orion Health HIE matches this specification.
EMR/EHR Vendors	Configure and/or document EMR/EHR configuration requirements to meet Orion Health specifications.
Orion Health HIE Implementation	Implement standard message definitions, CDR, EMPI, codesets and configuration to support this message specification.
Orion Health HIE On-boarding	Validate inbound messages against this standard, identify exceptions. Understand destination requirements for custom mapping, if required.



# **Handling Of ADT Information In Orion Health HIEs**

ADT messages are processed by the following subsystems in the Orion Health HIE:

- Orion Health Clinical Data Repository (CDR 8.14)
- EMPI
- Relationships Store
- Facilities and Locations Store
- Orion Health CDR6 Additional Data Models (Insurance)

In addition to the storage of ADT message content in these subsystems, ADT messages are used to convey information about the state of patient encounters, and to trigger events such as notifications to clinicians in the patient's circle of care.

## **ADT Message Types Processed**

The following table outlines the types of ADT Messages that are processed by an Orion Health HIE. Other ADT message types are not supported. This table also indicates the following health domains and sub-systems that process the ADT messages in the Orion Health HIE:

- EMPI = Enterprise Master Patient Index & Demographics
- ENC = Encounters (CDR8)
- DIAG = Diagnoses (CDR8)
- ALL = Allergies (CDR8)
- PROC = Procedures (CDR8)
- PROV = Provider Register (CDR8)
- REL = Relationship Store (Notifications)
- FAC = Facility and Location Store
- INS = Insurance Model (CDR6).



ADT Message Type	Processed By								
	EMPI	ENC	DIAG	ALL	PROC	PROV	REL	FAC	INS
A01 ADMIT/VISIT NOTIFICATION		<b>~</b>	<b>~</b>	$\overline{\mathbf{Z}}$			<b>~</b>	<b>~</b>	<b>~</b>
A02 TRANSFER A PATIENT	X	<b>~</b>	X	X	X	<b>~</b>	<b>~</b>	<b>~</b>	X
A03 DISCHARGE/END VISIT	X	~	<b>~</b>	X	<b>~</b>	X	~	<b>~</b>	X
A04 REGISTER A PATIENT	~	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	~
A05 PRE-ADMIT A PATIENT	~	~	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	<b>~</b>
A06 CHANGE OUTPATIENT TO INPATIENT	X	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>
A07 CHANGE INPATIENT TO OUTPATIENT	X	~	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	~
A08 UPDATE PATIENT INFORMATION	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	<b>~</b>
A11 CANCEL ADMIT / VISIT NOTIFICATION	X	<b>~</b>	<b>~</b>	X	X	<b>~</b>	<b>~</b>	<b>~</b>	X
A12 CANCEL TRANSFER	X	<b>~</b>	<b>~</b>	X	X	<b>~</b>	X	<b>~</b>	X
A13 CANCEL DISCHARGE / END VISIT	X	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	X	<b>~</b>	<b>~</b>
A28 ADD PERSON OR PATIENT INFORMATION	<b>~</b>	X	X	<b>~</b>	X	<b>~</b>	X	X	X
A31 UPDATE PERSON INFORMATION	<b>~</b>	X	X	<b>~</b>	X	<b>~</b>	X	X	X
A37 UNLINK PATIENT INFORMATION		X	X	X	X	X	X	X	X
A38 CANCEL PRE-ADMIT	X	<b>~</b>	<b>~</b>	X	X	<b>~</b>	X	<b>~</b>	X
A40 MERGE PATIENT ID LIST	<b>~</b>	X	X	X	X	X	X	X	X
A45 MOVE VISIT INFORMATION	X	<b>~</b>	<b>~</b>	X	<b>~</b>	X	X	X	X
A50 CHANGE VISIT NUMBER	X	<b>~</b>	<b>~</b>	X	<b>~</b>	X	X	X	X

Processes this ADT message typeCannot process this particular ADT message type





If you use the following message types, please confirm with the Orion Health project team that the functionality meets your requirements:

- A37 UNLINK PATIENT INFORMATION
- A45 MOVE VISIT INFORMATION
- A50 CHANGE VISIT NUMBER

## **Use of UniversalID for Distinguishing Identifiers**

Unless otherwise specified, information conveyed in HL7 HD field components (such as MSH 4 SendingFacility) must be in the **UniversalID** sub-field (such as MSH 4.2). The **NamespaceID** sub-field will normally be ignored.

Orion Health HIEs use a combination of the **IDNumber** and the **AssigningAuthority.UniversalID** sub-fields to resolve:

- Patient Identifiers
- VisitNumber and Account Identifiers (CX component type)
- Provider/Clinician Identifiers (XCN component type).

For CX-type and XCN-type HL7 fields, **IDNumber** values must uniquely distinguish the patient or provider within the context of the distinguishing "namespace" defined by the participant and specified in the **AssigningAuthority.UniversalID**.

Typically, a facility or HIE participant would use one **UniversalID** value to uniquely distinguish patient Ids (MRNs) and other CX-type fields in the HIE context. They would use another **UniversalID** value to distinguish facilities or clinicians in XCN-type fields.

For example, ABCD Hospital might use ABCD as a **UniversalID** to distinguish patients who belong to this hospital. This value would be typically be populated in the following fields:

- MSH 4.2 SendingFacility.UniversalID Identifies the message source.
- PID 3.4.2 Distinguishes the patient ID or MRNs values as belonging to this hospital.
- PV1 19.4.2 Distinguishes the encounter number as belonging to this hospital.

The same hospital might use ABCD-PV to distinguish referenced clinician providers as belonging to this hospital. This value would typically be populated in the **AssigningAuthority.UniversallD** sub-fields of XCN-type fields, such as **PV1-7 AttendingDoctor**, **PV1-8 ReferringDoctor**, and **PV1-9 ConsultingDoctor**.

The **UniversalID** values are critical in distinguishing patients and clinical information from one facility to another. The use of specific values for a participant or facility must be arranged with the Orion Health project team to ensure that these values do not conflict with those already used by other facilities.

The vendor and/or participant are responsible for ensuring that identifiers in the same **UniversalID** space uniquely refer to a single entity.



# **How to Read the Segment Specification Tables**

The document sections for each of the segments may be further broken down into the following sections:

- **Processing Notes** section Contains information specific to the processing of a particular field(s) or its/their sub-fields.
- Processing Details section Contains further details about the processing of the fields or their sub-fields.
   The processing details is outlined in a table format. You can find the following information in each of the columns in the table:

Column	Description
Processed Component	This column describes the HL7 component name and its position in the segment. Any sub-components for a component are also listed.
	Some of the processed components will have the following icons to indicate whether all, or only some, of the sub-fields are processed:
	Repeating values are allowed in this field, and all values are processed.
	Repeating values are allowed, but not all values will be processed.
Required	Indicates whether the component/sub-component is required, processed or ignored.
	<ul> <li>R – This is a required field. This field is essential if the message contains this segment. If this field is not populated, the message will produce an error and its contents will not be processed.</li> </ul>
	<ul> <li>P – This field will be processed, but it is optional and need not be populated. However, in some cases, specific sub-components of the field might be mandatory if any part of the field is populated.</li> </ul>
	<ul> <li>C – This field is required if certain other fields are present.</li> <li>I – This field and its contents will be ignored.</li> </ul>
Field Size	Maximum size (in bytes) of each of the sub-components specified in the <b>Processed Components</b> column. If no sub-components are specified, this value indicates the maximum size of the field.
Codeset	Specifies the name of any codeset that is used for the component.



# **ADT Specifications by Segment**

This section outlines the segment and field processing requirements for ADT messages being sent to an Orion Health HIE. It is assumed that the structure and elements of the message conform with the HL7 2.5.1 message standards, unless otherwise stated.

Messages containing additional segment types that are not defined in this section will still be accepted by the Orion Health HIE as long as the order and structure of these additional segments conform to HL7 2.x standards. However, only data from the fields and segments listed in this section will be processed and/or stored in the HIE.

Segments described in this section are listed in the following table:

Se	gment	Required	Can Repeat	Note
MS	SH	R	N	
EV	'N	R	N	Event information
PI	)	R	N	Patient Identification
	PD1	0	N	
	NK1	0	Υ	Refer to segment processing for repeating segment details
	PV1	R	N	Patient visit information is required in all ADT message types except for ADT A28 and A31
	PV2	0	N	
	AL1	0	Υ	
	DG1	0	Υ	
	PR1	0	Υ	
	IN1	0	N	Requires HIE Insurance Module implementation
	IN2	0	N	Requires HIE Insurance Module implementation



# **MSH Segment**

The Message Header (MSH) segment is a required first segment in all ADT messages.

Processed Component		d Component	Data Type	Required	Field Size	Codeset
MSH-1		Field Separator		1		
MSF	H-2	Encoding Characters		I		
MSH	1-3	Sending Application	HD	R	227	
	1	Namespace ID		I		
	2	Universal ID	ST	R	199	
	3	Universal ID Type		1		
MSH	l-4	Sending Facility	HD	R	227	
	1	Namespace ID		I		
	2	Universal ID	ST	R	199	
	3	Universal ID Type		I		
MSH	l-5	Receiving Application	HD	R	227	
	1	Namespace ID		I		
	2	Universal ID	ST	R	199	
	3	Universal ID Type		I		
MSF	H-6	Receiving Facility		1		
MSH	I-7	Date/Time Of Message	TS	R	26	
MSH	H-8	Security		I		
MSH	<del>1</del> -9	Message Type	MSG	R	6	
	1	Message Type	ID	R	3	
	2	Trigger Event	ID	R	3	
	3	Message Structure		1		
MSH	<del>1</del> -10	Message Control ID	ST	R	20	
MSF	H-11	Processing ID		I		
				1		
MSF	H-21	Message Profile Identifier		I		



# **EVN Segment**

The Event Type (EVN) segment is required in all ADT messages.

Pro	Processe		d Component	Data Type	Required	Field Size	Codeset
EV	EVN-1		Event Type Code		I		
EV	N-2		Recorded Date Time	TS	Р	26	
EV	N-3		Date/Time Planned Event		I		
EV	N-4		Event Reason Code		I		
EV	N-5		Operator ID	XCN	Р	250	
	1		Identifier	ST	R	50	
	2		Family Name		I		
	3		Given Name		I		
	4		Middle Initial Or Name		I		
	5		5 Suffix		I		
	6	6 Prefix			I		
	7		Degree		I		
	8		Source Table		I		
	9		Assigning Authority	HD	R	250	
		1	Namespace ID		I		
		2	Universal ID	ST	R	199	
		3	Universal ID Type		I		
	10		Name Type Code		I		
	11		Identifier Check Digit		I		
	12		Code Identifying The Check Digit Scheme Employed		I		
	13		Identifier Type Code	IS	R	250	
	14		Assigning Facility		I		
	15		Name Representation Code		I		
	16		Name Context		I		



	17	Name Validity Range		1		
	18	Name Assembly Order		I		
EV	/N-6	<b>Event Occurred</b>	TS	Р	26	
EV	/N-7	Event Facility	HD	P	241	
	1	Namespace ID		1		
	2	Universal ID	ST	R	199	
	3	Universal ID Type		I		



# **PID Segment**

The Patient Identification (PID) segment is required in all ADT messages.

Processed Component					Required	Field Size	Codeset
PI	PID-1 Set ID				1		
PI	D-2		Patient ID		I		
PI	PID-3		Patient Identifier List	СХ	R	250	HL7 0203
	1		Identifier	ST	R	50	
	2		Check Digit		1		
	3		Code Identifying The Check Digit Scheme Employed		I		
	4		Assigning Authority	HD	R	227	
		1	Namespace ID		I		
		2	Universal ID	ST	R	199	
		3	Universal ID Type		I		
	5		Identifier Type Code	ID	R	50	
PI	D-4		Alternate Patient ID - PID		1		
PI	D-5		Patient Name	XPN	R	250	
	1		Family Name	FN	R	194	
		1	Surname	ST	R	50	
		2	Own Surname Prefix		1		
		3	Own Surname		1		
		4	Surname Prefix From Partner		I		
		5	Surname From Partner		1		
	2		Given Name	ST	R	30	
	3		Middle Initial Or Name	ST	R	30	
	4		Suffix	ST	R	20	
	5		Prefix	ST	R	20	
	6		Degree	IS	R	6	



	7		Name Type Code	ID	R	1	
PII	D-6		Mother's Maiden Name		I		
PII	PID-7		Date/Time of Birth	TS	R	26	
	1		Time	DTM	R	24	
		1	Year	2 Byte Short	R	4	
		2	Month	2 Byte Short	R	2	
		3	Day	2 Byte Short	R	2	
		4	Hours		I		
		5	Minutes		I		
		6	Seconds		I		
		7	Millis		I		
		8	GMT Offset		I		
	2		Precision		I		
PII	D-8		Administrative Sex	IS	P	1	HL7 0001
PII	D-9		Patient Alias		1		
PII	D-10	)	Race	CE	Р	250	HL7 0005
	1		Identifier	ST	R	20	
	2		Text		I		
	3		Name Of Coding System		1		
	4		Alternate Identifier		I		
	5		Alternate Text		I		
	6		Name Of Alternate Coding System		I		
PII	<b>D-1</b> 1	I	Patient Address	XAD	P	250	
	1		Street Address	SAD	Р	184	
		1	Street Or Mailing Address	ST	Р	120	



		2	Street Name	ST	Р	50	
		3	Dwelling Number	ST	Р	12	
	2		Other Designation		1		
	3		City	ST	Р	50	
	4		State Or Province	ST	Р	50	
	5		Zip Or Postal Code	ST	Р	12	
	6		Country	ID	Р	3	
	7		Address Type		I		
	8		Other Geographic Designation		I		
	9		County Parish Code	IS	Р	20	
	10		Census Tract		I		
	11		Address Representation Code		I		
	12		Adress Validity Range		1		
PII	D-12	-	Country Code		I		
PII	D-13	3	Phone Number - Home	XTN	P	250	
	1		Phone Number String	ST	Р	20	
	2		Telecommunication Use Code		I		
	3		Telecommunication Equipment Type		I		
	4		Email Address		1		
	5		Country Code		I		
	6		Area Or City Code		I		
	7		Phone Number		I		
	8		Extension		I		
	9		Any Text		I		
	10		Extension Prefix		I		
	11		Speed Dial Code		I		
	12		Unformatted Telephone Number		I		
PII	D-14	l	Phone Number - Busines	XTN	Р	250	



1		Phone Number String	ST	Р	20	
2		Telecommunication Use Code		I		
3		Telecommunication Equipment Type		I		
4		Email Address		I		
5		Country Code		I		
6	;	Area Or City Code		I		
7		Phone Number		I		
8		Extension		I		
9		Any Text		I		
1	0	Extension Prefix		I		
1	1	Speed Dial Code		I		
1:	2	Unformatted Telephone Number		I		
PID-1	15	Primary Language	CE	Р	250	ISO 639
1		Identifier	ST	Р	8	
2		Text	ST	I		
3	}	Name Of Coding System	IS	I		
4		Alternate Identifier	ST	I		
5		Alternate Text	ST	I		
6		Name Of Alternate Coding System	IS	1		
PID-1	16	Marital Status	CE	Р	250	HL7 0002
1		Identifier	ST	Р	8	
2		Text	ST	I		
3	}	Name Of Coding System	IS	I		
4		Alternate Identifier	ST	I		
5		Alternate Text	ST	I		
6		Name Of Alternate Coding System	IS	I		
PID-1	17	Religion	CE	Р	250	
1		Identifier	ST	Р	20	



	6	Name Of Alternate Coding System				
	5	Alternate Text		1		
	4	Alternate Identfier		I		
	3	Name Of Coding System		I		
	2	Text		I		
					0	
	1	Identifier	ST	Р	8	
PII	D-26	Citizenship	CE	P	250	HL7 0171 use 3 letter codeset as in HL7 0399
PII	D-25	Birth Order		I		
PII	D-24	Multiple Birth Indicator		I		
PII	D-23	Birth Place		I		
	6	Name Of Alternate Coding System		I		
	5	Alternate Text		I		
	4	Alternate Identifier		I		
	3	Name Of Coding System		I		
	2	Text		I		
	1	Identifier	ST	Р	8	
PII	D-22	Ethnic Group	CE	P	250	HL7 0189
PII	D-21	Mother's Identifier		I		
PII	D-20	Driver's License Number - Patient		I		
PII	D-19	SSN Number - Patient	ST	Р	16	
PII	D-18	Patient Account Number		I		
	6	Name Of Alternate Coding System		I		
	5	Alternate Text		1		
	4	Alternate Identifier		I		
	3	Name Of Coding System		I		
	2	Text		I		



PID-27	Veterans Military Status	CE	Р	250	
1	Identifier	ST	Р	8	
2	Text		I		
3	Name Of Coding System		I		
4	Alternate Identfier		I		
5	Alternate Text		I		
6	Name Of Alternate Coding System		I		
PID-28	Nationality	CE	P	250	HL7 0212 use 3 letter codeset as in HL7 0399
1	Identifier	ST	Р	8	
2	Text		I		
3	Name Of Coding System		I		
4	Alternate Identfier		I		
5	Alternate Text		I		
6	Name Of Alternate Coding System		I		
PID-29	Patient Death Date and Time	TS	P	26	
PID-30	Patient Death Indicator	ID	P	1	HL7 0136
PID-31			I		
			I		



# **PD1 Segment**

The Patient Additional Demographic (PD1) segment is optional in ADT messages.

## **Processing Notes**

#### **PD1-3 Patient Primary Facility**

Only the first value in OrganizationName is processed. IDNumber is processed by EMPI, Providers Store.

Pr	oce	sse	d Component	Data Type	Required	Field Size	Codeset
PE	)1-1		Living Dependency		I		
PD	)1-2		Living Arrangement		I		
PE	01-3		Patient Primary Facility	XON	P	250	
	1		Organization Name	ST	Р	100	
	2		Organization Name Type Code		I		
	3		ID Number	NM	Р	4	
	4		Check Digit		I		
	5		Code Identifying The Check Digit Scheme Employed		I		
	6		Assigning Authority	HD	Р	227	
		1	Namespace ID		I		
		2	Universal ID	ST	Р	199	
		3	Universal ID Type		I		
	7		Identifier Type Code		I		
	8		Assigning Facility ID		I		
	9		Name Representation Code		I		
PE	01-4		Patient Primary Care Provider Name & ID Number	XCN	P	250	
	1		ID Number	ST	R	50	
	2		Family Name	FN	Р	100	
		1	Surname	ST	Р	50	



		2	Own Surname Prefix		I		
		3	Own Surname		I		
		4	Surname Prefix From Partner		1		
		5	Surname From Partner		I		
	3		Given Name	ST	Р	100	
	4		Middle Initial Or Name	ST	Р	100	
	5		Suffix	ST	Р	20	
	6		Prefix	ST	Р	20	
	7		Degree		I		
	8		Source Table		I		
	9		Assigning Authority	HD	R	250	
		1	Namespace ID		I		
		2	Universal ID	ST	R		
		3	Universal ID Type		I		
	10		Name Type Code		I		
	11		Identifier Check Digit		I		
	12		Code Identifying The Check Digit Scheme Employed		I		
	13		Identifier Type Code		I		
	14		Assigning Facility		I		
	15		Name Representation Code		I		
	16		Name Context		I		
	17		Name Validity Range		I		
	18		Name Assembly Order		I		
PE	01-5		Student Indicator		I		
					I		
PE	01-1	1	Publicity Code		I		
P	<b>D1-1</b>	2	Protection Indicator	ID	P	1	
PE	01-1	3	Protection Indicator Effective Date		I		
					I		
PE	01-2	1	Military Status		I		





## **NK1 Segment**

The Next of Kin / Associated Parties (NK1) segment is optional in ADT messages. Multiple NK1 segments may be included in an ADT message, but only one NK1 segment is processed by the Orion Health HIE. This segment is used to store a patient's emergency contact information.

To identify the NK1 segment to use for emergency contact, NK1 segments are scanned sequentially to check the values of **NK1-3.1 Relationship** and **NK1-7.1 ContactRole**. The first segment with NK1-3.1 = EMC or NK1-7.1 = C is selected as the Emergency Contact, and the name and relationship are stored. If this process does not identify a specific Emergency Contact segment, the first NK1 segment is used by default.

#### **Processing Notes**

#### NK1-2 Name

Only the first name is stored.

#### NK1-3 Relationship

Extended codeset to support additional values.

#### **NK1-5 Phone Number**

Only the first phone number is stored.

#### **NK1-7 Contact Role**

Determines which NK1 segment is stored as an emergency contact. If no NK1 is specified with value "C" (for emergency contact role), then the first NK1 is selected by default.

Pro	Processed Component			Required	Field Size	Codeset
NK	1-1	Set ID	SI	R	4	
NK	1-2	Name	XPN	R	250	
	1	Family Name	FN	R	32	
	2	Given Name	ST	R	32	
	3	Middle Initial Or Name	ST	R	32	
	4	Suffix		1		
	5	Prefix		1		
	6	Degree		1		
	7	Name Type Code		I		
	8	Name Representation Code		I		



	9	Name Context		I		
	10	Name Validity Range		I		
	11	Name Assembly Order		I		
NK	1-3	Relationship	CE	R	250	HL7 0063
	1	Identifier	ST	R	20	
	2	Text		I		
	3	Name Of Coding System		I		
	4	Alternate Identifier		I		
	5	Alternate Text		I		
	6	Name Of Alternate Coding System		I		
NK	1-4	Address		I		
NK	1-5	Phone Number	XTN	Р	250	
NK	1-6	Business Phone Number		I		
NK	1-7	Contact Role	CE	Р	250	
	1	Identifier	ST	Р	20	
	2	Text		I		
	3	Name Of Coding System		I		
	4	Alternate Identifier		I		
	5	Alternate Text		I		
	6	Name Of Alternate Coding System		I		
NK	1-8	Start Date		I		
				1		



# **PV1 Segment**

The Patient Visit (PV1) segment is required in all supported ADT message types, except for ADT A28 and ADT A31 messages where it is optional.

## **Processing Notes**

#### **PV1-2 Patient Class**

Patient Class as follows:

- E = EMERGENCY
- I = INPATIENT
- O = OUTPATIENT
- P = PREADMIT
- R = RECURRING\_PATIENT
- B = OBSTETRICS
- C = COMMERCIAL\_ACCOUNT
- N = NOT APPLICABLE
- U = UNKNOWN (UNKNOWN is used for any Patient Class that does not match one of these values)

#### **PV1-7 Attending Doctor**

Only information in the first entry is processed.

#### **PV1-8 Referring Doctor**

Only information in the first entry is processed.

## **PV1-9 Consulting Doctor**

Only information in the first entry is processed.

## **PV1-10 Hospital Service**

Displayed in portal windowlet as Encounter Speciality \*Extended HL7 codeset table. Refer to HL7 0069 Hospital Service.

#### **PV1-14 Admit Source**

Extended HL7 codeset table. Refer to HL7 0023 Admit Source.

#### **PV1-19 Visit Number**

This value is used by CDR to link all encounter-related information. The source system must provide this value to uniquely identify the encounter, and consistently refer to it in subsequent messages (such as Updates or Cancels).

Processed Component	Data Type	Required	Field Size	Codeset
---------------------	--------------	----------	---------------	---------



PV	PV1-1		Set ID		1		
PV	/1-2		Patient Class	IS	R	50	HL7 0004
P۷	/1-3		Assigned Patient Location	PL	P	80	
	1		Point Of Care	IS	Р	20	
	2		Room	IS	Р	20	
	3		Bed	IS	Р	20	
	4		Facility	HD	Р	227	
		1	Namespace ID		I		
		2	Universal ID	ST	Р	199	
		3	Universal ID Type		I		
	5 6 7		Location Status		1		
			Patient Location Type		1		
			Building	IS	Р	20	
	8		Floor	IS	Р	20	
	9		Location Description	ST	Р	199	
PV	/1-4		Admission Type		1		
P۷	/1-5		Preadmit Number	СХ	P	250	
	1		ID Number	ST	Р	15	
	2		Check Digit		I		
	3		Code Identifying The Check Digit Scheme Employed		I		
	4		Assigning Authority	HD	Р	227	
		1	Namespace ID		I		
		2	Universal ID	ST	Р	199	
		3	Universal ID Type		I		
	5		Identifier Type Code	ID	Р	5	
	6		Assigning Facility		I		
	7		Effective Date		I		
	8		Expiration Date		I		
PV	/1-6		Prior Patient Location		1		
P۷	/1-7		Attending Doctor	XCN	Р		



	1		ID Number	ST	R	50	
	2		Family Name	FN	Р	100	
		1	Surname	ST	Р		
		2	Own Surname Prefix		I		
		3	Own Surname		I		
		4	Surname Prefix From Partner		1		
		5	Surname From Partner		1		
	3		Given Name	ST	Р	100	
	4		Middle Initial Or Name	ST	P	100	
	5		Suffix	ST	Р	20	
	6		Prefix	ST	Р	20	
	7		Degree		I		
	9		Source Table		I		
			Assigning Authority	HD	R	250	
		1	Namespace ID		I		
		2	Universal ID	ST	R	199	
		3	Universal ID Type		I		
	10		Name Type Code		I		
	11		Identifier Check Digit		I		
	12		Code Identifying The Check Digit Scheme Employed		I		
	13		Identifier Type Code	IS	Р	50	
	14		Assigning Facility		I		
	15		Name Representation Code		I		
	16		Name Context		I		
	17		Name Validity Range		I		
	18		Name Assembly Order		I		
PV	/1-8		Referring Doctor	XCN	Р	250	
	1		ID Number	ST	R	50	
	2		Family Name	FN	Р	100	
		1	Surname	ST	Р	50	
		2	Own Surname Prefix		I		



		3	Own Surname		1		
		4	Surname Prefix From Partner		1		
		5	Surname From Partner		I		
	3		Given Name	ST	Р	100	
	4		Middle Initial Or Name	ST	Р	100	
	5		Suffix	ST	Р	20	
	6		Prefix	ST	Р	20	
	7 8 9		Degree		I		
			Source Table		I		
			Assigning Authority	HD	R	250	
		1	Namespace ID		I		
		2	Universal ID	ST	R	199	
	3		Universal ID Type		I		
	10		Name Type Code		I		
			Identifier Check Digit		I		
	12		Code Identifying The Check Digit Scheme Employed		I		
	13		Identifier Type Code	IS	Р	250	
	14		Assigning Facility		I		
	15		Name Representation Code		I		
	16		Name Context		I		
	17		Name Validity Range		I		
	18		Name Assembly Order		I		
PV1	I <b>-9</b>		Consulting Doctor	XCN	Р	250	
	1		ID Number	ST	Р	50	
	2		Family Name	FN	Р	100	
		1	Surname	ST	Р	50	
		2	Own Surname Prefix		I		
		3	Own Surname		I		
		4	Surname Prefix From Partner		I		
		5	Surname From Partner		I		
	3		Given Name	ST	Р	100	



	4	Middle Initial Or Name	ST	Р	100	
	5	Suffix	ST	Р	20	
	6	Prefix	ST	Р	20	
	7	Degree		1		
	8	Source Table		1		
	9	Assigning Authority	HD	Р	250	
	10	Name Type Code		1		
	11	Identifier Check Digit		1		
	12	Code Identifying The Check Digit Scheme Employed		I		
	13	Identifier Type Code	IS	Р	250	
	14	Assigning Facility		I		
	15	Name Representation Code		1		
	16	Name Context		1		
	17	Name Validity Range		I		
	18	Name Assembly Order		1		
PV <sup>′</sup>	1-10	Hospital Service	IS	P	50	HL7 0069
PV'	1-11	Temporary Location		I		
PV'	1-12	Preadmit Test Indicator		I		
PV	1-13	Re-admission Indicator		I		
PV <sup>′</sup>	1-14	Admit Source	IS	Р	50	HL7 0023
PV	1-15	Ambulatory Status		I		
PV'	1-16	VIP Indicator		I		
PV'	1-17	Admitting Doctor		I		
PV'	1-18	Patient Type		I		
PV'	1-19	Visit Number	СХ	R	250	
	1	ID Number	ST	R	50	
	2	Check Digit		I		



	3		Code Identifying The Check Digit Scheme Employed		I		
	4		Assigning Authority	HD	R	250	
	5		Identifier Type Code	ID	R	5	
	6		Assigning Facility	HD	R	227	
		1	Namespace ID		1		
		2	Universal ID	ST	R	199	
		3	UniversalID Type		1		
	7		Effective Date		1		
	8		Expiration Date		I		
PV	/1-20	0	Financial Class		I		
					I		
PV	/1-3	5	Delete Account Date		I		
PV	/1-30	6	Discharge Disposition	IS	Р	50	HL7 0112
PV	PV1-37		Discharged to Location	DLD	Р	50	
	1		Discharge Location	IS	Р	20	
	2		Effective Date	TS	Р	26	
PV	/1-38	8	Diet Type		I		
					I		
PV	/1-4:	3	Prior Temporary Location		I		
PV	/1-4	4	Admit Date/Time	TS	Р	26	
PV	PV1-45		Discharge Date/Time	тѕ	P	26	
PV	/1-40	6	Current Patient Balance		I		
					1		
PV	/1-52	2	Other Healthcare Provider		1		



# **PV2 Segment**

The Patient Visit - Additional Information (PV2) segment is optional in ADT messages. When it is present, it must always succeed and be accompanied by a PV1 segment.

## **Processing Notes**

#### **PV2-3 Admit Reason**

This value should be coded using a recognized health language, such as ICD-10. Local (site-specific or vendor-specific) coding systems may be used for the alternate values.

If only a free text value is available, it should be populated in AltText and all other values left blank.

#### **PV2-8 Expected Admit Date Time**

As defined in the HL7 specification for TS components.

#### **PV2-9 Expected Discharge Date Time**

As defined in the HL7 specification for TS components.



Pro	cess	ed Components	Data Type	Required	Field Size	Codeset
PV2	2-1	Prior Pending Location		I		
PV2	2-2	Accommodation Code		I		
PV	2-3	Admit Reason	CE	P	250	
	1	Identifier	ST	R	50	
	2	Text	ST	Р	2000	
	3	Name Of Coding System	IS	R	100	
	4	Alternate Identifier	ST	Р	50	
	5	Alternate Text	ST	Р	2000	
	6	Name Of Alternate Coding System	IS	Р	100	
PV2	2-4	Transfer Reason		I		
PV2	2-5	Transfer Reason		I		
PV2	2-6	Patient Valuables Location		I		
PV2	2-7	Visit User Code		I		
PV	2-8	Expected Admit Date/Time	TS	P	26	
PV	2-9	Expected Discharge Date/Time	TS	Р	26	
PV	2-10	Estimated Length of Inpatient Stay	NM	Р	3	
PV	2-11	Actual Length of Inpatient Stay	NM	P	3	
PV	2-12	Visit Description	ST	P	400	
PV2-13		Referral Source Code		I		
				I		
PV2	2-49	Notify Clergy Code		1		



# **AL1 Segment**

The Patient Allergy Information (AL1) segment is optional in ADT messages. Multiple AL1 segments may be present in a single message.

## **Processing Notes**

#### **AL1-2 Allergy Type**

If Allergy Type is not present, AllergyType.Code is defaulted to UNKNOWN, and AllergyType.CodingSystem to ORION.

## **AL1-3 Allergy Code Mnemonic Description**

For 'Identifier' – Where possible use SNOMED code or other standardized terminology; Text – If only a free text value is available, it should be populated in AltText and all other values left blank.

#### **AL1-4 Allergy Severity**

For 'Identifier' - Severity will be mapped to all reactions present.



Pro	cess	sed Components	Data Type	Required	Field Size	Codeset
AL1	-1	Set ID		I		
AL1	I-2	Allergy Type	CE	Р	250	
	1	Identifier	ST	R	50	
	2	Text	ST	Р	2000	
	3	Name Of Coding System	IS	Р	100	
	4	Alternate Identifier		I		
	5	Alternate Text		1		
	6	Name Of Alternate Coding System		1		
AL1	I <b>-</b> 3	Allergen Code Mnemonic	CE	R	250	HL7 0396
	1	Identifier	ST	Р	50	
	2	Text	ST	Р	2000	
	3	Name Of Coding System	IS	Р	100	
	4	Alternate Identifier	ST	Р	50	
	5	Alternate Text	ST	Р	2000	
	6	Name Of Alternate Coding System	IS	Р	100	
AL1	I-4	Allergy Severity	CE	P	250	
	1	Identifier	ST	Р	50	
	2	Text	ST	Р	2000	
	3	Name Of Coding System	IS	Р	100	
	4	Alternate Identifier	ST	Р	50	
	5	Alternate Text	ST	Р	2000	
	6	Name Of Alternate Coding System	IS	Р	100	
AL1	I <b>-</b> 5	Allergy Reaction	ST	Р	50	
AL1	I <b>-</b> 6	Identification Date	DT	Р	8	



## **DG1 Segment**

#### **Processing Notes**

Diagnosis (DG1) segments are not required in an ADT message. If they are present, they must be accompanied by a PV1 segment describing the patient encounter to which the diagnosis is related.

#### **DG1-3 Diagnosis Code**

Use ICD-9, ICD-10 code or other standardized terminology.

## **DG1-4 Diagnosis Description**

Deprecated. If this field is used, the data should be moved to the alternateFreeText sent through DG1-3.4.

#### **DG1-18 Confidential Indicator**

Distinguishes confidential diagnoses that should not be displayed or exported in CCD:

- Y = Confidential
- N or blank = Not confidential

Pro	ocessed	d Component	Data Type	Required	Field Size	Codeset
DG	G1-1	Set ID		I		
DG	§1-2	Diagnosis Coding Method		I		
DG	<b>31-3</b>	Diagnosis Code - DG1	CE	R	250	HL7 0396
	1	Identifier	ST	R	50	
	2	Text	ST	Р	2000	
	3	Name Of Coding System	IS	R	100	
	4	Alternate Identifier	ST	Р	50	
	5	Alternate Text	ST	Р	2000	
	6	Name Of Alternate Coding System	IS	Р	100	
DG	G1-4	Diagnosis Description		I		
DG	§1-5	Diagnosis Date/Time	TS	P	26	
DG	61-6	Diagnosis Type	IS	Р	50	HL7 0052
DG	91-7	Major Diagnostic Category		I		



					I	
DG1-14		4	Grouper Version And Type		1	
DG1-15		5	Diagnosis Priority	ID	Р	3
DG1-16		6	Diagnosing Clinician	XCN	Р	250
	1		ID Number	ST	R	50
	9		Assigning Authority	HD	R	250
		1	Namespace ID	IS	I	
		2	Universal ID	ST	R	250
		3	Universal ID Type	ID	I	
13			Identifier Type Code	IS	Р	250
DG1-17		7	Diagnosis Classification		1	
DG1-18		8	Confidential Indicator	ID	Р	250
DG1-19		9	Attestation Date/Time		I	
DG1-20		0	Diagnosis Identifier		I	
DG	1-2	1	Diagnosis Action Code		1	



## **PR1 Segment**

Procedures (PR1) segments are not required in an ADT message. If they are present, they must be accompanied by a PV1 segment describing the patient encounter to which the procedure is related.

### **Processing Notes**

#### **PR1-3 Procedure Code**

Where possible use CPT, ICD-9, ICD-10 or other standardized coding system.

### **Processing Details**

Pr	Processed Component Data Type			Required	Field Size	Codeset
PR	1-1	Set ID - PR1		I		
PR	21-2	Procedure Coding Method		I		
PR	1-3	Procedure Code	CE	R	250	
	1	Identifier	ST	R	20	
	2	Text	ST	Р	199	
	3	Name Of Coding System	IS	R	20	
	4	Alternate Identifier	ST	Р	20	
	5	AlternateText	ST	Р	199	
	6	Name Of Alternate Coding System	IS	Р	20	
PR	1-4	Procedure Description	ST	P	2000	
PR	1-5	Procedure Date/Time	TS	R	26	
PR	1-6	Procedure Functional Type	IS	P	2	HL7 0230
PR	1-7	Procedure Minutes		1		
PR	1-8	Anaesthesiologist	XCN	P	250	
	1	ID Number	ST	R	50	
	2	Family Name		I		
	3	Given Name		I		
	4	Middle Initial Or Name		I		
	5	Suffix		I		



	6		Prefix		I	
	7		Degree		I	
	8		Source Table		I	
	9 1		Assigning Authority	HD	R	250
			Namespace ID		I	
		2	Universal ID	ST	R	199
		3	Universal ID Type		1	
	10		Name Type Code		1	
	11		Identifier Check Digit		1	
	12		Check Digit Scheme		1	
	13		Identifier Type Code	IS	Р	250
	14		Assigning Facility		I	
	15		Name Representation Code		I	
	16		Name Context		1	
	17		Name Validity Range		1	
	18		Name Assembly Order		1	
	19		Effective Date		1	
	20		Expiration Date		1	
	21		Professional Suffix		1	
	22		Assigning Jurisdiction		I	
	23		Assigning Agency or Department		I	
PR′	1-9		Anesthesia Code	IS	P	50
PR′	1-1(	)	Anesthesia Minutes		I	
PR	1-11	l	Surgeon	XCN	Р	250
	1		ID Number	ST	R	50
	2		Family Name		I	
	3		Given Name		I	
	4		Middle Initial Or Name		I	
	5		Suffix		I	
	6		Prefix		I	
	7		Degree		I	



	8		Source Table		1	
	9		Assigning Authority	HD	R	250
		1	Namespace ID		I	
	3		Universal ID	ST	R	250
			Universal ID Type		I	
	10		Name Type Code		I	
	11		Identifier Check Digit		I	
	12		Check Digit Scheme		I	
	13		Identifier Type Code	IS	Р	250
	14		Assigning Facility		I	
	15		Name Representation Code		I	
	16		Name Context		I	
	17		Name Validity Range		I	
	18		Name Assembly Order		I	
	19		Effective Date		I	
	20		Expiration Date		I	
	21		Professional Suffix		I	
	22		Assigning Jurisdiction		I	
	23		Assigning Agency or Department		I	
PR	1-12	2	Procedure Practitioner	XCN	Р	250
	1		ID Number	ST	R	50
	2		Family Name		I	
	3		Given Name		1	
	4		Middle Initial Or Name		1	
	5		Suffix		I	
	6		Prefix		I	
	7		Degree		I	
	8		Source Table		I	
	9		Assigning Authority	HD	R	250
		1	Namespace ID		I	
		2	Universal ID	ST	R	250
		3	Universal ID Type		I	



10	Name Type Code		I		
11	Identifier Check Digit		1		
12	12 Check Digit Scheme		I		
13	Identifier Type Code	IS	Р	250	
14	Assigning Facility		I		
15	Name Representation Code		I		
16	Name Context		I		
17	Name Validity Range		I		
18	Name Assembly Order		I		
19	Effective Date		I		
20	Expiration Date		I		
21	Professional Suffix		I		
22	Assigning Jurisdiction		I		
23	Assigning Agency or Department		I		
PR1-13	Consent Code		I		
PR1-14	Procedure Priority	ID	Р	3	
PR1-15	Associated Diagnosis Code	CE	Р	250	
1	Identifier	ST	R	50	
2	Text	ST	Р	2000	
3	Name Of Coding System	IS	R	100	
4	Alternate Identifier	ST	Р	50	
5	Alternate Text	ST	Р	2000	
6	Name Of Alternate Coding System	IS	Р	100	
PR1-16	Procedure Code Modifier		I		
			I		
PR1-20	Procedure Action Code		1		



## **IN1 Segment**

Insurance (IN1) and Insurance Additional Information (IN2) segments are processed only for HIEs that have implemented the CDR6 Insurance Model. Other Orion HIEs ignore these segments.

### **Processing Notes**

#### **IN1-4** Insurance Company Name

Only the first value in the list is processed.

#### **IN1-9 Group Name**

Only the first value in the list is processed.

#### **IN1-12 Plan Effective Date**

Specifies only yyyymmdd.

#### **IN1-13 Plan Expiration Date**

Specifies only yyyymmdd.

#### IN1-16 Name Of Insured

Only the first value in the list is processed, which should contain Subscriber details.

#### IN1-18 Insured's Date of Birth

Specifies only yyyymmdd.

#### **IN1-19 Insured's Address**

- StreetAddress.StreetOrMailingAddress Only the first value in the list is processed.
- StreetAddress.StreetName Only the first five characters of ZipOrPostalCode are processed.

#### **IN1-49 Insured's ID Number**

Only the first value in the list is processed.

## **Processing Details**

Processed Component		Data Type	Required	Field Size	Codeset
IN1-1	Set ID	SI	R	4	
IN1-2	Insurance Plan ID		I		
IN1-3	Insurance Company ID		I		



IN	1-4	Insurance Company Name	XON	Р	250
	1	Organization Name	ST	Р	50
	Organization Name Type Code			I	
	3 ID Number			I	
	4	Check Digit		I	
	5	Code Identifying The Check Digit Scheme Employed		I	
	6	Assigning Authority		I	
	7	Identifier Type Code		I	
	8	Assigning Facility ID		I	
	9	Name Representation Code		I	
IN	1-5	Insurance Company Address		I	
IN	1-6	Insurance Company Contact Person		I	
IN	1-7	Insurance Company Phone Number		I	
IN	1-8	Group Number	ST	Р	12
IN	1-9	Group Name	XON	Р	250
	1	Organization Name	ST	Р	50
	2	Organization Name Type Code		I	
	3	ID Number		I	
	4	Check Digit		I	
	5 Code Identifying The Check Digit Scheme Employed			I	
	6 Assigning Authority			1	
	7 Identifier Type Code			I	
	8	Assigning Facility ID		I	
	9	Name Representation Code		I	
IN	1-10	Insured Group Emp ID		I	



IN	1-11		Insured Group Emp Name		I			
IN	IN1-12		Plan Effective Date	DT	Р	8		
IN	1-13	3	Plan Expiration Date	DT	P	8		
IN	1-14		Authorization Information		I	3		
IN	1-15	j	Plan Type	IS	P			
IN	1-16	<b>;</b>	Name Of Insured					
	1		Family Name	FN	Р	194		
		1	Surname	ST	Р	50		
		2	Own Surname Prefix		I			
		3	Own Surname		I			
		4	Surname Prefix From Partner		I			
		5	Surname From Partner		I			
	2		Given Name	ST	Р	30		
	3		Middle Initial Or Name	ST	Р	30		
	4		Suffix		I			
	5		Prefix		I			
	6		Degree		I			
	7		Name Type Code		I			
	8		Name Representation Code		I			
	9		Name Context		I			
	10		Name Validity Range		I			
	11		Name Assembly Order		I			
IN	1-17	•	Insureds Relationship To Patient	CE	Р	250		
	1		Identifier	ST	Р	20		
	2		Text	ST	Р	199		
	3		Name Of Coding System		I			
	4		Alternate Identifier		I			
	5		Alternate Text		I			
	6		Name Of Alternate Coding System		I			



IN	IN1-18		Insureds Date Of Birth	TS	Р	26	
IN	IN1-19		InsuredAddress	XAD	Р	250	
	1		Street Address	SAD	Р	184	
		1	Street Or Mailing Address	ST	Р	120	
		2	Street Name	ST	Р	50	
		3	Dwelling Number		I		
	2		Other Designation		I		
	3		City	ST	Р	50	
	4		State Or Province	ST	Р	50	
	5		Zip Or Postal Code	ST	Р	12	
	6		Country		I		
	7		Address Type		I		
	8		Other Geographic Designation		I		
	9		County Or Parish Code		I		
	10		Census Tract		I		
	11		Address Representation Code		I		
	12		Adress Validity Range		I		
IN	1-20	)	Assignment Of Benefits		I		
					I		
IN	1-35		CompanyPlanCode		I		
IN	1-36	;	Policy Number	ST	R	15	
IN	1-37	,	Policy Deductible		I		
					I		
IN	IN1-48		Handicap		I		
IN			Insureds ID Number	СХ	R	250	
	1		ID Number	26	R	256	
	2		Check Digit		I		
	3		Code Identifying The Check Digit Scheme Employed		I		
	4		Assigning Authority		I		



	5	Identifier Type Code		I	
	6 Assigning Facility			I	
	7 Effective Date			I	
	8	Expiration Date		I	
IN	1-20	Assignment Of Benefits		I	
				I	
IN	1-53	VIP Indicator		I	



# **IN2 Segment**

Insurance (IN1) and Insurance Additional Information (IN2) segments are processed only for HIEs that have implemented the CDR6 Insurance Model. Other Orion Health HIEs ignore these segments.

### **Processing Notes**

#### **IN2-63 Insured Home Phone Number**

Only the first value in the list is processed.

### **Processing Details**

Pro	cess	sed Component	Data Type	Required	Field Size	Codeset
IN2	2-1	Insured Employee ID		I		
				1		
IN2	2-62	Guarantors Relationship To Insured		I		
IN2	2-63	Insured Home Phone Number	XTN	Р	250	
	1	Phone Number String	ST	Р	199	
	2	Telecommunication Use Code		1		
	3	Telecommunication Equipment Type		I		
	4	Email Address		I		
	5	Country Code		I		
	6	Area Or City Code		I		
	7	Phone Number		I		
	8	Extension		1		
	9	Any Text		1		
IN2	2-64	Insured Employer Phone Number		I		
				I		
IN2	2-72	HCFA Patient Relationship To Insured		I		



# **Terminology Services**

To support semantic interoperability, Orion Health HIE Terminology services provide validation and text normalization for fields in inbound messages that contain information coded in recognized health terminologies, such as SNOMED, LOINC, CPT, ICD-9, and ICD-10.

The following table lists the segments and fields that interact with Orion Health HIE Terminology services. Wherever possible, these fields should be coded in a supported health terminology. In some HIE implementations, supported coding may be mandated to ensure compliance with particular standards:

Segment	Field
AL1	AL1-3 Allergy Code Mnemonic Description
DG1	DG1-3 Diagnosis Code
PR1	PR1-3 Procedure Code



## **Codesets**

The fields described in the ADT Specifications by Segment section can be encoded with health terminologies, but numerous other fields need to be coded with specific Orion Health HIE codesets. Where possible, these codesets are based on HL7 or other widely acknowledged recommendations.

Specific HIE implementations might use different codesets for any given field, but the following codesets provide a baseline set of codes that are used in a standardized Orion Health HIE implementation.

Description	Fields	Codeset Name	Notes
Sex/Gender	PID-8	HL7 0001	
Identifier Type Code	PID-3.5 and other fields	HL7 0203	
Race	PID-10	HL7 0005	Values in extended list extracted from: http://www.cdc.gov/nchs/data/dvs/Race_Ethnicity_CodeSet.pdf (pp 1-36)
Primary Language	PID-15	ISO 639	Based on ISO-639-2 three-letter codes.
Marital Status	PID-16	HL7 0002	
Religion	PID-17	HL7 0006	
Ethnic Group	PID-22	HL7 0189	
Citizenship Nationality	PID-26 PID-28		
Relationship	NK1-10	HL7 0063	Extended list from HL7 table.
Coding System	AL1-3, DG1-3 or PR1-3	HL7 0396	
Patient Class	PV1-2	HL7 0004	Not extendable or configurable, this codeset is built into CDR.
Hospital Service	PV1-10	HL7 0069	Displays as "Specialty" in Portal DPS.



Admit Source	PV1-10	HL7 0023	
Discharge Disposition	PV1-36	HL7 0112	
Procedure Functional Type	PR1-6	HL7 0230	
Procedure Priority	PR1-14	HL7 0418	A string field, but it must contain only numeric data or CDR will error.

### **Codeset Translation**

Participants or vendors who want to connect to Orion Health HIEs need to convert local codes in ADT messages to the codes used in the standardized Orion Health HIE so that they can be correctly recognized and processed in the HIE.



## **Detailed Codeset Tables**

This section contains the following codeset tables:

- HL7 0001 Gender/Sex
- HL7 0002 Marital Status
- HL7 0004 Patient Class
- HL7 0005 Race
- HL7 0006 Religion
- HL7 0023 Admit Source
- HL7 0063 Relationship
- HL7 0069 Hospital Service
- HL7 0112 Discharge Disposition
- HL7 0171 Citizenship
- HL7 0189 Ethnicity
- HL7 0212 Nationality
- HL7 0230 Procedure Functional Type
- HL7 0399 Country
- HL7 0418 Procedure Priority
- ISO 639 Primary Language Code



## HL7 0001 Gender/Sex

This codeset is used in PID-8 Sex for values stored in the EMPI.

Code	Description
A	Ambiguous
F	Female
M	Male
N	Not applicable
0	Other
U	Unknown



## **HL7 0002 Marital Status**

This codeset is used in PID-16.1 MaritalStatus.Identifier for values stored in the EMPI.

Code	Description
A	Separated
В	Unmarried
С	Common law
D	Divorced
E	Legally separated
G	Living together
I	Interlocutory
М	Married
N	Annulled
0	Other
Р	Domestic partner
R	Registered domestic partner
S	Single
Т	Unreported
U	Unknown
W	Widowed



## **HL7 0004 Patient Class**

This codeset is used for values in **PV1-2**. This codeset is built into CDR and is not configurable. Unrecognized values are stored as <code>Unknown</code>.

Value	Comment
В	Obstetrics
С	Commercial Account
E	Emergency
I	Inpatient
N	Not Applicable
0	Outpatient
Р	Preadmit
R	Recurring patient
U	Unknown



## **HL7 0005 Race**

This codeset is used in **PID-10.1 Race.Identifier** for values stored in the EMPI. This codeset is based on values from HL7005 with extended concepts derived from CDC codes.

Code	Description
1002-5	AMERICAN INDIAN OR ALASKAN NATIVE
1840-8	INUIT
2028-9	ASIAN
2029-7	ASIAN INDIAN
2030-5	BANGLADESHI
2031-3	BHUTANESE
2032-1	BURMESE
2033-9	CAMBODIAN
2034-7	CHINESE
2035-4	TAIWANESE
2036-2	FILIPINO
2037-0	HMONG
2038-8	INDONESIAN
2039-6	JAPANESE
2040-4	KOREAN
2041-2	LAOTIAN
2042-0	MALAYSIAN
2043-8	OKINAWAN
2044-6	PAKISTANI
2045-3	SRI LANKAN



2046-1	THAI
2047-9	VIETNAMESE
2048-7	IWO JIMAN
2049-5	MALDIVIAN
2050-3	NEPALESE
2051-1	SINGAPOREAN
2052-9	MADAGASCAR
2054-5	BLACK OR AFRICAN AMERICAN
2056-0	BLACK
2058-6	AFRICAN AMERICAN
2060-2	AFRICAN
2061-0	BOTSWANAN
2062-8	ETHIOPIAN
2063-6	LIBERIAN
2064-4	NAMIBIAN
2065-1	NIGERIAN
2066-9	ZAIREAN
2067-7	BAHAMIAN
2068-5	BARBADIAN
2069-3	DOMINICAN
2070-1	DOMINICA ISLANDER
2071-9	HAITIAN
2072-7	JAMAICAN
2073-5	TOBAGOAN



2074-3	TRINIDADIAN
2075-0	WEST INDIAN
2076-8	NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
2078-4	POLYNESIAN
2079-2	NATIVE HAWAIIAN
2080-0	SAMOAN
2081-8	TAHITIAN
2082-6	TONGAN
2083-4	TOKELAUAN
2085-9	MICRONESIAN
2086-7	GUAMANIAN OR CHAMORRO
2087-5	GUAMANIAN
2088-3	CHAMORRO
2089-1	MARIANA ISLANDER
2090-9	MARSHALLESE
2091-7	PALAUAN
2092-5	CAROLINIAN
2093-3	KOSRAEAN
2094-1	POHNPEIAN
2095-8	SAIPANESE
2096-6	KIRIBATI
2097-4	CHUUKESE
2098-2	YAPESE
2100-6	MELANESIAN



2101-4	FIJIAN
2102-2	PAPUA NEW GUINEAN
2103-0	SOLOMON ISLANDER
2104-8	NEW HEBRIDES
2106-3	WHITE
2108-9	EUROPEAN
2109-7	ARMENIAN
2110-5	ENGLISH
2111-3	FRENCH
2112-1	GERMAN
2113-9	IRISH
2114-7	ITALIAN
2115-4	POLISH
2116-2	SCOTTISH
2118-8	MIDDLE EASTERN OR NORTH AFRICAN
2119-6	ASSYRIAN
2120-4	EGYPTIAN
2121-2	IRANIAN
2122-0	IRAQI
2123-8	LEBANESE
2124-6	PALESTINIAN
2125-3	SYRIAN
2126-1	AFGHANISTANI
2127-9	ISRAEILI



2129-5	ARAB
2131-1	OTHER RACE
2500-7	OTHER PACIFIC ISLANDER



# **HL7 0006 Religion**

This codeset is used in PID-17.1 Religion.Identifier for values stored in the EMPI.

Code	Description
ABC	Christian: American Baptist Church
AGN	Agnostic
AME	Christian: African Methodist Episcopal Zion
AMT	Christian: African Methodist Episcopal
ANG	Christian: Anglican
AOG	Christian: Assembly of God
ATH	Atheist
ВАН	Baha'i
BAP	Christian: Baptist
BMA	Buddhist: Mahayana
ВОТ	Buddhist: Other
ВТА	Buddhist: Tantrayana
BTH	Buddhist: Theravada
BUD	Buddhist
CAT	Christian: Roman Catholic
CFR	Chinese Folk Religionist
CHR	Christian
CHS	Christian: Christian Science
СМА	Christian: Christian Missionary Alliance
CNF	Confucian
COC	Christian: Church of Christ



COG	Christian: Church of God
COI	Christian: Church of God in Christ
COL	Christian: Congregational
COM	Christian: Community
COP	Christian: Other Pentecostal
COT	Christian: Other
CRR	Christian: Christian Reformed
EOT	Christian: Eastern Orthodox
EPI	Christian: Episcopalian
ERL	Ethnic Religionist
EVC	Christian: Evangelical Church
FRQ	Christian: Friends
FWB	Christian: Free Will Baptist
GRE	Christian: Greek Orthodox
HIN	Hindu
НОТ	Hindu: Other
HSH	Hindu: Shaivites
HVA	Hindu: Vaishnavites
JAI	Jain
JCO	Jewish: Conservative
JEW	Jewish
JOR	Jewish: Orthodox
JOT	Jewish: Other
JRC	Jewish: Reconstructionist



JRF	Jewish: Reform
JRN	Jewish: Renewal
JWN	Christian: Jehovah's Witness
LMS	Christian: Lutheran Missouri Synod
LUT	Christian: Lutheran
MEN	Christian: Mennonite
MET	Christian: Methodist
МОМ	Christian: Latter-day Saints
MOS	Muslim
MOT	Muslim: Other
MSH	Muslim: Shiite
MSU	Muslim: Sunni
NAM	Native American
NAZ	Christian: Church of the Nazarene
NOE	Nonreligious
NRL	New Religionist
ORT	Christian: Orthodox
ОТН	Other
PEN	Christian: Pentecostal
PRC	Christian: Other Protestant
PRE	Christian: Presbyterian
PRO	Christian: Protestant
QUA	Christian: Friends
REC	Christian: Reformed Church



REO	Christian: Reorganized Church of Jesus Christ-LDS
SAA	Christian: Salvation Army
SEV	Christian: Seventh Day Adventist
SHN	Shintoist
SIK	Sikh
SOU	Christian: Southern Baptist
SPI	Spiritist
UCC	Christian: United Church of Christ
UMD	Christian: United Methodist
UNI	Christian: Unitarian
UNU	Christian: Unitarian Universalist
VAR	Unknown
WES	Christian: Wesleyan
WMC	Christian: Wesleyan Methodist



## **HL7 0023 Admit Source**

This codeset is used for values in PV1-14 which is stored in CDR.

Value	Description
1	Physician referral
2	Clinic referral
3	HMO referral
4	Transfer from a hospital
5	Transfer from a skilled nursing facility
6	Transfer from another health care facility
7	Emergency room
8	Court/law enforcement
9	Information not available
Р	Patient/Self/Walk-in



## **HL7 0063 Relationship**

This codeset is used in **NK1-3.1** for values stored in the EMPI. This codeset does not auto-extend and any unrecognized values will cause the message to error.

Value	Description
ASC	Associate
BRO	Brother
CGV	Care giver
CHD	Child
DEP	Handicapped dependent
DOM	Life partner
EMC	Emergency contact
EME	Employee
EMR	Employer
EXF	Extended family
FCH	Foster child
FND	Friend
FTH	Father
GCH	Grandchild
GRD	Guardian
GRP	Grandparent
MGR	Manager
MTH	Mother
NCH	Natural child
NON	None



OAD	Other adult
OTH	Other
OWN	Owner
PAR	Parent
SCH	Stepchild
SEL	Self
SIB	Sibling
SIS	Sister
SPO	Spouse
TRA	Trainer
UNK	Unknown
WRD	Ward of court



# **HL7 0069 Hospital Service**

This codeset is used for values in **PV1-10**. These values are stored in CDR and displayed in the Encounter windowlet, Specialty field.

Value	Description
ACC	Accident & Emergency
ALI	Allergy Immunology
ALL	Allergy
AN	Anaesthetics
ANA	Anaesthetics Assessment
ANAC	Anaesthetics Acupuncture
ANH	Anaesthetics Hypnotherapy
ANP	Anaesthetics Pain
ANTL	Anesthesiology
CAR	Cardiology
СНРА	Chemical Pathology
CLGE	Clinical Genetics
COLO	Colorectal Surgery
СР	Child & Adolescent Psychology
CPD	Community Paediatrics
CRCA	Critical Care
CRD	Cardiology
CTS	CardioThoracic Surgery
DEN	Dental
DER	Dermatology



DNS	District Nursing Service
DOU	Definitive Observation Unit/Direct Observation Unit
ELME	Electrodiagnostic Med
EMM	Emergency Medicine
ENC	Endocrinology
END	Endocrinology
ENT	Ear, Nose, Throat
ER	Emergency Room
ESMI	Mental health for the elderly
FPR	Family Practice
GA	Gastroenterology
GAS	Gastroenterology
GE	Gastroenterology (Surgical)
GER	Geriatric Medicine
GM	General Medicine
GS	General Surgery
GU	Genito-Urinary Medicine
GY	Gynaecology
GYN	Gynaecology
GYON	Gynecology Oncology
HAEC	Haematology (Clinical)
HAEM	Haem. Anticoagulant Outpatient
HCP	Health Care Professional
HEM	Haematology



ICA	Intervention Cardiology
ICC	Intensive Care Cots Neonatal
ICU	Intensive Care Unit
IDI	Infectious Disease
INME	Internal Medicine
МН	Learning Disabilities
MI	Adult Mental Illness
МО	Medical Oncology
MW	Midwife
MWA	Midwife Ante Natal
MWP	Midwife Post Natal
NEO	Neonatal
NEPH	Nephrology
NEU	Neurology
NEW	New Born
NHDU	Neo-natal HDU
NR	Neurology
NRS	Neurosurgery
NRYD	Neurology Young DIS. Unit
NSG	Neurosurgery
NUME	Nuclear Medicine
OBA	Obstetrics, Ante-natal
OBGY	Obstetric/Gynecology
ОВМ	Obstetric Medicine



OBP	Obstetrics, Post-natal
OBS	Obstetrics Total
OBSRV	Observation
ODS	Orthodontics
OLG	Otolaryngology
ONC	Oncology
OPH	Ophthalmology
OPS	Services for Older Adults – ATR
OPT	Orthoptics
ОРТО	Optometry
ORT	Orthopaedics
os	Oral Surgery
PAAL	Ped & Adult Allergy
PAC	Physician Assistant
PAMA	Pain Management
PAN	Pain and Anaesthesia
PAT	Pathology
PCL	Psychology Clinical
PD	Pediatrics
PDA	Peds Allergy/Immun.
PDC	Pediatric Cardiology
PDE	Peds Endocrinology
PDG	Pediatric Gastroentr
PDN	Pediatric Neurology



PDNE	Pediatric Nephrology
PDO	Peds Oncology
PDR	Pediatrics Radiology
PED	Pediatric Medicine
PER	Perinatology
PHDU	Pediatric HDU
PLS	Plastic Surgery
PM	Palliative Medicine
POD	Podiatry
PRO	Proctology
PS	Plastic Surgery
PSY	Psychiatric Medicine
PUL	Pulmonology
PVSU	Peri-Vascular Surgery
RA	Radiology
RAD	Intervention Radiology
RADT	Clinical Oncology
RAON	Radiation Oncology
REHB	Rehabilitation
RH	Rheumatology
RHC	Rheumatology Child
RHM	Rheumatology
RHYD	Rheumatology Young DIS Unit
RSP	Respiritory Medicine



SB	Stillbirths
SBA	Surgery Bariatric
SCB	Special Care Babies
SHA	Surgery Hand
SHN	Surgery Head and Neck
SON	Surgery Oncology
SOT	Surgery Otolarhinolaryngology
SPN	Specialty Nurse
SPO	Surgery Podiatry
SPP	Speech Pathology
STH	Surgery Thoracic
SUAS	Surgical Assistant
TEL	Telemetry
TH	Cardiothoracic Surgery
THSU	Thoracic Surgery
TM	Thoracic Medicine
ТО	Orthopaedic Surgery
TOF	Orthopaedic Fracture
TOP	Private trauma & Orthopaedics
TOV	Trauma & Ortho Overseas Team
TRA	Theurapeutic Radiology
TRD	Tele-Radiology
UC	Unclassified
UR	Urology



URCA	Urgent Care
URO	Urology
VASC	Vascular
WB	Well Babies



# **HL7 0112 Discharge Disposition**

This codeset is used for values in PV1-36 which is stored in CDR.

Value	Description
01	Discharged to home or self care (routine discharge)
02	Discharged/transferred to another short term general hospital for inpatient care
03	Discharged/transferred to skilled nursing facility (SNF)
04	Discharged/transferred to an intermediate care facility (ICF)
05	Discharged/transferred to another type of institution for inpatient care or referred
06	Discharged/transferred to home under care of organized home health service organization
07	Left against medical advice or discontinued care
08	Discharged/transferred to home under care of Home IV provider
09	Admitted as an inpatient to this hospital
10 - 19	Discharge to be defined at state level, if necessary
20	Expired (dead)
21 – 29	Expired to be defined at state level, if necessary
30 – 38	Still patient or expected to return for outpatient services (still a patient)
39	Still patient to be defined at state level, if necessary (still a patient)
40	Expired (died) at home
41	Expired (died) in a medical facility, such as a hospital, SNF, ICF, or free standing hospice



42	Expired (died) - place unknown
43	Disc/Transfer to a federal hospital
50	Discharged to Hospice – Home
51	Discharged to Hospice Med Facility
62	Discharge/Transferred to Inpatient Rehabilitation Facility
63	Discharged/Transferred to LTC
64	Discharge/Transferred to Medicaid Nursing Facility
65	Discharge/Transferred to Psychiatric Hospital/Unit
71	Discharge/Transferred to another institute for outpatient services



### **HL7 0171 Citizenship**

This codeset is used in PID-26.1 values stored in the EMPI. This uses the same codeset as is shown for HL70399.



# **HL7 0189 Ethnicity**

This codeset is used in PID-22.1 Ethnicity.ldentifier for values stored in the EMPI.

Code	Description
Н	Hispanic or Latino
N	Not Hispanic or Latino
U	Unknown



#### **HL7 0212 Nationality**

This codeset is used in PID-28.1 values stored in the EMPI. This uses the same codeset as is shown for HL70399.



# **HL7 0230 Procedure Functional Type**

This codeset is used for values in PR1-6 which is stored in CDR.

Value	Description
Α	Anesthesia
D	Diagnostic procedure
I	Invasive procedure not classified elsewhere, such as IV or catheter.
Р	Procedure for treatment (therapeutic, including operations)



#### HL7 0399 Country

This codeset is used in MSH-17. This uses the same codeset as is shown for HL70399.



#### **HL7 0418 Procedure Priority**

This codeset is used for values in **PR1-14** which is stored in CDR. Although this is a string field, it must contain a numeric value otherwise CDR will error.

Value	Comment
0	Admitting procedure
1	Primary procedure
2	Ranked secondary procedures



### **ISO 639 Primary Language Code**

This codeset is used in PID-15.1 PrimaryLanguage.Identifier for values stored in the EMPI.

Code	Description
AAR	Afar
ABK	Abkhazian
ACE	Achinese
ACH	Acoli
ADA	Adangme
ADY	Adyghe; Adygei
AFA	Afro-Asiatic languages
AFH	Afrihili
AFR	Afrikaans
AIN	Ainu
AKA	Akan
AKK	Akkadian
ALB	Albanian
ALE	Aleut
ALG	Algonquian languages
ALT	Southern Altai
AMH	Amharic
ANP	Angika
APA	Apache languages
ARA	Arabic
ARG	Aragonese



ARM	Armenian
ARN	Mapudungun; Mapuche
ARP	Arapaho
ARW	Arawak
ASM	Assamese
AST	Asturian; Bable; Leonese; Asturleonese
ATH	Athapascan languages
AUS	Australian languages
AVA	Avaric
AVE	Avestan
AWA	Awadhi
AYM	Aymara
AZE	Azerbaijani
BAD	Banda languages
BAI	Bamileke languages
BAK	Bashkir
BAL	Baluchi
BAM	Bambara
BAN	Balinese
BAQ	Basque
BAS	Basa
BAT	Baltic languages
BEJ	Beja; Bedawiyet
BEL	Belarusian



BEM	Bemba
BEN	Bengali
BER	Berber languages
вно	Bhojpuri
BIH	Bihari languages
BIK	Bikol
BIN	Bini; Edo
BIS	Bislama
BLA	Siksika
BNT	Bantu languages
BOS	Bosnian
BRA	Braj
BRE	Breton
ВТК	Batak languages
BUA	Buriat
BUG	Buginese
BUL	Bulgarian
BUR	Burmese
BYN	Blin; Bilin
CAD	Caddo
CAI	Central American Indian languages
CAR	Galibi Carib
CAT	Catalan; Valencian
CAU	Caucasian languages



CEB	Cebuano
CEL	Celtic languages
СНА	Chamorro
СНВ	Chibcha
CHE	Chechen
CHG	Chagatai
CHI	Chinese
СНК	Chuukese
СНМ	Mari
CHN	Chinook jargon
СНО	Choctaw
CHP	Chipewyan; Dene Suline
CHR	Cherokee
CHV	Chuvash
CHY	Cheyenne
CMC	Chamic languages
COP	Coptic
COR	Cornish
cos	Corsican
CPE	Creoles and pidgins, English based
CPF	Creoles and pidgins, French-based
CPP	Creoles and pidgins, Portuguese-based
CRE	Cree
CRH	Crimean Tatar; Crimean Turkish



CRP	Creoles and pidgins
CSB	Kashubian
CUS	Cushitic languages
CZE	Czech
DAK	Dakota
DAN	Danish
DAR	Dargwa
DAY	Land Dayak languages
DEL	Delaware
DEN	Slave (Athapascan)
DGR	Dogrib
DIN	Dinka
DIV	Divehi; Dhivehi; Maldivian
DOI	Dogri
DRA	Dravidian languages
DSB	Lower Sorbian
DUA	Duala
DUT	Dutch; Flemish
DYU	Dyula
DZO	Dzongkha
EFI	Efik
EGY	Egyptian (Ancient)
EKA	Ekajuk
ELX	Elamite



ENG	English
EPO	Esperanto
EST	Estonian
EWE	Ewe
EWO	Ewondo
FAN	Fang
FAO	Faroese
FAT	Fanti
FIJ	Fijian
FIL	Filipino; Pilipino
FIN	Finnish
FIU	Finno-Ugrian languages
FON	Fon
FRE	French
FRR	Northern Frisian
FRS	Eastern Frisian
FRY	Western Frisian
FUL	Fulah
FUR	Friulian
GAA	Ga
GAY	Gayo
GBA	Gbaya
GEM	Germanic languages
GEO	Georgian



GER	German
GEZ	Geez
GIL	Gilbertese
GLA	Gaelic; Scottish Gaelic
GLE	Irish
GLG	Galician
GLV	Manx
GON	Gondi
GOR	Gorontalo
GOT	Gothic
GRB	Grebo
GRE	Greek
GRN	Guarani
GSW	Swiss German; Alemannic; Alsatian
GUJ	Gujarati
GWI	Gwich'in
HAI	Haida
HAT	Haitian; Haitian Creole
HAU	Hausa
HAW	Hawaiian
HEB	Hebrew
HER	Herero
HIL	Hiligaynon
HIM	Himachali languages; Western Pahari languages



HIN	Hindi
HIT	Hittite
HMN	Hmong; Mong
НМО	Hiri Motu
HRV	Croatian
HSB	Upper Sorbian
HUN	Hungarian
HUP	Нира
IBA	Iban
IBO	Igbo
ICE	Icelandic
IDO	Ido
Ш	Sichuan Yi; Nuosu
IJO	Ijo languages
IKU	Inuktitut
ILE	Interlingue; Occidental
ILO	Iloko
INC	Indic languages
IND	Indonesian
INE	Indo-European languages
INH	Ingush
IPK	Inupiaq
IRA	Iranian languages
IRO	Iroquoian languages



ITA	Italian
JAV	Javanese
JBO	Lojban
JPN	Japanese
JPR	Judeo-Persian
JRB	Judeo-Arabic
KAA	Kara-Kalpak
KAB	Kabyle
KAC	Kachin; Jingpho
KAL	Kalaallisut; Greenlandic
KAM	Kamba
KAN	Kannada
KAR	Karen languages
KAS	Kashmiri
KAU	Kanuri
KAW	Kawi
KAZ	Kazakh
KBD	Kabardian
KHA	Khasi
KHI	Khoisan languages
KHM	Central Khmer
KHO	Khotanese; Sakan
KIK	Kikuyu; Gikuyu
KIN	Kinyarwanda



KIR	Kirghiz; Kyrgyz
KMB	Kimbundu
KOK	Konkani
KOM	Komi
KON	Kongo
KOR	Korean
KOS	Kosraean
KPE	Kpelle
KRC	Karachay-Balkar
KRL	Karelian
KRO	Kru languages
KRU	Kurukh
KUA	Kuanyama; Kwanyama
KUM	Kumyk
KUR	Kurdish
KUT	Kutenai
LAD	Ladino
LAH	Lahnda
LAM	Lamba
LAO	Lao
LAT	Latin
LAV	Latvian
LEZ	Lezghian
LIM	Limburgan; Limburger; Limburgish



LIN	Lingala
LIT	Lithuanian
LOL	Mongo
LOZ	Lozi
LTZ	Luxembourgish; Letzeburgesch
LUA	Luba-Lulua
LUB	Luba-Katanga
LUG	Ganda
LUI	Luiseno
LUN	Lunda
LUO	Luo (Kenya and Tanzania)
LUS	Lushai
MAC	Macedonian
MAD	Madurese
MAG	Magahi
MAH	Marshallese
MAI	Maithili
MAK	Makasar
MAL	Malayalam
MAN	Mandingo
MAO	Maori
MAP	Austronesian languages
MAR	Marathi
MAS	Masai



MAY	Malay
MDF	Moksha
MDR	Mandar
MEN	Mende
MGA	Irish, Middle (900-1200)
MIC	Mi'kmaq; Micmac
MIN	Minangkabau
MIS	Uncoded languages
MKH	Mon-Khmer languages
MLG	Malagasy
MLT	Maltese
MNC	Manchu
MNI	Manipuri
MNO	Manobo languages
МОН	Mohawk
MON	Mongolian
MOS	Mossi
MUL	Multiple languages
MUN	Munda languages
MUS	Creek
MWL	Mirandese
MWR	Marwari
MYN	Mayan languages
MYV	Erzya



NAH	Nahuatl languages
NAI	North American Indian languages
NAP	Neapolitan
NAU	Nauru
NAV	Navajo; Navaho
NBL	Ndebele, South; South Ndebele
NDE	Ndebele, North; North Ndebele
NDO	Ndonga
NDS	Low German; Low Saxon; German, Low; Saxon, Low
NEP	Nepali
NEW	Nepal Bhasa; Newari
NIA	Nias
NIC	Niger-Kordofanian languages
NIU	Niuean
NNO	Norwegian Nynorsk; Nynorsk, Norwegian
NOB	BokmŒl, Norwegian; Norwegian BokmŒl
NOG	Nogai
NON	Norse, Old
NOR	Norwegian
NQO	N'Ko
NSO	Pedi; Sepedi; Northern Sotho
NUB	Nubian languages
NWC	Classical Newari; Old Newari; Classical Nepal Bhasa
NYA	Chichewa; Chewa; Nyanja



NYM	Nyamwezi
NYN	Nyankole
NYO	Nyoro
NZI	Nzima
OCI	Occitan (post 1500)
OJI	Ojibwa
ORI	Oriya
ORM	Oromo
OSA	Osage
oss	Ossetian; Ossetic
ОТО	Otomian languages
PAA	Papuan languages
PAG	Pangasinan
PAL	Pahlavi
PAM	Pampanga; Kapampangan
PAN	Panjabi; Punjabi
PAP	Papiamento
PAU	Palauan
PER	Persian
PHI	Philippine languages
PHN	Phoenician
PLI	Pali
POL	Polish
PON	Pohnpeian



POR	Portuguese
PRA	Prakrit languages
PUS	Pushto; Pashto
QUE	Quechua
RAJ	Rajasthani
RAP	Rapanui
RAR	Rarotongan; Cook Islands Maori
ROA	Romance languages
ROH	Romansh
ROM	Romany
RUM	Romanian; Moldavian; Moldovan
RUN	Rundi
RUP	Aromanian; Arumanian; Macedo-Romanian
RUS	Russian
SAD	Sandawe
SAG	Sango
SAH	Yakut
SAI	South American Indian languages
SAL	Salishan languages
SAM	Samaritan Aramaic
SAN	Sanskrit
SAS	Sasak
SAT	Santali
SCN	Sicilian



SEM S	Selkup Semitic languages rish, Old (to 900) Sign Languages
SGA Iri	rish, Old (to 900)
SGN S	Sign Languages
SHN S	Shan
SID S	Sidamo
SIN S	Sinhala; Sinhalese
SIO S	Siouan languages
SIT S	Sino-Tibetan languages
SLA S	Slavic languages
SLO S	Slovak
SLV S	Slovenian
SMA S	Southern Sami
SME N	Northern Sami
SMI S	Sami languages
SMJ L	ule Sami
SMN In	nari Sami
SMO S	Samoan
SMS S	Skolt Sami
SNA S	Shona
SND S	Sindhi
SNK S	Soninke
sog s	Sogdian



SOM	Somali
SON	Songhai languages
SOT	Sotho, Southern
SPA	Spanish; Castilian
SRD	Sardinian
SRN	Sranan Tongo
SRP	Serbian
SRR	Serer
SSA	Nilo-Saharan languages
SSW	Swati
SUK	Sukuma
SUN	Sundanese
SUS	Susu
SUX	Sumerian
SWA	Swahili
SWE	Swedish
SYR	Syriac
TAH	Tahitian
TAI	Tai languages
TAM	Tamil
TAT	Tatar
TEL	Telugu
TEM	Timne
TER	Tereno



TET	Tetum
TGK	Tajik
TGL	Tagalog
THA	Thai
TIB	Tibetan
TIG	Tigre
TIR	Tigrinya
TIV	Tiv
TKL	Tokelau
TLH	Klingon; tlhIngan-Hol
TLI	Tlingit
TMH	Tamashek
TOG	Tonga (Nyasa)
TON	Tonga (Tonga Islands)
TPI	Tok Pisin
TSI	Tsimshian
TSN	Tswana
TSO	Tsonga
TUK	Turkmen
TUM	Tumbuka
TUP	Tupi languages
TUR	Turkish
TUT	Altaic languages
TVL	Tuvalu



TWI	Twi
TYV	Tuvinian
UDM	Udmurt
UGA	Ugaritic
UIG	Uighur; Uyghur
UKR	Ukrainian
UMB	Umbundu
UND	Undetermined
URD	Urdu
UZB	Uzbek
VAI	Vai
VEN	Venda
VIE	Vietnamese
VOL	VolapŸk
VOT	Votic
WAK	Wakashan languages
WAL	Wolaitta; Wolaytta
WAR	Waray
WAS	Washo
WEL	Welsh
WEN	Sorbian languages
WLN	Walloon
WOL	Wolof
XAL	Kalmyk; Oirat



XHO	Xhosa
YAO	Yao
YAP	Yapese
YID	Yiddish
YOR	Yoruba
YPK	Yupik languages
ZAP	Zapotec
ZBL	Blissymbols; Blissymbolics; Bliss
ZEN	Zenaga
ZGH	Standard Moroccan Tamazight
ZHA	Zhuang; Chuang
ZND	Zande languages
ZUL	Zulu
ZUN	Zuni
ZZA	Zaza; Dimili; Dimli; Kirdki; Kirmanjki; Zazaki