5.3.2. 記述項目

以下これら代表的な記述項目について規定するが、これらはあくまで代表例であり、実装現場での制限を加えるものではない。

表 8 記述項目一覧表

項目名	用語	JMIX コード	備考
診療情報提供書	提供情報説明	MD0020730	
目的	情報提供目的	MD0020200	提供情報説明としても使用
傷病名・主訴	主訴	MD0018530	
現疾患. 診断. 名称	現疾患診断名称	MD0022790	
現病歴	現病歴	MD0018550	
既往歴	既往歴	MD0014230	
アレルギー	アレルギー情報	MD0014760	
家族歴	家族歴	MD0014860	
身体所見	身体所見	MD0018730	
感染症	感染症因子の有無	MD0015320	
生活習慣・リスク要因	生活習慣	MD0012990	
予防接種	予防接種名	MD0013820	
手術	手術実施記録情報	MD0020890	
輸血記録	既往輸血歴	MD0014330	
現在の処方・現投薬情報	現投与処方指示 現投与. 処方指示	MD0022780	
検査結果	検査結果	MD0018800	
処置	処置実施記録情報	MD0020900	
保険情報	情報提供保険区分	MD0020210	
職業歴	職業歴	MD0012810	
備考・連絡事項	情報提供元連絡備考	MD0020330	
添付書類			検査等の記述は外部文書として記載する

(1). 目的 MD0020200（紹介目的等）

このセクションは、診療情報を提供する目的（Purpose）を記述する。患者に本診療情報を提供する場合は明確に目的を記述しなくてもよい。

(2). 傷病名・主訴 MD0018530

これらのセクションは、患者の傷病名を記述する。

(3). 現疾患（疾患内容、現病歴、症状経過）MD0022790、MD0018550
このセクションには、所見（診療要約）、症状経過を含む現疾患（診断内容、現病歴）について記述する

(4). 既往歴 MD0014230
このセクションには、患者が、過去に治療した既往歴に関連する情報を記述する。

(5). アレルギーMD0014760
このセクションは、患者のアレルギーについて記述する。すべてのアレルギー、有害反応、過敏症等を記述する。ここのセクションは、アレルゲン、感応に関する情報、コメントを記述してもよい。

アレルギーには、薬物、食事、他のアレルギーを含む。また、患者がペニシリンに対するアレルギーを申告したがスキンテストで陰性になったような場合もその旨を記述すべきである。

(6). 入院歴
これらのセクションには、逆年代順にすべての関連する、これまでの診療を記述する。

(7). 家族歴 MD0014860
このセクションは、患者の関連する家族歴を記述する。このセクションは、家族の死因等を記述する。

(8). 来院理由
これらのセクションは、患者の来院の理由（Reason For Vist）を記述する。

(9). 身体所見 MD0018730
このセクションは、患者の身体所見（General status, Physical Findings/ Examination Measurements）からの関連する情報を記述する。患者のバイタルサインも、このセクションに記述する。

(10). 感染症
これらのセクションは、感染症について記述する。感染症など紹介先が知りたい項目を具体的に記載する。感染症の有無にチェックするだけではなく、必要に応じて、「感染症名　無・有・不明　重症度　確認年月日」等を記載する。

(11). 生活習慣／リスク要因 MD0012990
このセクションは、患者のこれまでの社会歴（生活習慣／リスク要因）を記述する。関連する日付を示すべきである、又は、追加のコメントを提示する。

(12). 予防接種 MD0013820

このセクションは、予防接種、及び、投与の日付を、逆年代順にリストする。このセクションは、任意である。しかし、小児科の場合は、存在することが推奨される。一方、それは、その情報が分かっていれば記述すべきである。

(13). 手術・処置 MD0020890

このセクションは、手術の既往について記述する。関連するこれまでの処置、及びそれらの日付を、逆年代順にリストしたものを含むべきである。

(14). 輸血記録 MD0014330

このセクションには、輸血の記録を記述する。

(15). 現在の処方 MD0022780

このセクションは、現在の処方について記述する。

注：関連する必要な処方歴のデータは、外部資料として添付するものとする

(16). 介護の必要度

このセクションは、患者の関連する介護の必要度を記述する。日常生活自立度、要介護認定の状況などを記述する。

(17). 治療計画

このセクションには、患者への処置を含む治療計画を記述する。さらに、転院を含む詳細な実施予定の行為について記載する

(18). 事前指示

このセクションは、事前指示、遺言、法定代理人、ドナー意思表明などの患者についての情報を含む参照文書について記述する。(外部文書として添付する)

(19). 検査情報 MD0018800

本規格では、検査結果、所見等の文字・数値情報の記述及び添付ファイルとして外部オブジェクトをリンクすることで記載できる。つまり、外部の画像や既存の報告書などの外部オブジェクトとして参照する。それぞれのオブジェクトは id および code をもち、MIME タイプを指定することで参照できる。

注：CDA R2 では、外部オブジェクトは、NonXMLBody 及び ObservationMedia で参照可能であるが、本規格では全て外部参照(referenece)を用いることとする。

- **検査**

このセクションには、検査内容及び所見について記述する。検査詳細データは、テキストで記述するか添付ファイルとする。コードシステムはJC10(JLAC10)を推奨する。

- **画像**

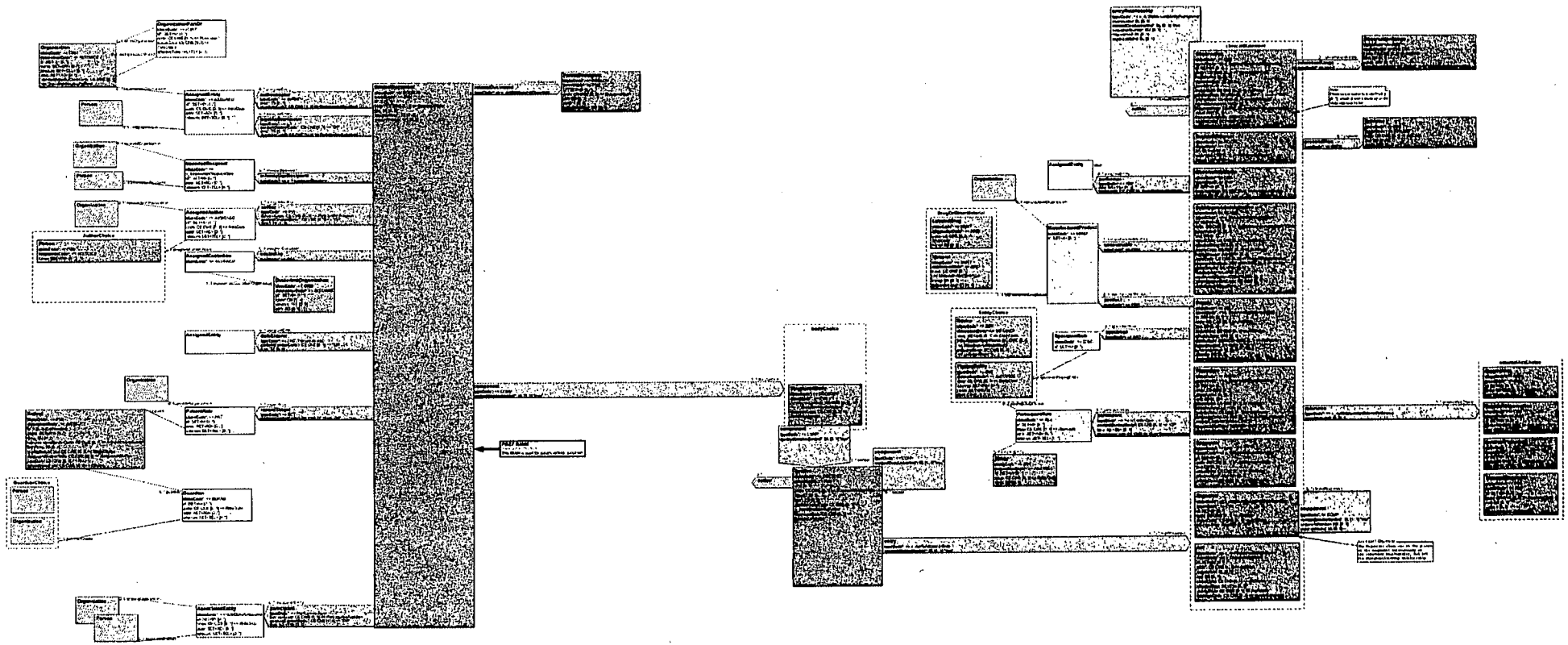
このセクションには、画像データについて記述する。画像データは外部参照として添付する。

(20). 備考 MD0020330

このセクションには、連絡事項、留意事項について記述する。

附属書 A 診療情報提供書 R-MIM

本 R-MIM は、CDA R2 R-MIM を診療情報提供書に利用するために制約をかけたものである。



【資料2】

Patient Referral Document Standard

V 1.00

Health Level Seven, Japan

Patient Referral Document Standard

V 1.00

Health Level Seven, Japan

1. Introduction

Recently there is an increasing demand for the functional differentiation of medical/nursing care institutions and for the improvement of efficiency of medical/nursing care through collaboration between institutions. To describe diagnosis information electronically and to exchange it between collaborating institutions, this standard specifies the patient referral document based on HL7 CDARelease2 according to the following policies. The patient referral document on paper is used to exchange not only between medical institutions but also between medical care-related services including nursing care institutions.

(1) An emphasis shall be put on provision of patient care information.

(2) It shall enable a system to be realized at low cost.

(3) The described information shall have the possibility of reuse.

(4) It shall have compatibility with various document creation applications.

(5) It shall be independent of the transfer mode and the storage mechanism of the document.

(6) Design standards shall be provided promptly.

(7) An open standard shall be used.

Accordingly, this standard is specified based on HL7 CDA (Clinical Document Architecture) Release 2 Normative Edition 2005, which is ISO/DIS as of the end of the year 2006. Based on the HL7RIM model, various diagnosis information is described, and the HL7V3 methodology is used. Thus, an XML schema is automatically created, and alignment is easily verified. For V1.0, implementation is specified at the level 2, because some medical information systems are not fully standardized, and the standardization codes are not available yet.

Moreover, for V1.0, it is equivalent to the description of a letter of introduction using the patient referral document that has been already established.

2. Purpose, scope, and notes

2.1. Purpose

This standard is intended to electronically describe the patient referral document used to exchange diagnosis information between medical institutions. This standard is specified based on HL7 CDA Release2 Normative Edition 2005.

2.2. Scope

This standard specifies the patient referral document used to exchange diagnosis information between medical institutions. This standard includes the rules to attach the accompanying information, such as laboratory tests, physiology examinations, radiation and other image information. But, it does not include the rules about clinical records and various summaries. Moreover, V1.0 does not cover the standard code and standard system at present. So, this standard does not specify the description (level 3) in the clinical statement section. This specification excludes the means of providing, controlling and using the patient referral document, because they should be covered by other standards.

2.3. Precautions

The medical institution ID etc. for each purpose and the patient ID should be specified separately by implementation rules other than this standard.

3. Normative references and vocabulary

3.1. Normative references

HL7 Clinical Document Architecture, Release 2.0 and Japanese translation version
HL7 V3 Normative Edition 2005
Patient referral document standard, V1.0 HL7 J-CDA-001
CDA document electronic signature standard, V1.02 HL7 J-CDA-002
CDA document encryption standard, V1.02 HL7 J-CDA-003
Portable electronic patient referral document medium standard, V1.01 HL7 J-CDA-004
PS 3.10-2004 Digital Imaging and Communications in Medicine (DICOM) Part 10: Media Storage and File Format for Media Interchange
PS 3.11-2004 Digital Imaging and Communications in Medicine (DICOM) Part 11: Media Storage Application Profiles

PS 3.15-2004 Digital Imaging and Communications in Medicine (DICOM) Part 15: Security and System Management Profiles

ISO 3166 and ISO-639-1

ISO/TS11073-90201 Medical waveform format encoring rules and medical waveform description rule Part 1 V1.05

Medical waveform description rule ECG detailed rule Part 3-1 V0.98

Data item set for the exchange of electronically saved medical-record information (J-MIX)

MERIT-9 version 2

3.2. Vocabulary and definition

HL7 Reference Information Model (RIM)

The HL7 information model from which all other information models (for example, R-MIM etc.) and messages are derived.

3.2.1. Refined Message Information Model (R-MIM:)

The information structure that shows one set of requirements. It includes the class, attribute, relation and data type required to support one or more HMD(s).

3.2.2. Hierarchical Message Description (HMD)

Accurate description of field about the messages, their grouping, sequence, selectivity, and multiplicity. One HMD may include a message type for one or two or more interactions, or a message type that expresses one or more common message element types (CMET). HMD is the most important Normative structure of HL7 message.

3.2.3. Patient Referral Document

The document created by medical institutions to ensure the continual and appropriate medical care and to provide information between institutions or from institutions to patients. This document is accompanied by diagnostic imaging, necessary examination results, ECG, brain waves, therapy plan after leaving hospital etc.

3.3. Symbol and abbreviation

HL7 Health Level Seven

RIM Reference Information Model

RMIM. Refined Message Information Model

HMD Hierarchical Message Description

CDA Clinical Document Architecture

DICOM Digital Imaging and Communications in Medicine

MFER Medical waveform Format Encoding Rules

4. Outline

This standard is specified, based on CDA R2, to electronically describe a patient referral document (**Figure 1**) that is delivered by medical institutions to patients. For the contents of description, refer to Format 6. The contents are limited to the scope that is available as of the year 2006. We have modified some items, such CDA R2 (POCD RM000040JP00) and V3 vocabulary, data type, etc. to adapt them to Japan.

Figure 1 JAHIS report Format 6 (source: edited from the document issued by HOI of the Ministry of Health, Labour and Welfare on March 8, 2002)

Patient Referral Document (letter of introduction) 0

Name of medical institution as information recipient
Doctor in charge Department Mr. Date HEISEI 0 Year Month Day

5.2.3

Address and name of medical institution as author
Telephone number
Doctor name 5.2.4 Seal

Patient name					Gender	Male/female
Patient address Telephone number	5.2.2					
Date of birth	MEI, HEI	TAI,	SHOU,	Date	(age)	Occupation

Disease-and-injury name	5.3.2 (2)
Introduction purpose	5.3.2 (1)
Previous disease and family history	5.3.2 (4) (7)
Symptom progress and examination result	5.3.2 (3) (19)

Medical treatment progress	5.3.2 (13)
Present prescription	5.3.2 (15)
Remarks	5.3.2 (20)

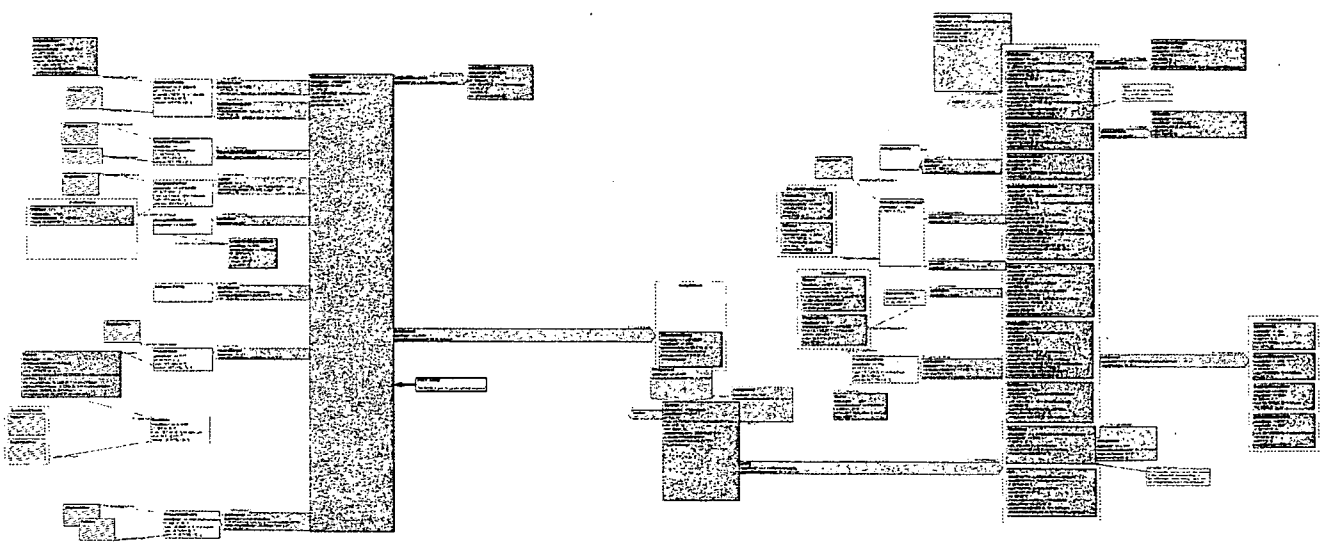
Remarks
1. If necessary, use a separate sheet(s) of paper for continuation.
2. If necessary, attach the film of diagnostic imaging, and record of examination.
3. If the information recipient is not a health insurance medical institution, then the column of "Name of medical institution as information recipient" shall be filled with the pharmacy as information recipient, SHI CHOU SON, name of health center etc. Be sure to write the address and telephone number of patient.

4.1. Patient referral document description CDA rule

To describe according to this standard, use RMIM RM000040JP00 where we revised the essential parts and options of the patient referral document based on CDA RMIM RM000040. However, this standard complies essentially with CDA, and does not eliminate application according to CDA or V3 standard, which is a high order standard, if any extension is needed by implementation.

Note: This standard is completely the same as RM000040 except for the following. This standard eliminates the unused option parts. The Custodian multiplicity and Patient.desc are different from RM000040

Figure 2 Patient referral document RMIM RM000040JP00 (For an enlargement, refer to the Annex.)



Note: The V1.0 of this standard limits the description to level 2. So, the clinical statement section

is simplified further.

4.2. Patient referral document

The patient referral document is divided into the header part that describes the meta-data and the body part that describes the information about various medical examinations.

4.2.1. CDA header part

CDA header includes the meta-data such as document identification, type, author, patient, and other information for document identification, and provision/coverage (meta-data).

4.2.2. CDA body part

CDA body part records the diagnosis information. It consists of arbitrary sections, which in turn consists of arbitrary entries. The entry may include external link information and multimedia information.

4.2.3. Name space

The name space used by XML of this standard is urn:hl7-org:v3.

5. Description rule

The details of this standard are specified according to CDA R-MIM (Refined Message Information Model). Moreover, if necessary, it is accompanied by XML (eXtensible Markup Language) ITS (Implementation Technical Standard).

5.1. Description sequence of this standard

The sequence and essential conditions of each description element are as follows.

5.1.1. CDA header part

Each element must be described in the following sequence.

- typeId: Essential (1 .. 1)
- templateId: Option (0.. *)
- id: Essential (1 .. 1)
- code: Essential (1 .. 1)
- title: Option (0 .. 1)
- effectiveTime: Essential (1 .. 1)
- confidentialityCode: Essential (1 .. 1)
- languageCode: Option (0 .. 1)
- setId: Option (0 .. 1)
- versionNumber: Option (0 .. 1)

5.1.2. Diagnosis information description - element sequence and option

Each element must be described in the following sequence.

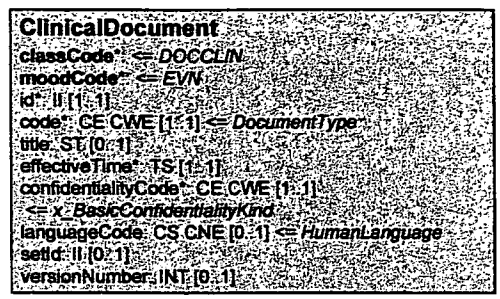
- recordTarget: Essential (1.. *)
- author: Essential (1.. *)
- dataEnterer: Option (0 .. 1)
- custodian: Option (0 .. 1)
- informationRecipient: Option (0 .. 1) Note: In CDA original standard, the multiplicity is (0.. *). In this standard, however, it is upper limit (information recipient) 1. Moreover, when there is no description of the information recipient, it is the same as the patient referral document.
- legalAuthenticator: Option (0.. 1) It describes the legal authenticator (organization) who issued the patient referral document.
- component: Option (0.. 1)

5.2. Header definition

5.2.1. XML definition and Clinical Document root definition

It shall be described at the head of the patient referral document XML document, and at the head of the CDA.

Figure 3 Clinical Document R-MIM



An example of XML instance according to this standard is as follows.

[Example]

< ?xml version="1.0"encoding="UTF-8"?>

<?xml-stylesheet type="text/xsl"href="CDA.XSL"?>

<ClinicalDocument xmlns="urn:hlseven-org:vthree"xmlns:xsi="http:// www.w3.org/2001/ XMLSchema-instance"xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">

This standard recommends UTF-8 in consideration of alignment with languages other than Japanese. The space before a default name shall use "urn:hl7-org:v3" on the implementation. Moreover, although it is outside the scope of this standard, a style sheet (referred to as CDA.XSL in this example) etc. shall be provided by the supplier, because the supplier of the patient referral document is responsible for the display of its contents.

Table 1 Header HMD

ClinicalDocument	0..1					
typeId	1..1	M	R	II		
id	1..1		R	II		
code	1..1		R	CE	DocumentType	CWE
title	0..1			ST		
effectiveTime	1..1		R	TS		
confidentialityCode	1..1		R	CE	x_BasicConfidentialityKind	CWE
languageCode	0..1			CS	HumanLanguage	CNE
setId	0..1			II		
versionNumber	0..1			INT		

typeId: Essential (1 .. 1)

It specifies the CDA model ID. In the patient referral document, POCD_HD000040JP00 and UID describe 2.16.840.1.113883.2.2.3.2.

<typeId extension="POCD_HD000040JP00" root="2.16.840.1.113883.2.2.3.2"/>

templateId: Option (0 .. *)

It describes the patient referral document template UID of implementation (templateId is not explicitly expressed in CDA R-MIM).

<templateId root= "patient referral document template UID"/>

Id: Essential item (1 .. 1)

It describes the patient referral document ID according to implementation.

<id root= "patient referral document ID" extension= "sub ID" displayable="true"/>

code: Essential item (1 .. 1)

It specifies the patient referral document code. This standard recommends description of J-MIX (1.2.392.200119.5.3.1) code (MD0020730).

<code code="patient referral document code (MD0020730) "codeSystem=" J-MIX UID (1.2.392.200119.5.3.1)" codeSystemName="JMIX" displayName="ReferralNote"/>

title: Option (0 .. 1)

It describes the title of the patient referral document, "a patient referral document (letter of introduction)" etc.

<title> patient referral document </title>

effectiveTime: Essential item (1 .. 1)

It describes the date and time of issue of the patient referral document according to HL7 V3 rule (YYYYMMDD).

<effectiveTime value= "date and time of issue of patient referral document"/>

confidentialityCode

It describes the access criteria of the patient referral document. When usual access with due authority is permitted, describe N.

<confidentialityCode code="N" codeSystem=" HL7 access criteria code (2.16.840.1.113883.5. 25) "/>

languageCode: Option (0 .. 1)

It specifies Japanese language environment (ja-JP).

<languageCode code="ja-JP"/>

setId: Option (0 .. 1)

It describes the patient referral document UID.

<setId extension="sub ID" root=" patient referral document UID"/>

versionNumber: Option (0 .. 1)

It describes the version number of the patient referral document.

<versionNumber value= "version number"/>

5.2.2. Patient information (recordTarget): Essential (1 .. 1)

Patient information is described by recordTarget.

Note: In CDA rule, it is Essential (1 .. *). But, when it is described in the patient referral document, it is limited to one patient.

Figure 4 recordTarget class

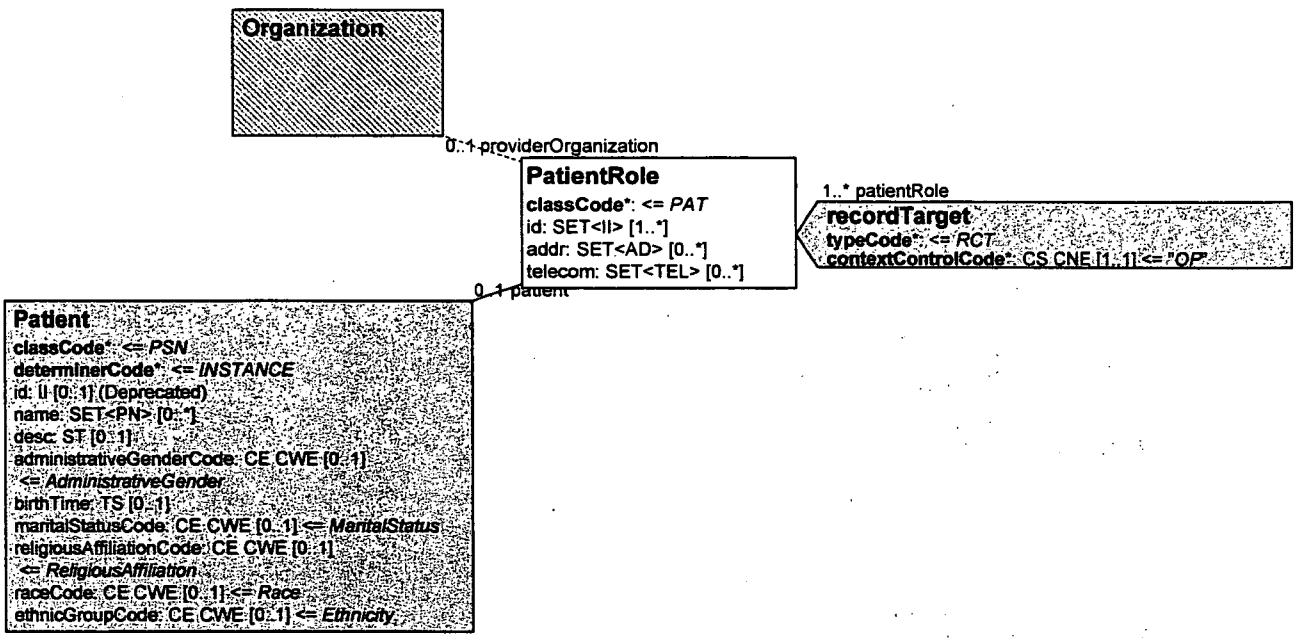


Table 2 Patient information HMD

recordTarget		1..*		SET<RecordTarget>		
patientRole		1..1		PatientRole		
	id	1..*		SET<II>		
	addr	0..*		SET<AD>		
	telecom	0..*		SET<TEL>		
patient		0..1		Patient		
	id	0..1		II		
	name	0..*		SET<PN>		
	desc	0..1		ST		
	administrativeGenderCode	0..1		CE	AdministrativeGender	CWE
	birthTime	0..1		TS		
	maritalStatusCode	0..1		CE	MaritalStatus	CWE

(1). Patient ID

When it is necessary to describe two or more IDs, including author ID, information recipient ID, regional collaboration ID etc., each ID together with identification of each medical institution shall be described by PatientRole.id.

- medical institution ID

<id root="medical institution ID" extension=" patient ID"assigningAuthorityName=" author "/>

[Example] These two or more IDs can be described for each purpose.

- author ID

<id root=" author ID"extension=" patient ID "assigningAuthorityName=" author"/>

- information recipient ID

<id root="information recipient ID" extension=" patient ID"assigningAuthorityName=" information recipient"/>

- regional collaboration ID

<id root="regional collaboration ID" extension=" patient ID"assigningAuthorityName=" regional collaboration"/>

Moreover, usually when the information recipient has no meaning, ID shall be nullFlavor="NI"

<id nullFlavor="NI"/>

Name of patient

- Pronunciation to show how to read KANJI: It shall be written in ZENKAKU KATAKANA. This is a compulsory item.

<name use="SYL">
<family> pronunciation of patient's family name</family>
<given> <pronunciation of patient's given name</given>
</name>

- Full name: The family name and given name with the right spelling written in KANJI, HIRAGANA, KATAKANA and alphabetical characters

