

PATIENT_DIMENSION Table

Each record in the **PATIENT_DIMENSION** table represents a patient in the database. The table includes demographic information such as gender, age, race, etc. Most attributes of the patient dimension table are discrete (i.e. Male / Female, Zip code, etc.)

Starting from version 1.6, this table will support custom columns apart from the required ones. The PDO service will return the custom fields in the <param> tag within the <patient> element. Please refer to the section called *CODE_LOOKUP Table* for adding the descriptions to the custom fields. The following table shows the rules for mapping the custom field's database type to the xml type.

Database to XML type mapping:

XML type	Oracle Type	PostgreSQL Type	SQL Server Type
string	varchar, varchar2, char	varchar, text, char	nchar, text, char, ntext
dateTime	date	timestamp	date, datetime
int	int, number	int	int, bigint
decimal	number (N,N), decimal, float	decimal	decimal

The PATIENT_DIMENSION table has the following four **REQUIRED** columns:

1. PATIENT_NUM

- It is the primary key for the table; therefore it *cannot* contain duplicates.
- *Cannot* be null.
- Holds a reference number for the patient within the data repository.
- Integer field.

1. BIRTH_DATE

- Can be null.
- Contains the patient date of birth (if it exists).
- Date-time field.

1. DEATH_DATE

- Can be null.
- Contains the patient date of death (if it exists).
- Date-time field.

- *The BIRTH_DATE and DEATH_DATE columns are not standardized to a specific time zone, a limitation that may need to be addressed in the future.*

1. VITAL_STATUS_CD

- Contains a code that represents the vital status of the patient and the precision of the vital status data.
- The code consists of two characters; the first one represents the validity of the DEATH_DATE and the second one is for the BIRTH_DATE.
- These values are:

KEY:

"**" means that a second character should be the birth date indicator (if exists)

"_" means that a first character should be the death date indicator (if exists)

Date Explained	Value	Description	
Death date	N*	Living	corresponds to a <i>null</i> /DEATH_DATE
Death date	(null)*	Living	corresponds to a <i>null</i> /DEATH_DATE
Death date	U*	Unknown	corresponds to a <i>null</i> /DEATH_DATE
Death date	Z*	Deceased	corresponds to a <i>null</i> /DEATH_DATE
Death date	Y*	Deceased	DEATH_DATE accurate to <i>day</i>
Death date	M*	Deceased	DEATH_DATE accurate to <i>month</i>
Death date	X*	Deceased	DEATH_DATE accurate to <i>year</i>
Death date	R*	Deceased	DEATH_DATE accurate to <i>hour</i>
Death date	T*	Deceased	DEATH_DATE accurate to <i>minute</i>
Death date	S*	Deceased	DEATH_DATE accurate to <i>second</i>

Birth date	_L	Unknown	corresponds to a <i>null</i> BIRTH_DATE
Birth date	_(null)	Known	BIRTH_DATE accurate to <i>day</i>
Birth date	_D	Known	BIRTH_DATE accurate to <i>day</i>
Birth date	_B	Known	BIRTH_DATE accurate to <i>month</i>
Birth date	_F	Known	BIRTH_DATE accurate to <i>year</i>
Birth date	_H	Known	BIRTH_DATE accurate to <i>hour</i>
Birth date	_J	Known	BIRTH_DATE accurate to <i>minute</i>
Birth date	_C	Known	BIRTH_DATE accurate to <i>second</i>

- *The codes for this field were determined arbitrarily as there was no standardized coding system for their representation.*

The PATIENT_DIMENSION table may have an unlimited number of optional columns and their data types and coding systems are specific to the local implementation. An example of a patient table is shown below. In the example table, there are eight optional columns.

PATIENT_DIMENSION		
PK	PATIENT_NUM	int
	VITAL_STATUS_CD	varchar(50)
	BIRTH_DATE	datetime
	DEATH_DATE	datetime
	SEX_CD*	varchar(50)
	AGE_IN_YEARS_NUM*	int
	LANGUAGE_CD*	varchar(50)
	RACE_CD	varchar(50)
	MARITAL_STATUS_CD*	varchar(50)
	RELIGION_CD*	varchar(50)
	ZIP_CD*	varchar(10)
	STATECITYZIP_PATH	varchar(700)
	PATIENT_BLOB	text
	UPDATE_DATE	datetime
	DOWNLOAD_DATE	datetime
	IMPORT_DATE	datetime
	SOURCESYSTEM_CD	varchar(50)
	UPLOAD_ID	int

The rules for using the codes in the columns to perform queries are represented in the metadata. For example, the columns shown in the table example include a *RACE_CD* and a *STATECITYZIP_CD*.

- The codes from the *RACE_CD* column are enumerated values that may be grouped together to achieve a desired result. For instance, if there are four codes to represent a race of "white"; W, WHITE, WHT, and WHITE-HISPANIC then all four codes can be counted directly to determine the number of white-race patients in the database.
- The codes from the *STATECITYZIP_CD* are strings that represent hierarchical information. In the way, the string is queried from left to right in a string comparison to determine which patients are returned by the query. For example, if a code is MA\BOSTON\02114 and all the patient in BOSTON are desired, the string "MA\BOSTON*" (where * is a wildcard) would be queried.