

Oracle® Healthcare Foundation

New Features Guide

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2 User Documentation

Preface

This guide explains new features and enhancements in Oracle Healthcare Foundation.

This guide is for users who want to learn more about new features and enhancements in this release.

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Related Documents

For more information, see the following documents:

- *Oracle Healthcare Foundation Administration Console Online Help*
- *Oracle Healthcare Foundation Administrator's Guide*
- *Oracle Healthcare Foundation Application Programming Interface Guide*
- *Oracle Healthcare Foundation Application Toolkit Installation Guide*
- *Oracle Healthcare Foundation Appendix*
- *Oracle Healthcare Foundation Data Dictionary*
- *Oracle Healthcare Foundation Electronic Technical Reference Manual*
- *Oracle Healthcare Foundation Installation Guide*
- *Oracle Healthcare Foundation Mapping Metadata*
- *Oracle Healthcare Foundation New Features Guide*
- *Oracle Healthcare Foundation Programmer's Guide*
- *Oracle Healthcare Foundation Quick Reference Guide*
- *Oracle Healthcare Foundation Release Notes*

- *Oracle Healthcare Foundation Security Guide*
- *Oracle Healthcare Foundation Third Party Licenses and Notices*

New Features and Enhancements

This chapter contains descriptions of the new features and enhancements in Oracle Healthcare Foundation. This chapter contains the following sections:

- [Section 1.1, "Data Model Updates"](#)
- [Section 1.2, "Warehouse Integration Loaders"](#)
- [Section 1.3, "Application Toolkit"](#)
- [Section 1.4, "Application Toolkit Loaders"](#)
- [Section 1.5, "Self-Service Analytics"](#)
- [Section 1.6, "Administration Console"](#)

1.1 Data Model Updates

1.1.1 Interface Tables

The following tables are obsolete:

- HDI_SRVY_ENC
- HDI_SRVY_PT
- HDI_SRVY_SVCPRV

The following table which was obsolete is now active:

- HDI_PHARMCY

The following tables are added:

- HDI_ADJCD_CLM
- HDI_ADJCD_CLM_ADJMT
- HDI_ADJCD_CLM_AMT
- HDI_ADJCD_CLM_DX
- HDI_ADJCD_CLM_GRP
- HDI_ADJCD_CLM_GRP_CLM
- HDI_ADJCD_CLM_LN
- HDI_ADJCD_CLM_LN_MDFR
- HDI_ADJCD_CLM_PROC

- HDI_ADJCD_CLM_RSN
- HDI_ADJCD_CLM_SVCPRV
- HDI_CLM_ADJCD_CLM
- HDI_CLM_PAYMT_ADJCD_CLM
- HDI_DERVD_MEAS
- HDI_DERVD_MEAS_RP
- HDI_DERVD_MEAS_SVCPRV
- HDI_MBR
- HDI_MBR_ELIGLY
- HDI_MBR_PT
- HDI_MEAS_MSTR
- HDI_MED_CLM
- HDI_REFAL
- HDI_REFAL_CNRN
- HDI_REFAL_COVRG
- HDI_REFAL_ENC
- HDI_REFAL_FAC
- HDI_REFAL_GRP
- HDI_REFAL_GRP_REFAL
- HDI_REFAL_ORD
- HDI_REFAL_PROC
- HDI_REFAL_RSN
- HDI_REFAL_SVCPRV
- HDI_RELTD_MBR
- HDI_RELTD_REFAL
- HDI_RSK_SCR
- HDI_RX_CLM
- HDI_SPCMN_ID

The following attributes (excluding the previously mentioned tables) are added.

Table 1–1 Attributes Added

TABLE_NAME	COLUMN_NAME
HDI_APPT	REFAL_DAT_SRC_NUM_ID
HDI_APPT	REFAL_INT_ID
HDI_APPT	REFAL_SRC_CHANGED_ON_DT
HDI_BILL_DX	BILL_LN_ITM_DAT_SRC_NUM_ID
HDI_BILL_DX	BILL_LN_ITM_INT_ID
HDI_BILL_DX	BILL_LN_ITM_SRC_CHANGED_ON_DT
HDI_CD_EXTN_SUBST	NDC_CD

Table 1–1 (Cont.) Attributes Added

TABLE_NAME	COLUMN_NAME
HDI_CD_EXTN_SUBST	NDC_CDG_SYS
HDI_CD_EXTN_SUBST	NDC_CDG_SYS_VER
HDI_CLM_DX	CLM_LN_ITM_DAT_SRC_NUM_ID
HDI_CLM_DX	CLM_LN_ITM_INT_ID
HDI_CLM_DX	CLM_LN_ITM_SRC_CHANGED_ON_DT
HDI_PHARMCY	ATTRIBUTE1_CD
HDI_PHARMCY	ATTRIBUTE1_CDG_SYS
HDI_PHARMCY	ATTRIBUTE1_CDG_SYS_VER
HDI_PHARMCY	ATTRIBUTE2_CD
HDI_PHARMCY	ATTRIBUTE2_CDG_SYS
HDI_PHARMCY	ATTRIBUTE2_CDG_SYS_VER
HDI_PHARMCY	ATTRIBUTE3_CD
HDI_PHARMCY	ATTRIBUTE3_CDG_SYS
HDI_PHARMCY	ATTRIBUTE3_CDG_SYS_VER
HDI_PHARMCY	ATTRIBUTE4_CD
HDI_PHARMCY	ATTRIBUTE4_CDG_SYS
HDI_PHARMCY	ATTRIBUTE4_CDG_SYS_VER
HDI_PHARMCY	ATTRIBUTE5_CD
HDI_PHARMCY	ATTRIBUTE5_CDG_SYS
HDI_PHARMCY	ATTRIBUTE5_CDG_SYS_VER
HDI_PHARMCY	MSTR_KY_EXTN_TXT
HDI_PHARMCY	MSTR_KY_ROOT_ID
HDI_PHARMCY	PTY_ATTRIBUTE1
HDI_PHARMCY	PTY_ATTRIBUTE10
HDI_PHARMCY	PTY_ATTRIBUTE11
HDI_PHARMCY	PTY_ATTRIBUTE12
HDI_PHARMCY	PTY_ATTRIBUTE13
HDI_PHARMCY	PTY_ATTRIBUTE14
HDI_PHARMCY	PTY_ATTRIBUTE15
HDI_PHARMCY	PTY_ATTRIBUTE16
HDI_PHARMCY	PTY_ATTRIBUTE17
HDI_PHARMCY	PTY_ATTRIBUTE18
HDI_PHARMCY	PTY_ATTRIBUTE19
HDI_PHARMCY	PTY_ATTRIBUTE1_CD
HDI_PHARMCY	PTY_ATTRIBUTE1_CDG_SYS
HDI_PHARMCY	PTY_ATTRIBUTE1_CDG_SYS_VER
HDI_PHARMCY	PTY_ATTRIBUTE2
HDI_PHARMCY	PTY_ATTRIBUTE20
HDI_PHARMCY	PTY_ATTRIBUTE2_CD
HDI_PHARMCY	PTY_ATTRIBUTE2_CDG_SYS
HDI_PHARMCY	PTY_ATTRIBUTE2_CDG_SYS_VER
HDI_PHARMCY	PTY_ATTRIBUTE3

Table 1–1 (Cont.) Attributes Added

TABLE_NAME	COLUMN_NAME
HDI_PHARMCY	PRTY_ATTRIBUTE3_CD
HDI_PHARMCY	PRTY_ATTRIBUTE3_CDG_SYS
HDI_PHARMCY	PRTY_ATTRIBUTE3_CDG_SYS_VER
HDI_PHARMCY	PRTY_ATTRIBUTE4
HDI_PHARMCY	PRTY_ATTRIBUTE4_CD
HDI_PHARMCY	PRTY_ATTRIBUTE4_CDG_SYS
HDI_PHARMCY	PRTY_ATTRIBUTE4_CDG_SYS_VER
HDI_PHARMCY	PRTY_ATTRIBUTE5
HDI_PHARMCY	PRTY_ATTRIBUTE5_CD
HDI_PHARMCY	PRTY_ATTRIBUTE5_CDG_SYS
HDI_PHARMCY	PRTY_ATTRIBUTE5_CDG_SYS_VER
HDI_PHARMCY	PRTY_ATTRIBUTE6
HDI_PHARMCY	PRTY_ATTRIBUTE7
HDI_PHARMCY	PRTY_ATTRIBUTE8
HDI_PHARMCY	PRTY_ATTRIBUTE9
HDI_PHARMCY	SRC_BIZ_KEY
HDI_PHARMCY	SRC_SURGT_KEY
HDI_PT_ACCT	FIN_CLAS_TYP_CD
HDI_PT_ACCT	FIN_CLAS_TYP_CDG_SYS
HDI_PT_ACCT	FIN_CLAS_TYP_CDG_SYS_VER
HDI_SRVY_FDBCK	ENC_DAT_SRC_NUM_ID
HDI_SRVY_FDBCK	ENC_INT_ID
HDI_SRVY_FDBCK	ENC_SRC_CHANGED_ON_DT
HDI_SRVY_FDBCK	PARTCPTNG_EMP_DAT_SRC_NUM_ID
HDI_SRVY_FDBCK	PARTCPTNG_EMP_INT_ID
HDI_SRVY_FDBCK	PARTCPTNG_EMP_SRC_CH_ON_DT
HDI_SRVY_FDBCK	PARTCPTNG_MBR_DAT_SRC_NUM_ID
HDI_SRVY_FDBCK	PARTCPTNG_MBR_INT_ID
HDI_SRVY_FDBCK	PARTCPTNG_MBR_SRC_CH_ON_DT
HDI_SRVY_FDBCK	PARTCPTNG_PT_DAT_SRC_NUM_ID
HDI_SRVY_FDBCK	PARTCPTNG_PT_INT_ID
HDI_SRVY_FDBCK	PARTCPTNG_PT_SRC_CHANGED_ON_DT
HDI_SRVY_FDBCK	PRTCPTNG_HMN_SUBJ_DATSRNUM_ID
HDI_SRVY_FDBCK	PRTCPTNG_HMN_SUBJ_INT_ID
HDI_SRVY_FDBCK	PRTCPTNG_HMN_SUBJ_SRC_CH_ON_DT
HDI_SRVY_FDBCK	PRTCPTNG_INDSVCPR_DATSRNUM_ID
HDI_SRVY_FDBCK	PRTCPTNG_INDSVCPR_INT_ID
HDI_SRVY_FDBCK	PRTCPTNG_INDSVCPR_SRC_CH_ON_DT
HDI_SRVY_FDBCK	RSPNSBL_ORG_SVCPR_DATSRNUM_ID
HDI_SRVY_FDBCK	RSPNSBL_ORG_SVCPR_INT_ID
HDI_SRVY_FDBCK	RSPNSBL_ORG_SVCPR_SRC_CH_ON_DT
HDI_SRVY_QSTN	SCES_CRITERIA_NT

Table 1–1 (Cont.) Attributes Added

TABLE_NAME	COLUMN_NAME
HDI_SRVY_QSTN	SRVY_QSTN_SECT_NM
HDI_SRVY_QSTN	SRVY_SUBJ_CLAS_CD
HDI_SRVY_QSTN	SRVY_SUBJ_CLAS_CDG_SYS
HDI_SRVY_QSTN	SRVY_SUBJ_CLAS_CDG_SYS_VER
HDI_SRVY_QSTN_RSPNS	SCES_FLG
HDI_STDY	STDY_PHENOTYPE_CD
HDI_STDY	STDY_PHENOTYPE_CDG_SYS
HDI_STDY	STDY_PHENOTYPE_CDG_SYS_VER
HDI_REFAL	PT_INT_ID
HDI_REFAL	PT_DAT_SRC_NUM_ID
HDI_REFAL	PT_SRC_CHANGED_ON_DT
HDI_ADMNSRVY	RSPNSBL_ORG_SVCPR_INT_ID
HDI_ADMNSRVY	RSPNSBL_ORG_SVCPR_DATSRCNUM_ID
HDI_ADMNSRVY	RSPNSBL_ORG_SVCPR_SRC_CH_ON_DT

The following attributes are obsolete.

Table 1–2 Obsolete Attributes

TABLE_NAME	COLUMN_NAME
HDI_BILL_LN_ITM	BILL_DX_DAT_SRC_NUM_ID
HDI_BILL_LN_ITM	BILL_DX_INT_ID
HDI_BILL_LN_ITM	BILL_DX_SRC_CHANGED_ON_DT
HDI_CLM_LN_ITM	CLM_DX_DAT_SRC_NUM_ID
HDI_CLM_LN_ITM	CLM_DX_INT_ID
HDI_CLM_LN_ITM	CLM_DX_SRC_CHANGED_ON_DT

The following attributes are modified.

Table 1–3 Modified Attributes (Datatype Length Change)

TABLE_NAME	COLUMN_NAME	DATA_TYPE	DATA_LENGTH
HDI_CHRG_MSTR	CHRG_MSTR_DESC	VARCHAR2	255
HDI_CHRG_MSTR	CHRG_MSTR_NM	VARCHAR2	100
HDI_SRVY_QSTN	SRVY_QSTN_NM	VARCHAR2	200

The following attributes are made nullable.

Table 1–4 Nullable Attributes

TABLE_NAME	COLUMN_NAME	NULLABLE
HDI_RSLT_LOG	ENTERPRISE_ID	Y

1.1.2 Healthcare Data Warehouse

The following tables are obsolete:

- HDM_SRVY_ENC

- HDM_SRVY_PT
- HDM_SRVY_SVCPRV

The following table which was obsolete is now active:

- HDM_PHARMCY

The following tables are added:

- HDM_ADJCD_CLM
- HDM_ADJCD_CLM_ADJMT
- HDM_ADJCD_CLM_AMT
- HDM_ADJCD_CLM_DX
- HDM_ADJCD_CLM_GRP
- HDM_ADJCD_CLM_GRP_CLM
- HDM_ADJCD_CLM_LN
- HDM_ADJCD_CLM_LN_MDFR
- HDM_ADJCD_CLM_PROC
- HDM_ADJCD_CLM_RSN
- HDM_ADJCD_CLM_SVCPRV
- HDM_CLM_ADJCD_CLM
- HDM_CLM_PAYMT_ADJCD_CLM
- HDM_DERVD_MEAS
- HDM_DERVD_MEAS_RP
- HDM_DERVD_MEAS_SVCPRV
- HDM_MBR
- HDM_MBR_ELIGLY
- HDM_MBR_PT
- HDM_MEAS_MSTR
- HDM_MED_CLM
- HDM_REFAL
- HDM_REFAL_CNRN
- HDM_REFAL_COVRG
- HDM_REFAL_ENC
- HDM_REFAL_FAC
- HDM_REFAL_GRP
- HDM_REFAL_GRP_REFAL
- HDM_REFAL_ORD
- HDM_REFAL_PROC
- HDM_REFAL_RSN
- HDM_REFAL_SVCPRV

- HDM_RELTD_MBR
- HDM_RELTD_REFAL
- HDM_RSK_SCR
- HDM_RX_CLM
- HDM_SPCMN_ID

The following attributes (excluding the tables previously mentioned) are added.

Table 1–5 Attributes Added

TABLE_NAME	COLUMN_NAME
HDM_APPT	REFAL_ID
HDM_APPT	REFAL_VN
HDM_BILL_DX	BILL_LN_ITM_ID
HDM_BILL_DX	BILL_LN_ITM_VN
HDM_CD_EXTN_SUBST	NDC_CD_ID
HDM_CD_EXTN_SUBST	NDC_CD_VN
HDM_CLM_DX	CLM_LN_ITM_ID
HDM_CLM_DX	CLM_LN_ITM_VN
HDM_PHARMCY	MSTR_KY_EXTN_TXT
HDM_PHARMCY	MSTR_KY_ROOT_ID
HDM_PHARMCY	ORIG_UDA1_CD_ID
HDM_PHARMCY	ORIG_UDA1_CD_VN
HDM_PHARMCY	ORIG_UDA2_CD_ID
HDM_PHARMCY	ORIG_UDA2_CD_VN
HDM_PHARMCY	ORIG_UDA3_CD_ID
HDM_PHARMCY	ORIG_UDA3_CD_VN
HDM_PHARMCY	ORIG_UDA4_CD_ID
HDM_PHARMCY	ORIG_UDA4_CD_VN
HDM_PHARMCY	ORIG_UDA5_CD_ID
HDM_PHARMCY	ORIG_UDA5_CD_VN
HDM_PHARMCY	SRC_BIZ_KY
HDM_PHARMCY	SRC_SURGT_KY
HDM_PHARMCY	UDA1
HDM_PHARMCY	UDA10
HDM_PHARMCY	UDA11
HDM_PHARMCY	UDA12
HDM_PHARMCY	UDA13
HDM_PHARMCY	UDA14
HDM_PHARMCY	UDA15
HDM_PHARMCY	UDA16
HDM_PHARMCY	UDA17
HDM_PHARMCY	UDA18
HDM_PHARMCY	UDA19
HDM_PHARMCY	UDA1_CD_ID
HDM_PHARMCY	UDA1_CD_VN

Table 1–5 (Cont.) Attributes Added

TABLE_NAME	COLUMN_NAME
HDM_PHARMCY	UDA2
HDM_PHARMCY	UDA20
HDM_PHARMCY	UDA2_CD_ID
HDM_PHARMCY	UDA2_CD_VN
HDM_PHARMCY	UDA3
HDM_PHARMCY	UDA3_CD_ID
HDM_PHARMCY	UDA3_CD_VN
HDM_PHARMCY	UDA4
HDM_PHARMCY	UDA4_CD_ID
HDM_PHARMCY	UDA4_CD_VN
HDM_PHARMCY	UDA5
HDM_PHARMCY	UDA5_CD_ID
HDM_PHARMCY	UDA5_CD_VN
HDM_PHARMCY	UDA6
HDM_PHARMCY	UDA7
HDM_PHARMCY	UDA8
HDM_PHARMCY	UDA9
HDM_PT_ACCT	FIN_CLAS_TYP_ID
HDM_PT_ACCT	FIN_CLAS_TYP_VN
HDM_PT_ACCT	ORIG_FIN_CLAS_TYP_ID
HDM_PT_ACCT	ORIG_FIN_CLAS_TYP_VN
HDM_SRVY_FDBCK	ENC_ID
HDM_SRVY_FDBCK	ENC_VN
HDM_SRVY_FDBCK	PARTCPTNG_EMP_ID
HDM_SRVY_FDBCK	PARTCPTNG_EMP_VN
HDM_SRVY_FDBCK	PARTCPTNG_HMN_SUBJ_ID
HDM_SRVY_FDBCK	PARTCPTNG_HMN_SUBJ_VN
HDM_SRVY_FDBCK	PARTCPTNG_IND_SVCPRV_ID
HDM_SRVY_FDBCK	PARTCPTNG_IND_SVCPRV_VN
HDM_SRVY_FDBCK	PARTCPTNG_MBR_ID
HDM_SRVY_FDBCK	PARTCPTNG_MBR_VN
HDM_SRVY_FDBCK	PARTCPTNG_PT_ID
HDM_SRVY_FDBCK	PARTCPTNG_PT_VN
HDM_SRVY_FDBCK	RSPNSBL_ORG_SVCPRV_ID
HDM_SRVY_FDBCK	RSPNSBL_ORG_SVCPRV_VN
HDM_SRVY_QSTN	ORIG_SRVY_SUBJ_CLAS_CD_ID
HDM_SRVY_QSTN	ORIG_SRVY_SUBJ_CLAS_CD_VN
HDM_SRVY_QSTN	SCES_CRITERIA_NT
HDM_SRVY_QSTN	Srvy_Qstn_Sect_Nm
HDM_SRVY_QSTN	Srvy_Subj_Clas_CD_ID
HDM_SRVY_QSTN	Srvy_Subj_Clas_CD_VN
HDM_SRVY_QSTN_RSPNS	SCES_FLG

Table 1–5 (Cont.) Attributes Added

TABLE_NAME	COLUMN_NAME
HDM_STDY	ORIG_STDY_PHENOTYPE_CD_ID
HDM_STDY	ORIG_STDY_PHENOTYPE_CD_VN
HDM_STDY	STDY_PHENOTYPE_CD_ID
HDM_STDY	STDY_PHENOTYPE_CD_VN
HDM_REFAL	PT_ID
HDM_REFAL	PT_VN
HDM_ADMSRVY	RSPNSBL_ORG_SVCPRV_ID
HDM_ADMSRVY	RSPNSBL_ORG_SVCPRV_VN

The following attributes are obsolete.

Table 1–6 Obsolete Attributes

HDM_BILL_LN_ITM	BILL_DX_ID
HDM_BILL_LN_ITM	BILL_DX_VN
HDM_CLM_LN_ITM	CLM_DX_ID
HDM_CLM_LN_ITM	CLM_DX_VN

The following attributes are modified.

Table 1–7 Modified Attributes (Datatype Length Change)

TABLE_NAME	COLUMN_NAME	DATA_TYPE	DATA_LENGTH
HDM_CHRG_MSTR	CHRG_MSTR_DESC	VARCHAR2	255
HDM_CHRG_MSTR	CHRG_MSTR_NM	VARCHAR2	100
HDM_SRVY_QSTN	SrvY_QSTN_NM	VARCHAR2	200

The following attributes are made nullable.

Table 1–8 Nullable Attributes

TABLE_NAME	COLUMN_NAME	NULLABLE
HDM_BILL_DX	BILL_ID	Y
HDM_BILL_DX	BILL_VN	Y
HDM_CLM_DX	CLM_ID	Y
HDM_CLM_DX	CLM_VN	Y

Note: The ENTERPRISE_ID column for all non-obsolete tables across the model is made nullable.

1.2 Warehouse Integration Loaders

1.2.1 Batch Processing

The Warehouse Integration Loaders support the Batch Processing feature for incremental ETLs that can be leveraged for vast volumes of data in Interface Tables (HDI). As initial load ETLs do not support versioning, the incremental ETLs can be used to process huge initial load data that contains version records by breaking into batches.

The following example illustrates using batching method to process data in multiple executions:

For example, the historical load of HDI_OBSV contains data between 01, Jan 2001 to 31, Dec 2015. If you do not perform batch processing and do not set BATCH_TO_DT, then all the data available in source system is considered during ETL execution and processed.

If you perform batch processing and load the data in three batches, then you can distribute the total volume into three batches and set the dates accordingly.

Table 1–9 Example for Batching Method to Process Data in Multiple Executions

BATCH_NO	CURRENT_EXEC_DT	LAST_EXEC_DT	BATCH_TO_DT
1	01, Jan 1700	-	01, Jan 2016 23:59:59
2	02, Jan 2016 00:00:00	-	02, Jan 2016 23:59:59
3	03, Jan 2016 00:00:00	-	-

- Batch 1: Before executing the ETL, set BATCH_TO_DT to 01, Jan 2016 23:59:59. This forces ETL to process the data loaded until BATCH_TO_DT date. At the end of the ETL execution, BATCH_TO_DT is automatically copied to CURRENT_EXEC_DT.
- Batch 2: Before executing the ETL, set BATCH_TO_DT to 02, Jan 2016 23:59:59. This forces ETL to process the data between CURRENT_EXEC_DT and BATCH_TO_DT date. At the end of the ETL execution, BATCH_TO_DT is automatically copied to CURRENT_EXEC_DT.
- Batch 3: For the last batch, you do not need to set any value for BATCH_TO_DT. ETL processes all the data from CURRENT_EXEC_DT to ETL execution time.

1.3 Application Toolkit

The following new subject areas are added to Healthcare Common Data mart (HCD):

- Value Based Care
- Derived Measure
- Survey

The Encounter and Billing subject areas are enhanced.

There are 15 new fact tables and 51 new dimensions added to Healthcare Common Data mart.

The following table lists the new fact tables.

Member Month Eligibility	Medical Claim Procedure	Administered Survey
Member Risk Score	Prescription Claim	Encounter DRG
Medical Claim	Derived Measure	Encounter Service Line

Medical Claim Line	Survey Response	Bill Self Pay
Medical Claim Diagnosis	Survey Feedback	Bill Balance

The following table lists the new dimension tables.

Member	Care Setting & Hierarchy	Pharmacy	Derived Measure
Survey	Survey Question	Adj. Claim Category	Adj. Claim Facility Type
Adj. Claim Frequency Code	Adj. Claim Payment Status Code	Adj. Claim Reason Code	Adj. Claim Subtype Code
AR Financial Class Type Code Dimension	Bill Activity Status Code	Brand Generic Code	Compound Drug Code
Confidence Level Code	Dispense As Written	Dispense Status Code	DRG Assignment Status Code
DRG Type	Eligibility Category Code	Bill Relationship Type Code	Network Relationship Type Code
Insurance Product Type Code	Insurance Program Type Code	MDM Code	Measure Value Code
Measure Value Type	Medical Claim Line Status Code	Medical Claim Dx Relationship Type Code	Medical Claim Procedure Relationship Type Code
Member Patient Relationship Type Code	Payment Arrangement Type Code	Response Value Code	Response Value Type Code
Revenue Code	Risk Category Code	Risk Class Code	Risk of Mortality Code
Risk Score Code	Risk Value Code	Risk Value Type Code	Self Pay Payment Code
Service Code	Service Modifier Code	Severity of Illness Code	Survey Delivery Method Code
Survey Received Method Code	Service Line Type	Therapeutic Class Code	-

1.3.1 Helper Tables

In addition to dimension tables, dimension materialized views and dimension views include several helper tables. These tables are suffixed with _G.

HCD includes the following helper tables.

Table 1–10 Helper Tables

Helper Name	Helper Table
Datasource Helper	W_HCD_DATASOURCE_G
Materialized View Type Definition Helper	W_HCD_MAT_VIEW_TYPE_DEFN_G

- The Datasource Helper (W_HCD_DATASOURCE_G) is used as an HCD-based repository for the data source metadata available in the HDM source table (HDM_DATASOURCE). An ETL is used to load and synchronize the contents of the HDM source tables and HCD target tables. These tables contain information describing original source systems, that is, source systems from which HDM data is extracted.
- The Materialized View Type Definition Helper (W_HCD_MAT_VIEW_TYPE_DEFN_G) is a metadata configuration table used to customize the association of a second class dimension materialized view to the HDM and HCD Code Repository code type which is used as the basis for that materialized view. This provides easier customization capability.

1.3.2 Master Provider Index of Individual Service Provider Dimension

An individual service provider may be found on all source systems and may have a different identifier across source systems. Master Provider Index (MPI) is leveraged to create a single identifier for each individual service provider that is unique across different source systems. The unique record for each individual service provider is known as Master Provider record, which is sourced from the MPI system.

The Related Service Provider entity (HDM_RELTD_SVCPRV) in Healthcare Data Warehouse is leveraged to create cross reference between source service provider and target service provider. The Service Provider entity (HDM_SVCPRV) contains both source records and Master Provider records.

Application Toolkit supports:

- Configuration to identify Master Provider Index (MPI) records
- Extraction and loading of MPI records into the Individual Service Provider dimension (W_HCD_IND_SVC_PROV_D)
- Consistent representation of all references (IND_SVC_PROV_WID) of the Individual Service Provider to MPI records

MPI_RELTD_SVCPRV Parameter

This parameter is present in the HCD_GLBL_PARAM_G table (values can be Y, N, or NULL). You have to configure SVCPRV_RLSHPTYP_CD (parameter value) of HDM_RELTD_SVCPRV for mapping between source and target service providers. Distinct list of target service provider is loaded to W_HCD_IND_SVC_PROV_D based on configured service provider relationship type (HDM_RELTD_SVCPRV.SVCPRV_RLSHPTYP_ID).

1.3.3 Terminology Standardization

Application Toolkit supports terminology standardization on the downstream Business Intelligence (BI) application requirements such as clinical, financial, and administrative analytics. For example, financial analytic applications may require ICD as preferred vocabulary for diagnosis codes, whereas clinical BI applications may require SNOMED. Application Toolkit supports terminology standardization of controlled medical vocabularies for diagnosis, procedure, substance, and observation entities.

1.3.3.1 Configuring Terminology Standardization

You can configure standard coding system for each dimension reference. The HCD_ATRB_CD_SYS_LKUP_G table is used for terminology configuration. This table is created in the HMC configuration schema of Application Toolkit.

The HCD_ATRB_CD_SYS_LKUP_G table consists the following columns.

Table 1–11 Columns in the HCD_ATRB_CD_SYS_LKUP_G Table

Column Name	Description
ATRB_CD_SYS_LKUP_G_ID	Primary key (surrogate unique identifier) for Attribute Code System Lookup.
ATRB_CD_SYS_LKUP_G_VN	Primary key (version number) for Attribute Code System Lookup.
ENTY_NM	Name of the entity.
ATRB_NM	Name of the attribute to be standardized.
STD_CDG_SYS_ID	Foreign key (surrogate unique identifier) identifying the standard code system.

Table 1–11 (Cont.) Columns in the HCD_ATRB_CD_SYS_LKUP_G Table

Column Name	Description
INSERT_DT	This column stores the date and time on which the record is inserted into the HDWF table.
UPDATE_DT	This column stores the date on which the record is updated into the HDWF table. It is same as INSERT_DT in case of first time loading in the HDWF table. Update date is used for incremental load from HDWF tables to Data Mart tables and it is mandatory.
REQUEST_ID	This column stores the request ID of the job that created the record. Typically ETL process ID is used to populate this column.
EFFECTIVE_FROM_DT	This column stores the date and time from which the record is effective in HDWF. This column is loaded from the SRC_CHANGED_ON_DT column of Interface Tables and is used for versioning of records in HDWF.
EFFECTIVE_TO_DT	This column stores the date and time up to which the record is effective in HDWF. This column must be populated as follows: <ul style="list-style-type: none"> ▪ For the current version of record: 12/31/9999. ▪ For the previous version of record: Immediate previous date and time relative to the value of SRC_CHANGED_ON_DT of the current version of the record.
CURRENT_FLG	This column is used to identify the current version of the record in HDWF using the value 'Y'.
DELETE_FLG	This column is used to identify delete status of the record in the source system using the value 'Y'.
ATRБ_CD_NM	Attribute code name.

Sample Configurations: The ENTY_NM and ATRB_NM columns hold the HCD table name and attribute name which need to be standardized. Only those entities present in the HCD_ATRB_CD_SYS_LKUP_G table are standardized.

Table 1–12 Snapshot of HCD_ATRB_CD_SYS_LKUP_G

ENTY_NM	ATRБ_NM	ATRБ_CD_NM	STD_CDG_SYS_ID
W_HCD_ENCOUNTER_F	PRI_ADMIT_DIAG_WID	ENC_ADMTNG_CNRN_RLSHPTYP_CD	10
W_HCD_ENCOUNTER_F	PRI_DISCH_DIAG_WID	ENC_DC_CNRN_RLSHPTYP_CD	10
W_HCD_ENCOUNTER_F	FINAL_DIAG_WID	ENC_FINAL_CNRN_RLSHPTYP_CD	10
W_HCD_ENCOUNTER_F	PRELIM_DIAG_WID	ENC_PRELIM_CNRN_RLSHPTYP_CD	10

The following table lists the dimension references in fact, fact bridge, or fact child tables which support terminology standardization feature.

Table 1–13 List of Dimension References

Fact/Fact Bridge Table	Foreign Key Column	Reference Table
W_HCD_BILL_LINE_FC	DIAGNOSIS_WID	W_HCD_DIAGNOSIS_D
W_HCD_BILL_LINE_FC	PROCEDURE_WID	W_HCD_PROCEDURE_D
W_HCD_CLAIM_F	PRINCIPAL_DIAG_WID	W_HCD_DIAGNOSIS_D
W_HCD_CLAIM_F	PRINCIPAL_PROC_WID	W_HCD_PROCEDURE_D
W_HCD_CLAIM_F	PRI_ADMIT_DIAG_WID	W_HCD_DIAGNOSIS_D
W_HCD_CLAIM_LINE_FC	DIAGNOSIS_WID	W_HCD_DIAGNOSIS_D
W_HCD_CLAIM_LINE_FC	PROCEDURE_WID	W_HCD_PROCEDURE_D
W_HCD_ENCOUNTER_F	PRI_ADMIT_DIAG_WID	W_HCD_DIAGNOSIS_D
W_HCD_ENCOUNTER_F	PRI_DISCH_DIAG_WID	W_HCD_DIAGNOSIS_D
W_HCD_ENCOUNTER_F	FINAL_DIAG_WID	W_HCD_DIAGNOSIS_D

Table 1–13 (Cont.) List of Dimension References

Fact/Fact Bridge Table	Foreign Key Column	Reference Table
W_HCD_ENCOUNTER_F	PRELIM_DIAG_WID	W_HCD_DIAGNOSIS_D
W_HCD_ENC_DIAG_FB	DIAGNOSIS_WID	W_HCD_DIAGNOSIS_D
W_HCD_ENC_PROC_FB	PROCEDURE_WID	W_HCD_PROCEDURE_D
W_HCD_MED_CLAIM_DIAG_FB	DIAGNOSIS_WID	W_HCD_DIAGNOSIS_D
W_HCD_MED_CLAIM_F	PRINCIPAL_PROC_WID	W_HCD_PROCEDURE_D
W_HCD_MED_CLAIM_F	PRINCIPAL_DIAG_WID	W_HCD_DIAGNOSIS_D
W_HCD_MED_CLAIM_PROC_FB	PROCEDURE_WID	W_HCD_PROCEDURE_D
W_HCD_OBSERVATION_F	PROCEDURE_WID	W_HCD_PROCEDURE_D
W_HCD_OBSERVATION_F	OBSERVATION_WID	W_HCD_OBSERVATION_D
W_HCD_RX_CLAIM_F	SUBSTANCE_WID	W_HCD_SUBSTANCE_D
W_HCD_SUBST_ADMIN_FB	SUBSTANCE_WID	W_HCD_SUBSTANCE_D

1.3.3.2 Terminology Standardization Process in Application Toolkit ETLs

- If standardization is not configured in the HCD_ATRB_CD_SYS_LKUP_G table, then dimension reference in fact tables is resolved to warehouse standard code (default functionality).
- If standardization is configured in the HCD_ATRB_CD_SYS_LKUP_G table, then Application Toolkit ETLs performs lookup on HDM_CRS_MAP to find standard code and resolve standard code to dimension references in fact, fact bridge, or fact child tables. Application Toolkit leverages the HDM Cross Map entity (HDM_CRS_MAP) for mapping content.
- If standardization is configured in the HCD_ATRB_CD_SYS_LKUP_G table and cross map is not found, then dimension reference is resolved to warehouse standard code, provided dimension has warehouse standard codes. Otherwise, dimension reference is resolved to NAV record.

1.4 Application Toolkit Loaders

1.4.1 Application Toolkit ETLs

New application toolkit ETLs are provided for new fact tables, fact bridge tables, fact child tables, and dimension tables.

A new column, PARAMETER_TYPE, is added to the HCD_ETL_ENTY_SELCTN_PARAM_G table.

Table 1–14 Structure of HCD_ETL_ENTY_SELCTN_PARAM_G

Parameter Name	Parameter Value
ETL_ENTY_SELCTN_PARAM_ID	Primary key of HCD_ETL_ENTY_SELCTN_PARAM_G.
MSTR_ENTY_NM	Entity that uses the parameterized attribute value.
ATTRIB_NM	Name of the attribute to be parameterized.
ATTRIB_VAL	Value of the attribute.
INSERT_DT	Date when the record is inserted.
ENTERPRISE_ID	Unique identifier of an enterprise.

Table 1–14 (Cont.) Structure of HCD_ETL_ENTY_SELCTN_PARAM_G

Parameter Name	Parameter Value
PARAMETER_TYPE	Configured value is either selection parameter to driving entity of given dimension or inline parameter for attribute value identification.

Table 1–15 Parameters Added for New Dimension Tables

Entity Name (MSTR_ENTY_NM)	Parameter Name (ATTRIB_NM)	Default Parameter Value (ATTRIB_VAL)	Parameter Type (PARAMETER_TYPE)
W_HCD_BILL_SELF_PAY_F	ENC_RSPNSBL_ORG_SVCPRV_RLSHPTYP_CD	ENC_SVCPRV_RLSHPTYP_RSPNSBL_SVCPRV	INLINE_VALUE
W_HCD_RX_CLAIM_F	RX_CLM_PRCRB_PROV_RLSHPTYP_CD	-	INLINE_VALUE
W_HCD_DERIVED_MEASURE_F	PRTY_SUBTYP_IND_PRTY	PRTY_SUBTYP_IND_PRTY	INLINE_VALUE
W_HCD_DERIVED_MEASURE_F	PRTY_SUBTYP_ORG_PRTY	PRTY_SUBTYP_ORG_PRTY	INLINE_VALUE
W_HCD_ADMNSTRD_SURVEY_F	ADMN_SRVY_BU_RLSHPTYP_CD	-	INLINE_VALUE
W_HCD_MED_CLAIM_F	MED_CLM_PRIN_CNRN_RLSHPTYP_CD	ADJCD_CLM_DX_RLSHPTYP_PNPAL_DX	INLINE_VALUE
W_HCD_MED_CLAIM_F	MED_CLM_PRIN_PROC_RLSHPTYP_CD	ADJCD_CLM_PROC_RLSHPTYP_PRMRY_PROC	INLINE_VALUE
W_HCD_MED_CLAIM_F	MED_CLM_ATTNDG_SVCPRV_RLSHPTYP_CD	ADJCD_CLM_SVCPRV_RLSHPTYP_ATTNDG_SVCPRV	INLINE_VALUE
W_HCD_MED_CLAIM_F	MED_CLM_ATTR_SVCPRV_RLSHPTYP_CD	ADJCD_CLM_SVCPRV_RLSHPTYP_RNERNG_SVCPRV	INLINE_VALUE
W_HCD_MEMBER_MONTH_ELIG_F	MEMBR_PT_RLSHPTYP_CD	MEMBR_PT_RLSHPTYP_MSTR_PT	INLINE_VALUE

Table 1–16 Parameter Added for New Hierarchy Tables

Entity Name (MSTR_ENTY_NM)	Parameter Name (ATTRIB_NM)	Default Parameter Value (ATTRIB_VAL)	Parameter Type (PARAMETER_TYPE)
W_HCD_CARE_SETTING_DH	GRAPH_NBR	-	SELECTION_VALUE

Table 1–17 Parameters Added for New Fact Tables

Entity Name (MSTR_ENTY_NM)	Parameter Name (ATTRIB_NM)	Default Parameter Value (ATTRIB_VAL)	Parameter Type (PARAMETER_TYPE)
W_HCD_BILL_SELF_PAY_F	ENC_RSPNSBL_ORG_SVCPRV_RLSHPTYP_CD	ENC_SVCPRV_RLSHPTYP_RSPNSBL_SVCPRV	INLINE_VALUE
W_HCD_RX_CLAIM_F	RX_CLM_PRCRB_PROV_RLSHPTYP_CD	-	INLINE_VALUE
W_HCD_DERIVED_MEASURE_F	PRTY_SUBTYP_IND_PRTY	PRTY_SUBTYP_IND_PRTY	INLINE_VALUE
W_HCD_DERIVED_MEASURE_F	PRTY_SUBTYP_ORG_PRTY	PRTY_SUBTYP_ORG_PRTY	INLINE_VALUE
W_HCD_ADMNSTRD_SURVEY_F	ADMN_SRVY_BU_RLSHPTYP_CD	-	INLINE_VALUE
W_HCD_MED_CLAIM_F	MED_CLM_PRIN_CNRN_RLSHPTYP_CD	ADJCD_CLM_DX_RLSHPTYP_PNPAL_DX	INLINE_VALUE
W_HCD_MED_CLAIM_F	MED_CLM_PRIN_PROC_RLSHPTYP_CD	ADJCD_CLM_PROC_RLSHPTYP_PRMRY_PROC	INLINE_VALUE

Table 1–17 (Cont.) Parameters Added for New Fact Tables

Entity Name (MSTR_ENTY_NM)	Parameter Name (ATTRIB_NM)	Default Parameter Value (ATTRIB_VAL)	Parameter Type (PARAMETER_TYPE)
W_HCD_MED_CLAIM_F	MED_CLM_ATTNDG_SVCPRV_RLSHPTYP_CD	ADJCD_CLM_SVCPRV_RLSHPTYP_ATTNDG_SVCPRV	INLINE_VALUE
W_HCD_MED_CLAIM_F	MED_CLM_ATTNDG_SVCPRV_RLSHPTYP_CD	ADJCD_CLM_SVCPRV_RLSHPTYP_RNERNG_SVCPRV	INLINE_VALUE
W_HCD_MEMBER_MONTH_ELIG_F	MEMBR_PT_RLSHPTYP_CD	MEMBR_PT_RLSHPTYP_MSTR_PT	INLINE_VALUE

1.4.1.1 Configuration Enhancement of ETL Parameters

A new column, MPI_RELTD_SVCPRV, is added to the HCD_GLBL_PARAM_G table.

Table 1–18 Snapshot of HCD_GLBL_PARAM_G

Parameter Name	Parameter Value
CODEID_NAV	-1
PARALLEL_QUERY_NO	1
MPI_RELTD_SVCPRV	NULL or <code>

1.4.1.2 Application Toolkit Load Plan

ODI load plan is provided to execute Application Toolkit ETLs as per recommended load sequence.

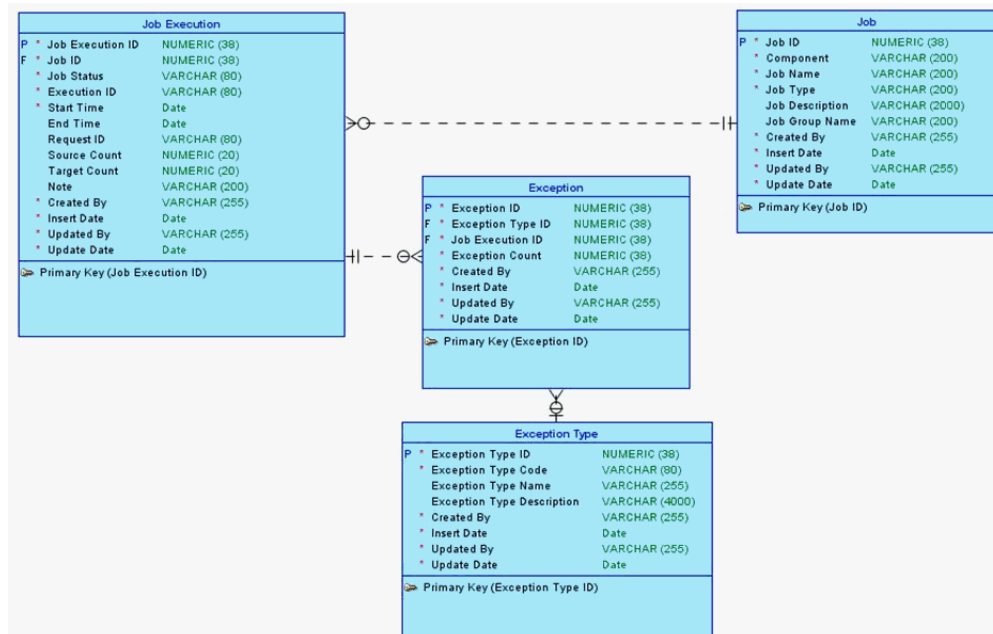
1.4.1.3 Application Toolkit Load Summary

When ETLs are executed, Application Toolkit captures the following load summary details:

- ETL Start Time
- ETL End Time
- Status
- Source Record Count
- Target Record Count
- Request ID
- NT (holds the schema user name)

The following diagram illustrates the relationship between different tables involved in capturing load summary details.

Figure 1–1 Load Summary Tables



where,

- Job and Exception Type are the master tables, and Job Execution and Exception are the run-time tables.
- The Job table contains workflows and its associated sessions. Each record is identified by a unique Job ID.
- The Job Execution table contains ETL execution details such as start time, end time, status, source and target record counts, and so on.

1.5 Self-Service Analytics

A new Healthcare Common Data Mart RPD compatible with Oracle Business Intelligence 12c is delivered. There are 15 new subject areas added that you can use to create reports and dashboards.

The following are the new subject areas:

Value Based Care

- Member Month Eligibility
- Member Risk Score
- Medical Claim
- Medical Claim Line
- Medical Claim Diagnosis
- Medical Claim Procedure
- Prescription Claim
- Derived Measure

Administrative

- Survey Response
- Survey Feedback
- Administered Survey

Clinical

- Encounter DRG
- Encounter Service Line

Finance

- Bill Self Pay
- Bill Balance

The following sections explain the new features added to the Self-Service Analytics tool.

1.5.1 Annotations Framework

The Annotations Framework lets you define and override RPD metadata previously supported through conventions in an external annotation file. The annotations are defined as key value pairs in a JSON notation.

1.5.2 Support for Calculated Columns

This feature lets you define both pre-aggregation and post-aggregation calculated columns supported by OBIEE, and to merge them with the generated OBIEE RPD.

1.5.3 Removal of Default Hierarchies from Presentation Tables

A new configuration option, `bi.presentation_include_default_hierarchy`, is added to the properties file which determines if default hierarchies consisting of Grand Total and Detail levels can be removed from the presentation layer.

1.5.4 Hide Functionality

This feature lets you use the Hide annotation on fact tables, aggregate tables, columns in fact tables, bridge tables, dimension tables, and dimension hierarchies to:

- Remove or hide subject area, logical fact, alias tables for the fact table and its aggregate tables, and associated logical dimensions that are not shared with other facts and dimension alias tables.
- Hide the detail level and its drill key, drill key columns and associated columns from the listing of presentation dimension tables.

1.5.5 Configure Prefixes of Default Presentation Tables

New configuration options are added to the properties file to configure the prefixes of Fact, Dimension, and Degenerate Dimension tables. This is useful if you want to drop the prefixes for usability.

1.5.6 Description of Presentation Subject Area

A new configuration option, `bi.presentation_subject_area_description`, is added to the properties file to add subject area description in the presentation layer of the RPD. The description is added when this option is set to true and the associated logical fact table contains a description.

1.5.7 Map Non-Aggregated Measures to Dimensions

This feature lets you add non-aggregated measures of a fact table as dimension measures to an associated dimension.

1.5.8 Support for Hierarchy Outrigger Dimension Table Pattern

A hierarchy table is used as outriggers of one base dimension table ($f \rightarrow d \rightarrow dh$). This new pattern models a normalized dimension that maintains a single, generic hierarchy as the only hierarchy or as an alternative hierarchy to the hierarchy of the base dimension table ($fact \rightarrow dimension \rightarrow dimension\ hierarchy$). You can combine this pattern with outrigger and peer dimension table patterns.

1.5.9 Optimize Query Performance of Peer Tables

The implementation of the peer dimension table pattern ($d \leftarrow dp$) between peer table 'dp' and its base dimension table 'd' is modified to allow OBIEE to perform LTS join pruning if a query contains columns of the base dimension table 'd' and any columns of the peer dimension table 'dp'. The functionality of the generated RPD remains unchanged.

1.5.10 Support of Additional Oracle Database Data Types

The mapping between Oracle database data types and OBIEE data types is extended. The Oracle data types `BINARY_FLOAT`, `BINARY_DOUBLE`, `BLOB`, `CLOB`, `NCLOB`, `LONG`, `ROWID`, and `XML Type` are mapped to OBIEE data types. For more details, see Oracle Business Intelligence Enterprise Edition 12c documentation.

1.6 Administration Console

The Oracle Healthcare Foundation (OHF) Administration Console is a web application that contains the following features:

Table 1–19 Features of Administration Console

Feature	Description
Load Summary	Displays the load summary for Warehouse Integration Loaders. This is the default page when you log in to the application.
Exception Log	Displays various status counts of exception records for each interface table based on the selected filters. It contains the following views: <ul style="list-style-type: none"> ▪ Exception Log Summary View ▪ Exception Log Analysis View ▪ Exception Log Detailed View
Profiler	Displays result of data profiling for reference and coded attributes of Interface Tables (HDI) entities through built-in profiling queries. It contains the following views: <ul style="list-style-type: none"> ▪ Referential Integrity View ▪ Coded Attribute View

User Documentation

This chapter provides a list of Oracle Healthcare Foundation user documentation, description, and the audience.

Table 2–1 User Documentation

Document Name	Description	Audience
Oracle Healthcare Foundation Administration Console Online Help	Provides information about implementation, configuration, and administration of Oracle Healthcare Foundation Administration Console.	Users who are responsible for administration of Oracle Healthcare Foundation. They include Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, and Business Intelligence developers.
Oracle Healthcare Foundation Administrator's Guide	Provides information about implementation, configuration, and administration of Oracle Healthcare Foundation. It also provides details on system monitoring and performance optimization.	Users who are responsible for administration of Oracle Healthcare Foundation. They include Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, and Business Intelligence developers.
Oracle Healthcare Foundation Application Programming Interface Guide	Contains information on Application Programming Interfaces (APIs) that can be used to interface with Oracle Healthcare Foundation.	Users who load Omics data.
Oracle Healthcare Foundation Application Toolkit Installation Guide	Explains the installation of Oracle Healthcare Foundation Application Toolkit.	Users who want to install Oracle Healthcare Foundation Application Toolkit.
Oracle Healthcare Foundation Appendix	Contains default load sequence, sample master data, and unique dependency list for HDM tables.	Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, Business Analysts, Product Managers, Business Intelligence developers, Bioinformaticians, Computational Biologists, Clinicians, Scientists, Developers, and administrators.
Oracle Healthcare Foundation Configuration Guide	Contains configuration details of Oracle Healthcare Foundation.	Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, and Business Intelligence developers.
Oracle Healthcare Foundation Data Dictionary	Provides information about the attributes of each Entity and the relationship between these Entities.	Business Analysts, Clinical Analysts, Implementation Analysts, Developers, or anyone that wants a basic understanding about the Healthcare Data Warehouse model.
Oracle Healthcare Foundation Electronic Technical Reference Manual	Contains data models technical references.	Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, Business Analysts, Product Managers, Business Intelligence developers, Bioinformaticians, Computational Biologists, Clinicians, Scientists, Developers, and administrators.

Table 2–1 (Cont.) User Documentation

Document Name	Description	Audience
Oracle Healthcare Foundation Installation Guide	Explains the installation and initial setup of Oracle Healthcare Foundation.	Users who want to install Oracle Healthcare Foundation.
Oracle Healthcare Foundation Mapping Metadata	Contains end-to-end mappings.	Users of Oracle Healthcare Foundation who are responsible for loading data from source systems to Oracle Healthcare Foundation and developing self-service business intelligence applications. They include Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, Business Analysts, Product Managers, Business Intelligence developers, Bioinformaticians, Computational Biologists, Clinicians, Scientists, Developers, and administrators.
Oracle Healthcare Foundation New Features Guide	Explains new features and enhancements in Oracle Healthcare Foundation.	Users who want to learn more about new features and enhancements in this release.
Oracle Healthcare Foundation Programmer's Guide	Describes architecture, features, and components of Oracle Healthcare Foundation.	Users of Oracle Healthcare Foundation who are responsible for loading data from source systems to Oracle Healthcare Foundation and developing self-service business intelligence applications. They include Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, Business Analysts, Product Managers, Business Intelligence developers, Bioinformaticians, Computational Biologists, Clinicians, Scientists, Developers, and administrators.
Oracle Healthcare Foundation Quick Reference Guide	Provides the configuration details and the process for data loading.	Users who are responsible for administration of Oracle Healthcare Foundation. They include Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, and Business Intelligence developers.
Oracle Healthcare Foundation Release Notes	Provides a complete, up-to-date description of Oracle Healthcare Foundation.	Users who want to learn more about new features and enhancements in this release.
Oracle Healthcare Foundation Security Guide	Describes various security guidelines for the Oracle Healthcare Foundation installation.	They include Data Warehouse Administrators, ETL Developers and Administrators, System Administrator, and Business Intelligence developers.
Oracle Healthcare Foundation Third Party Licenses and Notices	Contains third party licenses information distributed with Oracle Healthcare Foundation.	Users who want to install Oracle Healthcare Foundation.