

# CDW: Locating its Documentation

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January 19, 2016



# Thanks to:

- Richard Pham, BISL/CDW
- Mark Dean, BISL/CDW
- Heidi Scheuter and Hira Khan for organizing this session
- Chandrea Culbreath and Dharani Ramanathan for providing feedback in my practice sessions

# Poll #1: Your Primary Type of Work

What type of work do you do in the VA?

- Health Services Research / HSR&D
- Quality Improvement Research
- Operations Work/Data Analytics
- Research with Operations Partners
- Other

# Acronyms -Data & Metadata

- VistA – Veterans Health Information Systems and Technology Architecture; an information system that has many applications, including the Electronic Health Record.
- Corporate Data Warehouse (CDW) – national level database housing clinical, administrative and financial Veterans Health Administration information.
- Metadata – documentation describing the data.

# Acronyms - Offices & Resource Centers

- Business Intelligence Service Line (BISL) – the group that, in part, architects the CDW.
- VA Informatics and Computing Infrastructure (VINCI) – the group that, in part, maintains servers that hold a copy of CDW and provides extracts of CDW to researchers.
- VA Information Resource Center (VIReC) – the group that, in part, provides investigates and documents the CDW.

# In today's talk...

- Identify the sites that hold documentation of CDW
- Review the content of materials in each site
- Learn how to use these resources

## Poll #2: Have you seen “Getting Started with this Relational Database”?

Did you view our CDW cyberseminar, “CDW: A Conceptual Overview” (live broadcast last week)?

- Yes
- No
- Not sure

# Reminder - 2 Domain Types

- Production Domains – contains tables that have been structured by BISL to support their re-joining.
- Raw Domains – contains tables that are direct extracts from the source system (e.g., VistA) that are simply being housed with no editing performed on them.
- These types of domains also vary in terms of their documentation.

# Example #1 - A Production Domain

A great deal of health research will use information about inpatient stays. You do not currently have access to the data, but you want to learn about which demographic information exist in the CDW. You decide to search the metadata for the production domain called Inpatient.

## 5 Documentation Sites for Production Domains

We will explore 5 main sites housing information related to our example domain:

1. VA Information Resource Center (VIREC)
2. CDW SharePoint
3. Data Architecture Repository (DAR)
4. VA Informatics and Computing Infrastructure (VINCI)
5. VHA Data Portal

# VIReC's CDW Documentation Page

- This consists of a set of products that allow a glimpse into CDW data before you have been granted official access.
  - *CDW Domain Factbooks*
  - *Researcher's Notebooks*
  - *Data Summary Tables*
    - Lists of domains and tables
    - Formats of each column
    - Record Counts
    - And more

<http://vaww.virec.research.va.gov/>

## VA INFORMATION RESOURCE CENTER (VIReC)

VIReC Home  
 VA/CMS Home  
 About Us  
 New Users of VA Data  
 FAQs  
 Acronyms  
 HelpDesk



[Data Issues Brief, October 2015](#)

[Upcoming Cyberseminars](#)

[Real SSN Data Request Process](#)

[VA REDCap Project](#)

[Data Tip of the Month](#)

CONVERSATIONS ABOUT VA DATA

**HSRData Listserv**



CURRENT VA DATA NEWS

**Data Issues Brief**



GATEWAY TO DATA RESOURCES

**VHA Data Portal**



### Data News

**ICD-10 Transition:** VA will implement the ICD-10 code set October 1, 2015. Datasets commonly used by researchers will be affected.

[More info...](#)

**New CMS Data for Researchers:** 2013 Medicare, 2011-2012 MCBS, and 2007-2012 HEDIS data.

[More info...](#)

**NPCD Retirement Data Extended:** NDS had extended the retirement date to October 1, 2016.

[More info...](#)

**CDW Domain Updates:** Microbiology Domain now includes all etiologies involved in pathogenic microbiology. Outpatient 2.1 Domain has been released.

### New from VIReC

#### [Open Positions at VIReC](#)

VIReC is recruiting for two positions in our Data Knowledge area

- [Associate Director for Research](#)
- [Social Science Analyst](#)

#### [ICD-10 Information for Researchers](#)

Learn how the ICD-10 transition affects select datasets commonly used by the research community.

#### [Race & Ethnicity Data](#)

Learn about data sources containing race and ethnicity data elements.

#### [ED & Urgent Care Encounters Data](#)

Learn about data sources containing ED and urgent care encounters data.

### VIReC Resources

[Working with VA Data:](#) Guide to VA data sources, topics, and tools.

[VA/CMS Data for Research Project:](#) Data custodian for CMS and USRDS data for VA research.

[Factbooks:](#) Describe tables, columns, and values in select CDW Domains.

[Research User Guides:](#) Detailed information on select data sources, including variable descriptions.

[The Researcher's Notebook:](#) Practical information on using data from researchers in the field.

[Data Reports:](#) Technical reports, data investigations, and data quality

# CDW Domain *Factbooks*

## Data Documentation

Expand each type of documentation below to view these resources.

### Getting Started with Using CDW

### Factbooks

This product provides descriptions of tables, columns, and values in select CDW Domains including domain-specific SQL “starter language” and sample SQL code.

Domain		Released	 Factbooks
<b>NEW!</b> Patient Enrollment (with EWL)	1.0	2015/07	
Inpatient	2.1	2015/06	
Mental Health	1.0	2014/11	
Consult	2.1	2014/10	

# Factbook

## VIReC Factbook

*Corporate Data Warehouse (CDW)*

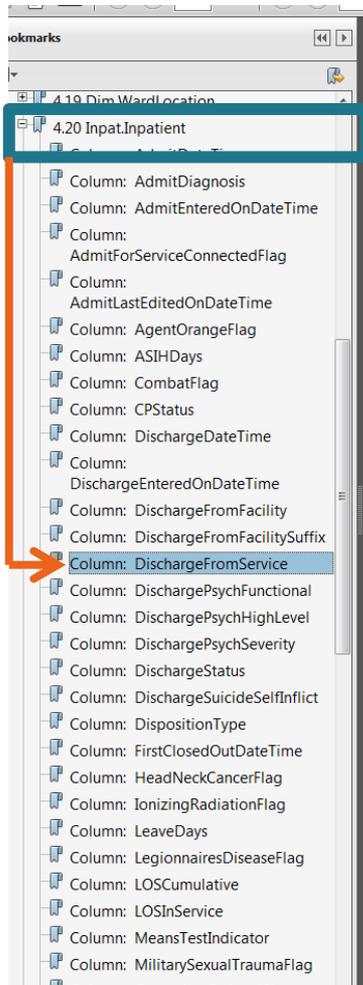
*Inpatient 2.1 Domain (Part I – Inpatient)*

*Version 3*

October, 2015

- Table of Contents
- Part 1. About this Factbook
- Part 2. Introduction to Inpatient 2.1 Domain
- Part 3. Clinical Context
- + Part 4. Table and Column Descriptions
- Part 5. Primary and Foreign Key Connections Query
- + Part 6. Example SQL Code for Basic Research Questions
- Part 7. References
- Appendix A: List of columns that were not selected
- Appendix B: Definitions

# Factbook - Column Description



**Column:** DischargeFromService

**Description:** The name of the service that the patient was transferred out of as a result of this movement for this episode of care.

**Notes:** One will also find “medical obser,” “neurology,” and “psychiatry” among the entries.

**Values:**

Value	Description
B	Blind Rehab
D	Domiciliary
I	Intermediate Med
M	Medicine
NE	Neurology
NH	Nursing Home Care Unit (NHCU)
P	Psychiatry
R	Rehab Medicine
RE	Respite Care
S	Surgery
SCI	Spinal Cord Injury

**Vista source information:**

Vista File	Vista Field
501 (#45.02)	Losing Service (#21)

# Researcher's Notebooks

## The Researcher's Notebook

### Overview

*The Researcher's Notebook* provides guidance on using data in research. Each issue elaborates on a nuance of data use for a specific topic or research question and conveys practical information from the perspective of researchers in the field.

### Current Issues

#	Notebook	Author	Released	View PDF
5	Are all members of my cohort Veterans?	Gonsoulin, M Cao, L	2015/10	
4	How do I access SQL database files in VHA's Corporate Data Warehouse using SPSS?	Fant, G Gonsoulin, M	2015/03	
3	How do I identify the bed sections for my inpatient cohort?	Ouellette, I Stolzmann, K	2015/03	
2	How do I identify a resistant organism in CDW Lab Microbiology?	Evans, C Poggensee, L Ramanathan, S	2014/11	
1	How do I identify the causative organism in CDW Lab Microbiology?	Evans, C Poggensee, L Ramanathan, S	2014/09	

### Subscription

*The Researcher's Notebook* is a free publication produced by VIREC and authored by researchers in the field. A Notebook subscription delivers current issues right to your inbox. E-mail [virec@va.gov](mailto:virec@va.gov) to subscribe.

<http://vaww.virec.research.va.gov/Notebook/Overview.htm>



# *The Researcher's Notebook*

## How do I identify the bed sections for my inpatient cohort?

### Introduction

This Researcher's Notebook is intended to provide logical steps for identifying bed section data in the Corporate Data Warehouse (CDW). The bed section is commonly referred to as the specialty. It reflects the type of inpatient service provided and helps categorize the type of care provided to the patient. A patient may move from one specialty to another during the inpatient stay. This notebook illustrates how to identify the various bed section stays a patient experienced during an inpatient stay.

### Step 1 | Become Familiar with the Terminology and Data

These are some terms that used in this notebook:

- Specialty – type of inpatient service, or bed section (e.g. Medicine, Surgery)
- BedSection – type of inpatient service, or specialty (e.g., Medicine, Surgery)
- Treating Specialty – subsection of the specialty (e.g. Cardiology, Surgical ICU)
- PTF Code – “Specialty Code” (e.g., 72 = “ALCOHOL DEPENDENCE TRMT UNIT”)
- Inpatient stay – complete stay from admission to discharge (made up of 1 or more bed section stays)
- Bed section stay – duration in a particular specialty or bed section
- LOS in Service – length of stay in a specialty or bed section
- VistA 501 Movement – specialty transfer/bed section movements
- VistA 535 Movement – physical transfer/ward transfer movements (e.g. "1 North")

# Data Summary Tables

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## Data Documentation

Expand each type of documentation below to view these resources.

**+ Getting Started with Using CDW**

**+ Factbooks**

**+ Domain Layout**

**+ Data Contents**

**+ Discrete Frequencies**

**+ Record & Null Counts**

**+ Sample Records**



Sets of excel tables that are intended to give the end user an overall sense of the content found in CDW, before that end user actually has access.

# Domain Layout

## [-] Domain Layout

This resource lists schemas and tables for each CDW domain.

Domain Layout | [October 2015](#) 

This web page provides access to the most recent version of the Domain Layout. Previous versions are available [1 VHA Corporate Data Warehouse \(CDW\) Domain Layout, October 2015](#)

2	Domain	Schema	Table Name	Field Count	FileMan File Data Source
412	Inpatient 2.1 - Inpatient	Inpat	Inpatient	89	PTF (45)
413		Inpat	Inpatient501Multiple	34	501 (45.02)
414		Inpat	Inpatient535Multiple	20	535 (45.0535)
415		Inpat	InpatientCPTProcedure	25	INPATIENT CPT CODE (46)
416		Inpat	InpatientDiagnosis	16	PTF (45)
417		Inpat	InpatientDischargeDiagnosis	16	501 (45.02)
418		Inpat	InpatientICDProcedure	24	601 (45.05)
419		Inpat	InpatientSurgicalProcedure	27	401 (45.01)
420		Inpat	PatientTransfer	37	PATIENT MOVEMENT (405)
421		Inpat	PatientTransferDiagnosis	16	501 (45.02)
422		Inpat	PresentOnAdmission	12	DSIP POA TRACKING (19640.1)
423		Inpat	SpecialtyTransfer	42	PATIENT MOVEMENT (405)
424		Inpat	SpecialtyTransferDiagnosis	16	PATIENT MOVEMENT (405)
425		Dim	AbusedSubstance	6	PTF ABUSED SUBSTANCE (45.61)
426		Dim	AdmitRegulation	9	SOURCE OF ADMISSION (45.1)
427		Dim	AdmitSource	11	SOURCE OF ADMISSION (45.1)
428		Dim	BedSection	27	MCCR UTILITY (399.1)
429		Dim	CPTModifier	10	CPT MODIFIER (81.3)
430		Dim	DialysisType	5	PTF DIALYSIS TYPE (45.4)
431		Dim	DRG	16	DRG (80.2)
432		Dim	DRGChange	10	EFFECTIVE DATE (80.266)
433		Dim	FacilityMovementType	13	FACILITY MOVEMENT TYPE (405.1)
434		Dim	ICD9	17	ICD DIAGNOSIS (80)
435		Dim	ICD9Procedure	14	ICD OPERATION/PROCEDURE (80.1)
436		Dim	MASMovementType	15	MAS MOVEMENT TYPE (405.2)
437		Dim	MASTransactionType	4	MAS MOVEMENT TRANSACTION TYPE (405.3)
438		Dim	MDC	5	MAJOR DIAGNOSTIC CATEGORY (80.3)
439	Dim	PlaceOfDisposition	6	PLACE OF DISPOSITION (45.6)	
440	Dim	RoomBed	7	ROOM-BED (405.4)	
441	Dim	Specialty	11	SPECIALTY (42.4)	
442	Dim	SurgicalSpecialty	5	SURGICAL SPECIALTY (45.3)	
443	Dim	WardLocation	15	WARD LOCATION (42)	

# Discrete Frequencies (new)

## Discrete Frequencies

This resource provides frequencies for fields with discrete values in the CDW domains listed in the table below.

Domain	Released	Frequencies
Allergy 1.0	2015/06	
Appointment 2.0	2015/06	
Consult 2.1	2015/06	
CPROrder 1.0	2015/06	
Dental 1.0 - Dental	2015/09	
Dental 1.0 - Dental Analytics	2015/06	
Encounter 1.0	2015/06	
HealthFactor 2.0	2015/06	
Immunization 2.1	2015/06	
<b>Inpatient 2.1 – Inpatient</b>	2015/06	
Inpatient 2.0 – Inpatient Census	2015/06	
Inpatient 2.0 – Inpatient Fee Basis & Lodger	2015/06	
Lab Microbiology 2.0	2015/06	

## VIReC VHA Corporate Data Warehouse (CDW) Inpatient 2.1 Inpatient Domain Discrete Value Frequencies

### About This Workbook

This workbook provides frequencies for fields with discrete values in the Inpatient 2.1 Inpatient domain fact tables in the Corporate Data Warehouse (CDW). The information is presented by available fiscal years based on the Partition Key Date field in each table. The available fiscal years vary by table.

Descriptions and field definitions are available from the MetaData Report on CDW's SharePoint site, <https://vaww.dwh.cdw.portal.va.gov/metadata/default.aspx>.

Schema	Table	Partition Key Date
Inpat	<a href="#">Inpatient</a>	DischargeDateTime
Inpat	<a href="#">Inpatient604M</a>	SpecialtyTransferDateTime
Inpat	<a href="#">Inpatient535Multiple</a>	PatientTransferDateTime
Inpat	<a href="#">InpatientCPTProcedure</a>	CPTProcedureDateTime
Inpat	<a href="#">InpatientDiagnosis</a>	DischargeDateTime
Inpat	<a href="#">InpatientDischargeDiagnosis</a>	DischargeDateTime
Inpat	<a href="#">InpatientICDProcedure</a>	ICDProcedureDateTime
Inpat	<a href="#">InpatientSurgicalProcedure</a>	SurgicalProcedureDateTime
Inpat	<a href="#">PatientTransfer</a>	PatientTransferDateTime
Inpat	<a href="#">PatientTransferDiagnosis</a>	PatientTransferDateTime
Inpat	<a href="#">PresentOnAdmission</a>	PresentOnAdmissionEnteredDateTime
Inpat	<a href="#">SpecialtyTransfer</a>	SpecialtyTransferDateTime
Inpat	<a href="#">SpecialtyTransferDiagnosis</a>	SpecialtyTransferDateTime

### Terms Used in this Workbook

Domain	In CDW, the term domain refers to a grouping of tables that all contain information on the same topical area.
Schema	This refers to the organization of data; it is usually depicted as a blueprint of the manner in which the database is constructed. In CDW, the prefix of a table name is also referred to as schema.
Fact Table	Tables that hold substantive data about the topic of interest and include sensitive information. The partition key date is a field which is used to subdivide the underlying table into manageable portions for queries. In this

This web page provides access to the most recent version of the workbook. Previous versions are available upon request by contacting the data team.

VHA Corporate Data Warehouse (CDW) Inpatient 2.1 Inpatient Domain Discrete Value Frequencies									
Table Name: Inpatient									
Run Date: 09/22/2015									
Field Name	Discrete Value	Discrete Value Label	Partition Key Date Missing		FY 2000 (N=665,583)		FY 2001 (N=682,504)		
			Frequency	Percent	Frequency	Percent	Frequency	Percent	
DischargeAbusedSubstance	OTHER SEDATIVES OR HYPNOTICS		0	0.0	156	0.0	184	0.0	
DischargeAbusedSubstance	OTHER UNSPECIFIED		0	0.0	0	0.0	1	0.0	
DischargeAbusedSubstance	PCP		0	0.0	21	0.0	19	0.0	
DischargeAbusedSubstance	TOBACCO		0	0.0	1	0.0	5	0.0	
DischargeAbusedSubstance	UNSPECIFIED DRUG (NEC)		0	0.0	2,150	0.3	2,137	0.3	
DischargeFromService			5,098	0.2	6,446	1.0	6,875	1.0	
DischargeFromService	*Missing*		1	0.0	0	0.0	0	0.0	
DischargeFromService	*Unknown at this time*		3,224,933	99.0	0	0.0	0	0.0	
DischargeFromService	B		206	0.0	1,811	0.3	1,857	0.3	
DischargeFromService	D		5,798	0.2	19,223	2.9	21,534	3.2	
DischargeFromService	I		114	0.0	33,499	5.0	31,334	4.6	
DischargeFromService	M		5,863	0.2	309,910	46.6	326,272	47.8	
DischargeFromService	N		0	0.0	0	0.0	0	0.0	
DischargeFromService	NE		87	0.0	9,703	1.5	8,805	1.3	
DischargeFromService	NEUROLOGY		0	0.0	0	0.0	0	0.0	
DischargeFromService	NH		8,926	0.3	32,066	4.8	34,146	5.0	
DischargeFromService	P		3,113	0.1	118,822	17.9	115,000	16.8	
DischargeFromService	PSYCHIATRY		0	0.0	0	0.0	0	0.0	
DischargeFromService	R		285	0.0	5,680	0.9	5,517	0.8	
DischargeFromService	RE		0	0.0	1,694	0.3	1,947	0.3	
DischargeFromService	S		1,923	0.1	120,247	18.1	122,632	18.0	
DischargeFromService	SCI		780	0.0	6,482	1.0	6,585	1.0	
DischargeFromService	medical obser		0	0.0	0	0.0	0	0.0	
DischargeFromService	p		0	0.0	0	0.0	0	0.0	
DischargeMedicalService			5,110	0.2	0	0.0	2	0.0	

# Record & Null Counts

## Record & Null Counts

This resource provides record counts, null counts, and percents for fact tables domains.

Domain	Released	Counts
Allergy 1.0	2015/06	
Appointment 2.0	2015/06	
Consult 2.1	2015/06	
CPROrder 1.0	2015/06	
Dental 1.0 - Dental	2015/06	
Dental 1.0 - Dental Analytics	2015/06	
Encounter 1.0	2015/06	
HealthFactor 1.0	2015/06	
Immunization 2.0	2015/06	
Inpatient 2.1 – Inpatient	2015/06	
Inpatient 2.0 – Inpatient Census		
Inpatient 2.0 – Inpatient Fee Basis & Lodger		
Lab Microbiology 1.0		
LabChem 2.0		



## VHA Corporate Data Warehouse (CDW) Inpatient 2.1 Inpatient Domain Record & Null Counts

### About This Workbook

This workbook provides record counts, null counts, and percentages for data included in the Corporate Data Warehouse (CDW) Inpatient 2.1 Inpatient domain fact tables. The information is presented by fiscal year based on the Partition Date field in each table. Data are presented for the fiscal years available. This varies by table.

Select a table name from the list below to access a spreadsheet to view the counts. Table descriptions and field definitions are available from the MetaData Report on CDW's SharePoint site, <https://vaww.dwh.cdw.portal.va.gov/metadata/default.aspx>.

Schema	Table	Partition Date
Inpat	<a href="#">Inpatient</a>	DischargeDateTime
Inpat	<a href="#">Inpatient53Multiple</a>	SpecialtyTransferDateTime
Inpat	<a href="#">Inpatient535Multiple</a>	PatientTransferDateTime
Inpat	<a href="#">InpatientCPTProcedure</a>	CPTProcedureDateTime
Inpat	<a href="#">InpatientDiagnosis</a>	DischargeDateTime
Inpat	<a href="#">InpatientDischargeDiagnosis</a>	DischargeDateTime

# Null Count for DischargeFromService

	A	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI
1	VHA Corporate Data Warehouse										
2	Table Name: Inpatient										
3	Run Date: 03/16/2015										
4	Field Name	FY 2011 (N=770,756)		FY 2012 (N=782,359)		FY 2013 (N=772,690)		FY 2014 (N=778,745)		FY 2015 to Date (N=347,377)	
5		Null Count	Percen t	Null Count	Percen t	Null Count	Percen t	Null Count	Percen t	Null Count	Percen t
39	DischargeFacilityMovementTypeSID	7	0.0	12	0.0	7	0.0	111	0.0	31	0.0
40	DischargeFromFacility	475	0.1	293	0.0	197	0.0	222	0.0	2,842	0.8
41	DischargeFromFacilitySuffix	613,317	79.6	628,485	80.3	620,937	80.4	630,980	81.0	282,807	81.4
42	DischargeFromService	2,416	0.3	2,134	0.3	2,012	0.3	2,028	0.3	820	0.2
43	DischargeFromSpecialtySID	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0
44	DischargeLastEditedByStaffSID	7	0.0	12	0.0	7	0.0	111	0.0	31	0.0
45	DischargeLastEditedOnDateTime	2,618	0.3	2,456	0.3	2,334	0.3	2,696	0.3	1,492	0.4
46	DischargeMASMovementTypeSID	7	0.0	12	0.0	7	0.0	111	0.0	31	0.0
47	DischargePsychFunctional	672,811	87.3	684,247	87.5	677,968	87.7	685,384	88.0	308,874	88.9
48	DischargePsychHighLevel	672,811	87.3	684,246	87.5	677,968	87.7	685,384	88.0	308,874	88.9
49	DischargePsychSeverity	672,809	87.3	684,246	87.5	677,966	87.7	685,380	88.0	308,871	88.9

# CDW SharePoint

- **A user can find information about:**
  - Table contents
  - VHA data origins
  - Linking keys
  - Data formats



### NEW TO CDW?

Are you getting started with the Corporate Data Warehouse (CDW)?

- [Intro and Policies](#)
- [CDW Support](#)
- [CDW Metadata](#)

### WHAT'S IN THE WORKS?

- [General Announcements](#)
- [Training Announcements](#)
- [CDW Domain Status and Priority \(Excel\)](#)

### EXTERNAL LINKS

- [HSR&D Listserv](#)
- [Data Quality](#)
- [VHA Data Portal](#)
- [DAR](#)
- [NDS](#)
- [System Status & Planned Outages](#)

### DATA ACCESS

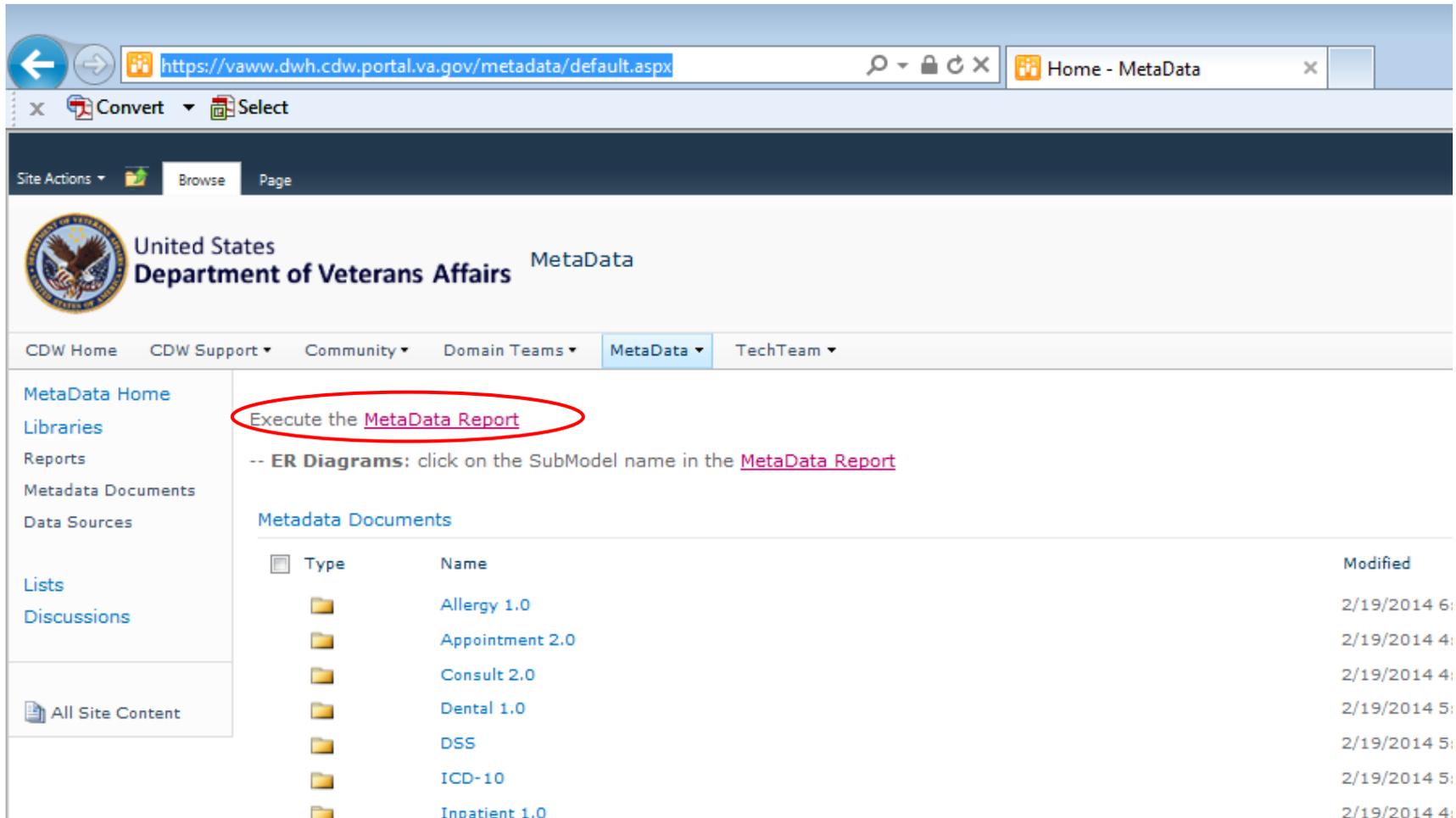
Do you want to get connected to CDW? There are many types of access to CDW. The best thing to do before you start is to define what kind of access you need.

- [Data Access information](#)
- [Customer and Project Permissions](#)

NEW CDW SHAREPOINT SITE! Don't be alarmed you are in the right place. You may see changes but if you have any questions or concerns please contact [Robert.Street2@va.gov](mailto:Robert.Street2@va.gov).

<https://vaww.dwh.cdw.portal.va.gov/Pages/CDWHome.aspx>

# Metadata for Production Domains



The screenshot shows a web browser window with the URL <https://vaww.dwh.cdw.portal.va.gov/metadata/default.aspx>. The page is titled "United States Department of Veterans Affairs MetaData". The navigation menu includes "CDW Home", "CDW Support", "Community", "Domain Teams", "MetaData", and "TechTeam". The "MetaData" menu item is selected. On the left sidebar, there are links for "MetaData Home", "Libraries", "Reports", "Metadata Documents", "Data Sources", "Lists", and "Discussions". The main content area has a red circle around the text "Execute the [MetaData Report](#)". Below this, there is a section titled "Metadata Documents" with a table listing various documents.

Execute the [MetaData Report](#)

-- ER Diagrams: click on the SubModel name in the [MetaData Report](#)

Type	Name	Modified
Folder	Allergy 1.0	2/19/2014 6:
Folder	Appointment 2.0	2/19/2014 4:
Folder	Consult 2.0	2/19/2014 4:
Folder	Dental 1.0	2/19/2014 5:
Folder	DSS	2/19/2014 5:
Folder	ICD-10	2/19/2014 5:
Folder	Inpatient 1.0	2/19/2014 4:

<https://vaww.dwh.cdw.portal.va.gov/metadata/default.aspx>

# Entity Relationship Diagrams

## CDW Metadata

Contains a grouped list of available CDW ER Diagrams and members.

### ImageDescription

<a href="#">Allergy 1.0</a>	Image Date: 01 Feb 2014
<a href="#">Appointment 2.0</a>	Image Date: 03 Jun 2015
<a href="#">Consult 2.1</a>	Image Date: 24 Sep 2015
<a href="#">CPRSOrder 1.0</a>	Image Date: 11 Aug 2014
<a href="#">Data Profiling 1.0</a>	Image Date: 21 Feb 2014
<a href="#">Dental 1.0 Diagram 1 of 2</a>	Image Date: 28 Oct 2015
<a href="#">Dental 1.0 Diagram 2 of 2 for Analytics</a>	Image Date: 28 Oct 2015
<a href="#">Dimensions A Through D 7/8/2015</a>	Image Date: 08 Jul 2015
<a href="#">Dimensions E Through K 7/8/2015</a>	Image Date: 08 Jul 2015
<a href="#">Dimensions L Through O 9/24/2015</a>	Image Date: 24 Sep 2015
<a href="#">Dimensions P Through R 6/30/2015</a>	Image Date: 30 Jun 2015
<a href="#">Dimensions S Through Z 4/17/2015</a>	Image Date: 17 Apr 2015
<a href="#">Dimensions, Place</a>	Image Date: 09 Oct 2015
<a href="#">Encounter 1.0</a>	Image Date: 29 Oct 2013
<a href="#">Health Factor 2.0</a>	Image Date: 11 Mar 2015
<a href="#">Health Factor 2.1</a>	Image Date: 15 Sep 2015
<a href="#">ICD-9-CM and ICD-10-CM</a>	Image Date: 24 Sep 2015
<a href="#">ICD-9-PCS and ICD-10-PCS</a>	Image Date: 10 Aug 2015
<a href="#">Immunization 2.1</a>	Image Date: 03 Jun 2015
<a href="#">Inpatient 2.0 Diagram 2 of 3 for Census</a>	Image Date: 06 Oct 2015
<a href="#">Inpatient 2.0 Diagram 3 of 3 for Fee Basis &amp; Lodger</a>	Image Date: 17 Feb 2014
<a href="#">Inpatient 2.1 Diagram 1 of 3</a>	Image Date: 20 Aug 2014
<a href="#">Lab Microbiology 2.0</a>	Image Date: 05 Jul 2015

Click the name of the domain to view the ER Diagram

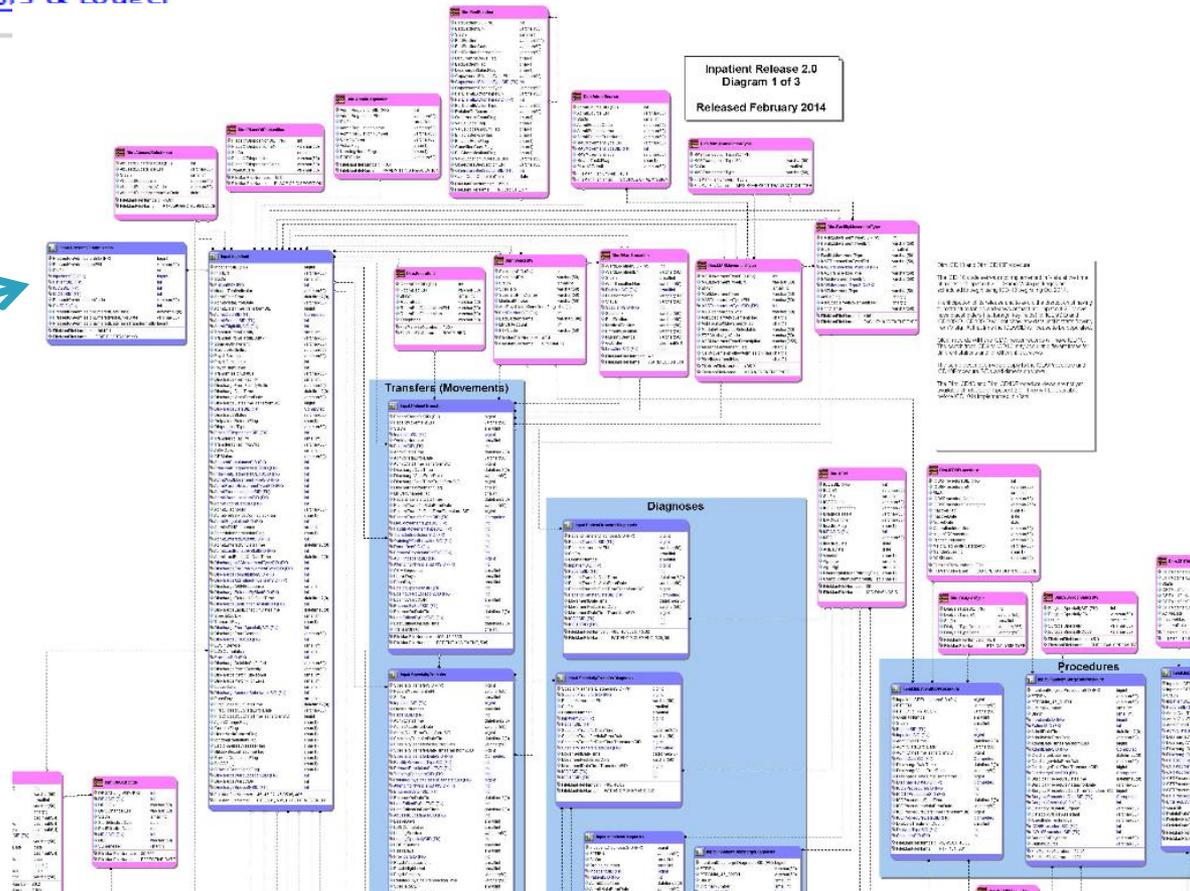
**Or**

Expand the domain tables using the plus sign to the left of the domain name

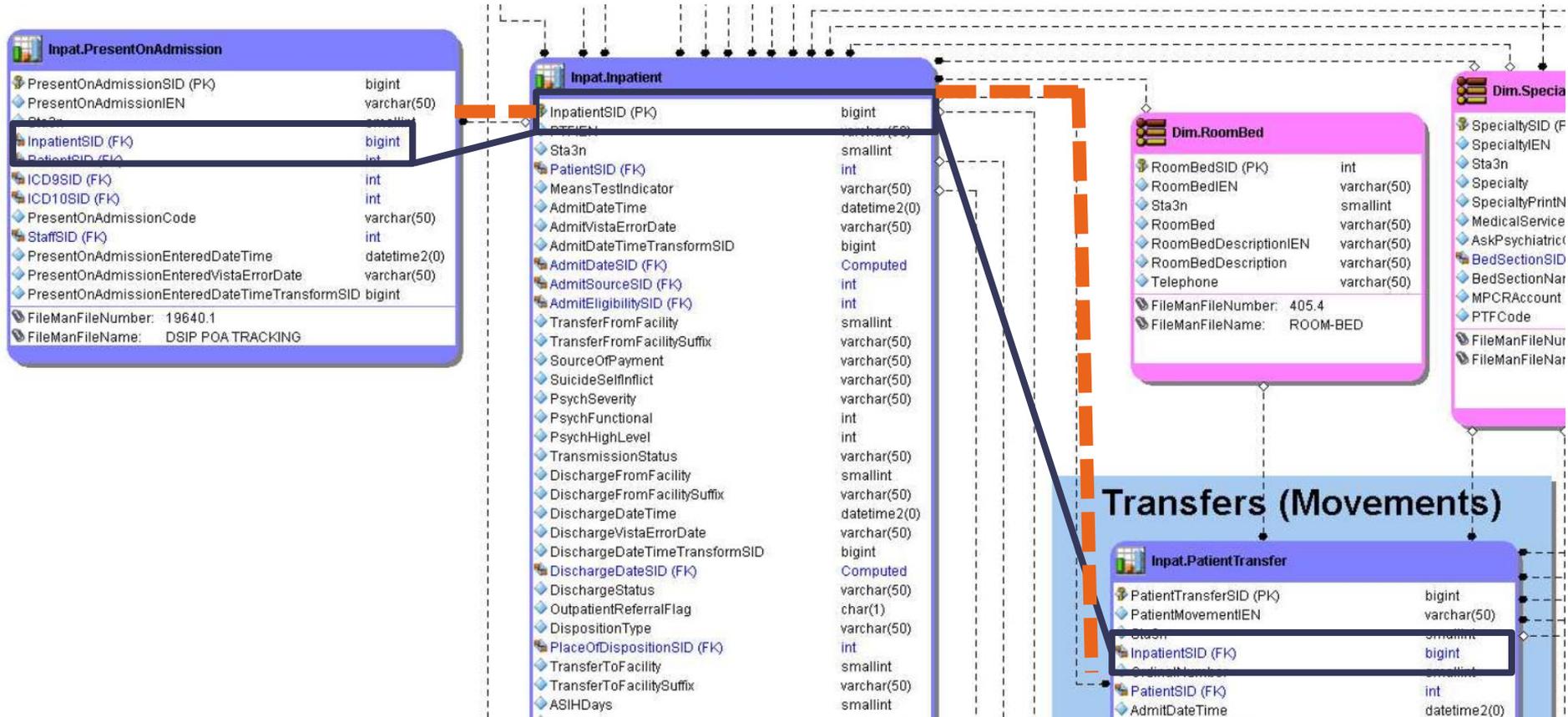
# The Entity Relationship Diagram

- ☑ [Inpatient 2.0 Diagram 2 of 3 for Census](#)
- ☑ [Inpatient 2.0 Diagram 3 of 3 for Fee Basis & Lodger](#)
- ☑ [Inpatient 2.1 Diagram 1 of 3](#)

Click the name of the domain to open the ER Diagram



# Tracing connections between tables



# A list of tables in the domain

[Inpatient 2.0 Diagram 2 of 3 for Census](#)

Image Date: 06 Oct 2015

[Inpatient 2.0 Diagram 3 of 3 for Fee Basis & Lodger](#)

Image Date: 17 Feb 2014

[Inpatient 2.1 Diagram 1 of 3](#)

DWViewName	Field Count	FileMan File Data Source	View Version	Relevant Dates	Relatio
<a href="#">Dim.AbusedSubstance</a>	6	PTF ABUSED SUBSTANCE (45.61)	DWViewDeployed: xDWWork View Version: 12		
<a href="#">Dim.AdmitRegulation</a>	9	SOURCE OF ADMISSION (45.1)	DWViewDeployed: xDWWork View Version: 7		
<a href="#">Dim.AdmitSource</a>	11	SOURCE OF ADMISSION (45.1)	DWViewDeployed: xDWWork View Version: 9		
<a href="#">Dim.BedSection</a>	27	MCCR UTILITY (399.1)	DWViewDeployed: xDWWork View Version: 2		
<a href="#">Dim.CPTModifier</a>	10	CPT MODIFIER (81.3)	DWViewDeployed: xDWWork View Version: 7		
<a href="#">Dim.DialysisType</a>	5	PTF DIALYSIS TYPE (45.4)	DWViewDeployed: xDWWork View Version: 8		
<a href="#">Dim.DRG</a>	16	DRG (80.2)	DWViewDeployed: xDWWork View Version: 15		
<a href="#">Dim.DRGChange</a>	10	EFFECTIVE DATE (80.266)	DWViewDeployed: xDWWork View Version: 23		
<a href="#">Dim.FacilityMovementType</a>	13	FACILITY MOVEMENT TYPE (405.1)	DWViewDeployed: xDWWork View Version: 12		
<a href="#">Dim.ICD9</a>	17	ICD DIAGNOSIS (80)	DWViewDeployed: ViewRemoved View Version: 19		
<a href="#">Dim.ICD9Procedure</a>	14	ICD OPERATION/PROCEDURE (80.1)	DWViewDeployed: ViewRemoved View Version: 13		
<a href="#">Dim.MASMovementType</a>	15	MAS MOVEMENT TYPE (405.2)	DWViewDeployed: xDWWork View Version: 11		

Name of  
domains

List of  
tables

Source of  
the data

List of  
joining keys

# Finding the column description

<a href="#">Dim.Specialty</a>	11	SPECIALTY (42.4)
<a href="#">Dim.SurgicalSpecialty</a>	5	SURGICAL SPECIALTY (45.3)
<a href="#">Dim.WardLocation</a>	15	WARD LOCATION (42)
<a href="#">Inpat.Inpatient</a>	89	PTF (45)
<a href="#">Inpat.Inpatient501Multiple</a>	34	501 (45.02)
<a href="#">Inpat.Inpatient535Multiple</a>	20	535 (45.0535)
<a href="#">Inpat.InpatientCPTProcedure</a>	25	INPATIENT CPT CODE (46)

Click

60	DWViewName	DWViewFieldName	FieldSequence	DataType
61	Inpat.Inpatient	TransmitFlag	61	char(1)
62	Inpat.Inpatient	DischargeFromSpecialtySID	62	int
63	Inpat.Inpatient	DischargeFromService	63	varchar(50)
64	Inpat.Inpatient	DischargeDRGSID	64	int
65	Inpat.Inpatient	LOSInService	65	smallint
66	Inpat.Inpatient	LOSCumulative	66	smallint
67	Inpat.Inpatient	ProviderSID	67	int
68	Inpat.Inpatient	DischargeSuicideSelfInflict	68	varchar(50)
69	Inpat.Inpatient	DischargeRankSeverity	69	varchar(50)

Scroll to  
column

select  
column  
description

# One page column description

<b>DischargeFromService</b> ← <b>ColumnName</b>		
Data lineage for this field as it occurs on the CDW View, <b>Inpatient</b> .		
View Field Name	<b>DischargeFromService</b> ←	The name of the view field.
View Schema	<b>Inpat</b>	} <b>CDW View</b>
View Name	<b>Inpatient</b>	
View Version	<b>20</b>	} <b>VistA file and field</b>
FileMan File Name	<b>501</b>	
FileMan File Number	<b>45.02</b>	
FileMan Field Name	<b>LOSING SERVICE</b>	
FileMan Field Number	<b>21</b>	
FileMan Field Type	<b>FreeText</b>	In VistA, this indicates what types of data are acceptable in the field.
FileMan Location	<b>^DGPT(D0,"M",D1,"P") Piece: 2</b>	VA FileMan stores the data of every file descendent from a single M global array (i.e. from a no global are stated as being stored in the nth ^-piece of a global node.
FileMan Field Description: This field contains the losing service for this episode of care.		

← **Description of field from VistA's metadata**

# Data Architecture Repository (DAR)

- This site serves as a repository for metadata from around the VA.
- It includes metadata for VistA.
- VistA is one of the primary sources of CDW data.
- Referencing these files can help clarify the meaning of CDW data.

# DAR's VistA Metadata

The screenshot shows the VistA Metadata Repository website. At the top, there is a header for the United States Department of Veterans Affairs Intranet. Below this is a navigation menu with links for 'VA Intranet Home', 'About VA', 'Organizations', 'Locations', and 'Employee Resources'. The main content area is titled 'the Metadata Repository' and includes a search bar and several radio button options for filtering search results. A callout box with a blue border and white background points to the 'VHA' link in the left sidebar, containing the text: 'Select "VHA" from the left banner Then select "VistA" from the menu'. The sidebar also contains links for 'Metadata Repository Home', 'VA', 'VHA', 'VBA', 'MDR User Guide', 'Email Subscription', 'Report Issue', 'Enhancement Request', and 'OneVA EA'. The main content area includes a search bar with a 'Search' button, and options for 'IN:' (Metadata Name Only, Identifying Fields Only, All Attribute Fields) and 'WITH:' (Any of these words, All of these words, These words as a phrase). There is also a checkbox for 'Use Thesaurus' and a note: 'Use the options below to apply filter(s) to search results, returning only matches on selected criteria'. Below the search options are three columns: 'Metadata Source', 'Metadata Category', and 'Metadata Type'.

Once inside, you will want to search by file name or number or field name or number. The files and fields are listed in the CDW Metadata. For this example, we will search for the file "501" #45.02



<http://enterprise.metadata.va.gov/pls/apex/f?p=VISTA:1:6316192910934058::::>

# What to search for in DAR

## DischargeFromService

Data lineage for this field as it occurs on the CDW View, **Inpatient**.

View Field Name	<b>DischargeFromService</b>	The name of the view field.
View Schema	<b>Inpat</b>	The schema that contains the view.
View Name	<b>Inpatient</b>	The name of the view where <i>DischargeFromService</i> is located.
View Version	<b>20</b>	The version of the view that is associated with the published image.
FileMan File Name	<b>501</b>	A set of related records (or entries) treated as a unit.
FileMan File Number	<b>45.02</b>	The unique number used to identify a file.
FileMan Field Name	<b>LOSING SERVICE</b>	In an entry, a specified area used to hold values. The specifications of each VA FileMan field are
FileMan Field Number	<b>21</b>	The unique number used to identify a field in a file.
FileMan Field Type	<b>FreeText</b>	In VistA, this indicates what types of data are acceptable in the field.
FileMan Location	<b>^DGPT(D0,"M",D1,"P")</b> Piece: 2	VA FileMan stores the data of every file descendent from a single M global array (i.e. from a node). The global array are stated as being stored in the nth ^-piece of a global node.
FileMan Field Description:	This field contains the losing service for this episode of care.	

VistA  
file and  
field

# Search VistA Metadata

UNITED STATES DEPARTMENT OF VETERANS AFFAIRS

VA Intranet Home | About VA | Organizations | Locations | Employee Resources

**VISTA METADATA REPOSITORY (VISTA)**

Home Packages Files

The **DAR Veterans Health Information Systems and Technology Architecture (Vista) Metadata Repository** provides an easy means to access structures within the **September 30, 2015** VistA Platinum image. VistA Platinum is the master version of the complete VistA system maintained by the S Technology. As VistA evolves and Platinum images are updated, the metadata will be added to the DAR with the identified publication date. For additional Library.

A listing of VHA national databases can be found within the [DAR VHA Corporate Database Menu](#). Some of these databases are derived from point-of-tracking, and are not part of VistA, or included within the DAR VistA Portal.

**How to Find VistA Metadata**

There are several options for searching VistA metadata:

- Use Tabs above to search within packages, files, fields, etc.
- Use the general Search VistA box below to search all packages, files, and field names, and descriptions.
- If you know the package name, you can navigate directly to a specific VistA package with drill down capabilities to files and fields using the Package Name.
- If you know the file name, you can navigate directly to a specific VistA file with associated field information using the File Name (#) select-list.

General Search:

Package Name:

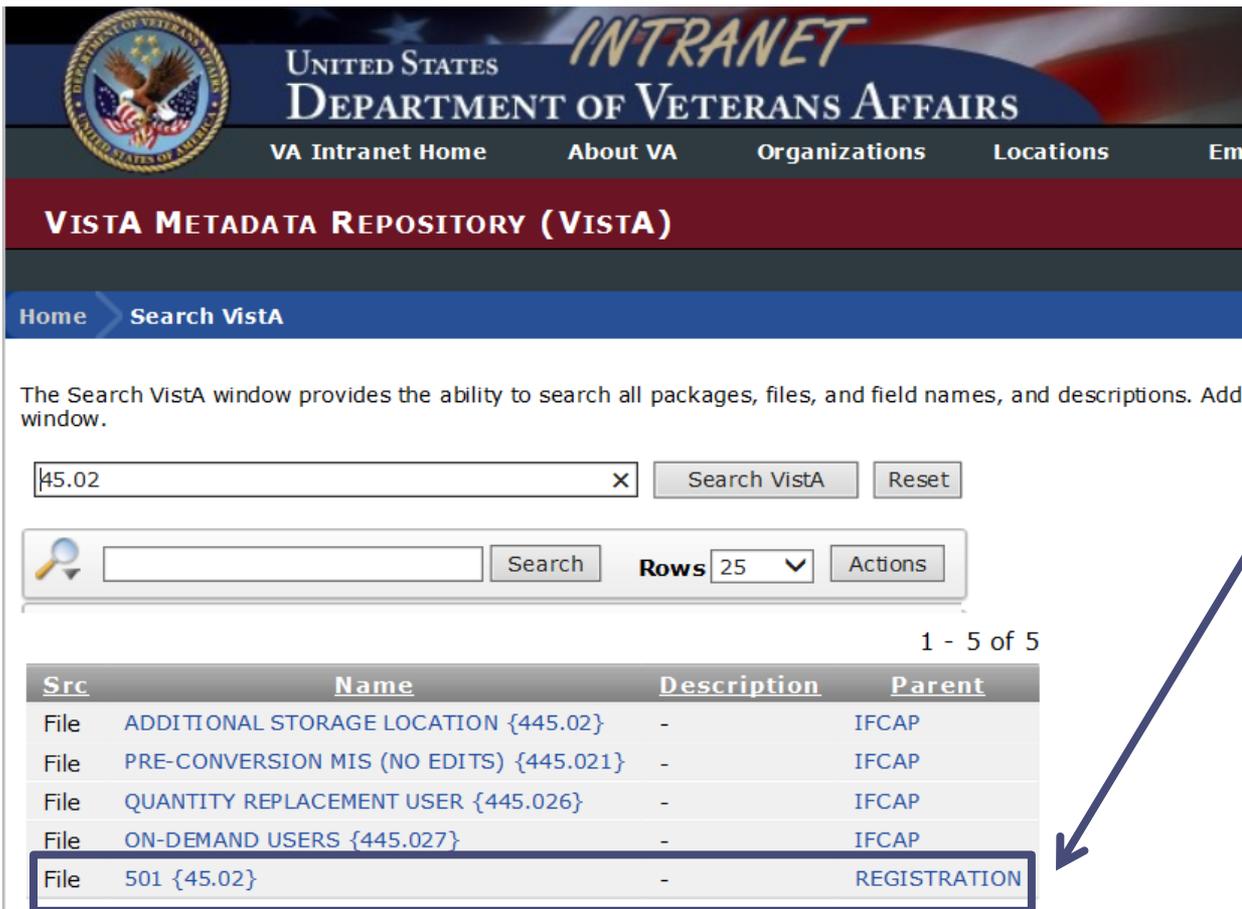
File Name (#):

**Vista Background**

RESEARCHERS' GUIDE TO VA DATA

Enter file or field name  
or number and press  
"Search VistA"

# Select correct information from results list



UNITED STATES DEPARTMENT OF VETERANS AFFAIRS  
VA Intranet Home About VA Organizations Locations Em

## VISTA METADATA REPOSITORY (VISTA)

Home Search VistA

The Search VistA window provides the ability to search all packages, files, and field names, and descriptions. Add window.

45.02 Search VistA Reset

Search Rows 25 Actions

1 - 5 of 5

Src	Name	Description	Parent
File	ADDITIONAL STORAGE LOCATION {445.02}	-	IFCAP
File	PRE-CONVERSION MIS (NO EDITS) {445.021}	-	IFCAP
File	QUANTITY REPLACEMENT USER {445.026}	-	IFCAP
File	ON-DEMAND USERS {445.027}	-	IFCAP
File	501 {45.02}	-	REGISTRATION

# Vista File Documentation

VISTA METADATA REPOSITORY (VISTA)

Home Packages **Files** Fields Standard Table Data Cross Reference Indexes Reports

Home Files **File Details**

File Details History Data

File Num	45.02
File Name	501
Description	-
Owning Package	REGISTRATION
	F S
Parent File Num	45
Audit Access	-
Data Dictionary Access	@
Delete Access	@
Laygo Access	@
Read Access	d
Write Access	D
Global Reference	^DGPT(D0,M,
Special Lookup Routine	-
Post Selection Action	-

File Number 45.02 & Name "501" Is part of the "registration package"

Field Name, Number and Descriptions are listed below

View VHA Data Management

Search Reports 1. Primary Report Rows 50 Actions

1 - 50 of 77

Field Name	Field Num	Data Type	Description	Help Text	File Pointed To Name
MOVEMENT RECORD	.01	NUMERIC	This field contains the movement number for this episode of care.	Enter the movement record number for this movement, between 1 and 1000	-
LOSING SPECIALTY	2	POINTER	This field contains the losing bedsection for this movement.	Enter the losing bedsection for this movement. This must be an active treating specialty.	SPECIALTY
LEAVE DAYS	3	NUMERIC	This field contains the total number of days this patient was on leave (authorized absence) from his stay	Enter the total number of days	-

# VistA Field Information



LOSING SERVICE

21 FREE TEXT

This field contains the losing service for this episode of care.

You can often find labels for values by clicking here to open the page below

File Num	45.02
File Name	501
Description	-
Owning Package	REGISTRATION
F S	S
Parent File Num	45
Audit Access	-
Data Dictionary Access	@
Delete Access	@
Laygo Access	@
Read Access	d
Write Access	D
Global Reference	^DGPT(D0,M,
Special Lookup Routine	-
Post Selection Action	-

< Report View < > Row 20 of 77

**File#** 45.02  
**Field Num** 21  
**Field Name** LOSING SERVICE  
**Description** This field contains the losing service for this episode of care.  
**Technical Description**  
**Sub File Num**  
**Help Text** ANSWER MUST BE 1-30 CHARACTERS IN LENGTH  
**Multiple** 0  
**Required**  
**Identifier**  
**Data Type** FREE TEXT  
**Minimum Length** 1  
**Maximum Length** 30  
**Sub Max Length** 30  
**Permissible Values**  
**Value Meaning**

# VINCI's Documentation

The screenshot shows the VINCI Central website interface. The top navigation bar includes links for 'About', 'Using VINCI', 'Data', 'Guides', 'Support', and 'VINCI Workspace'. The left sidebar contains 'Applications' (Data Access Request Tracker) and 'Shortcuts' (My Collaboration Sites, VINCI Workspace, VHA Data Portal, HSR&D, VIREC, HSRData-L Listserv). The main content area is titled 'Available Data' and includes a breadcrumb trail 'Home > Data > Available Data'. Below the title is a paragraph explaining the data categories and a list of two links: 'See CDW MetaData Reports Page on CDW site.' and 'See CDW-Raw Domains Page on CDW site.'. A section titled 'CDW Production' with a database icon follows, containing a descriptive paragraph. To the right, a 'Data Descriptions' sidebar lists various domains, with 'Immunization' circled in blue.

Home > Data > Available Data

## Available Data

The following is a list of the three categories of data available through VINCI. To see a description of the tables and columns contained within a domain, select it from the Data Descriptions on the right.

- See CDW MetaData Reports Page on CDW site.
- See CDW-Raw Domains Page on CDW site.

### CDW Production

The Veterans Administration's Corporate Data Warehouse (CDW) is a national repository comprising data from several Veterans Health Administration (VHA) clinical and administrative systems. The objective of CDW is to provide data and tools to support management decision making performance measurement and research objectives. Its premise is that

#### Data Descriptions

##### CDW PRODUCTION

- Allergy
- Appointment
- Consult
- CAN Score
- CPRS Orders
- Dental
- Dimensions (CDW)
- Health Factors
- Immunization
- Inpatient
- Lab Chemistry

Here one will find additional documentation related to various CDW domains. The documentation is organized by domain. It contains some descriptions of meaning of content found in tables and columns.

# Inpatient Domain Document

## VINCI Data Description

### Inpatient Encounter Domain

---

#### Contents

[Purpose of This Document](#)

[About Inpatient Encounters](#)

[CDW Inpatient Encounters ER Diagram](#)

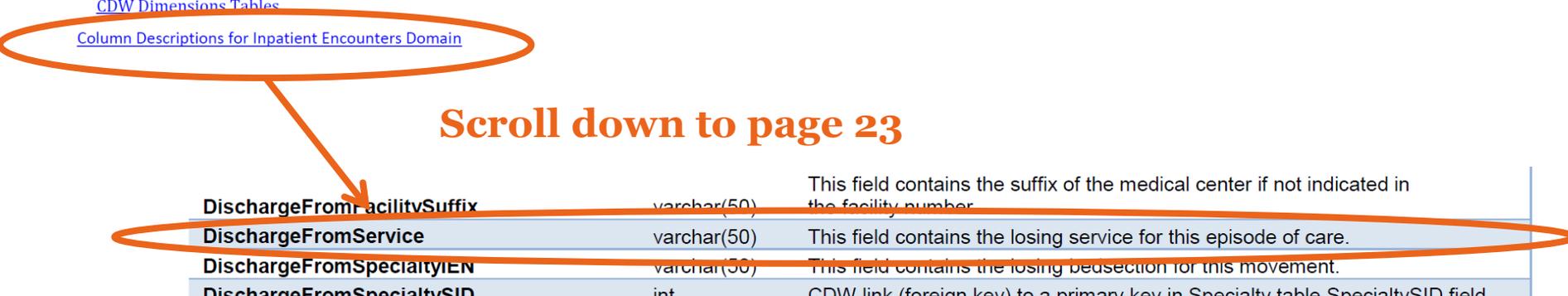
[Meta Data](#)

[CDW Inpatient Encounters Tables](#)

[CDW Dimensions Tables](#)

[Column Descriptions for Inpatient Encounters Domain](#)

**Scroll down to page 23**



<b>DischargeFromFacilitySuffix</b>	varchar(50)	This field contains the suffix of the medical center if not indicated in the facility number.
<b>DischargeFromService</b>	varchar(50)	This field contains the losing service for this episode of care.
<b>DischargeFromSpecialtyIEN</b>	varchar(30)	This field contains the losing bedsection for this movement.
<b>DischargeFromSpecialtySID</b>	int	CDW link (foreign key) to a primary key in Specialty table SpecialtySID field

# VHA Data Portal

- This site provides:
  - Links to all of the other sites mentioned in this talk
  - Information about how to apply for access to CDW data

# VHA Data Portal

<http://vaww.vhadataportal.med.va.gov/>

The screenshot shows the VHA Data Portal website. At the top right, there are navigation links for Home, About Us, Contact Us, and FAQ. Below this is a search bar. The main navigation menu includes Data Sources, Data Access (highlighted), Tools & Applications, Resources, Training, Policy & Agreements, and Support. The Data Access dropdown menu is open, showing links for Data Access Overview, Operations Access, Preparatory to Research Access, Research Access, Medical Advisory Opinions Access, and Veterans Service Officers Access. The main content area is divided into two columns. The left column features a 'Welcome to' section with introductory text and a 'The one-stop-shop' section with three large buttons: 'New Data User', 'Research', and 'Operations & Quality Improvement'. The right column has an 'Upcoming Events' section with a calendar icon and a list of seminars and happy hours, and a 'News' section with a 'CDW Review' article. The bottom of the page shows a taskbar with various application icons.

Home About Us Contact Us FAQ

Department of Veterans Affairs  
VHA Data Portal

Data Sources **Data Access** Tools & Applications Resources Training Policy & Agreements Support

**Welcome to**

The VHA Data Portal provides a comprehensive knowledge base to support the needs of VHA data users. It offers information from multiple sources to enhance user experience.

**The one-stop-shop**

Our home page design has recently changed to help get you the information you need. Each one of the badges below links to access information and other relevant resources for a particular data use need, or use the new top navigation menu to locate resources by category. [Tell us what you think.](#)

**New Data User**

**Research**

**Operations & Quality Improvement**

**Upcoming Events**

**Educational Opportunities**

**VIREC Partnered Research Cyberseminars - 12 PM Eastern**

**Dec 15: Evaluating Implementation of the Veterans Choice Act: Findings from Geospatial and Qualitative Analyses**

**VIREC Database & Methods Cyberseminars - 1 PM Eastern**

**Jan 4: Measuring Veterans Health Services Use in VA and Medicare**

**VIREC Corporate Data Warehouse (CDW) Cyberseminars - 1 PM Eastern**

**Jan 12: CDW: A Conceptual Overview**

**Jan 19: CDW: Locating Its Documentation**

**VINCI Happy Hour - 3rd Wednesday Every Month at 1 PM MT**

VINCI in its continuing efforts to assist VHA data users will be holding its VINCI Happy Hour open question and answer forum every 3rd Wednesday of the month from 1:00PM to 2:00PM MT to field questions from our customers on a range of topics. Click [here](#) to join the Lync meeting and call 855-767-1051 code 22265684.

**News**

**CDW Review**

On June 30, 2015, National Data Systems released an email with an embedded questionnaire to individuals identified who have access to VHA's Corporate Data Warehouse (CDW). The questionnaire requested feedback from users regarding their use of CDW, most importantly, inquiring if access is still needed in the

## Poll #3: About You

Which of the following best describes your role in the VA?

- Research Investigator / PI
- Data Manager / Analyst
- Project Coordinator
- Operations
- Other

# Next example... A Raw Domain

Now, you are doing research that requires access to X-ray results. You do not currently have access to the data, but you want to learn about which measures exist in the CDW that are related to radiology. You decide to search the metadata for the raw domain called Radiology.

## 3 Documentation Sites for Raw Domains

- We will explore 3 main sites housing information related to our example domain:
  1. CDW SharePoint
  2. Data Architecture Repository (DAR)
  3. VA Informatics and Computing Infrastructure (VINCI)

# A Raw Domain - Radiology Example

The screenshot shows the Department of Veterans Affairs Corporate Data Warehouse (CDW) website. The header includes the VA logo, the text "Department of Veterans Affairs Corporate Data Warehouse", and a breadcrumb trail "CDW Home > CDW HOME". A navigation bar contains links for "CDW Home", "CDW Support", "Community", "Domain Teams", "MetaData", and "TechTeam". An orange box with the text "Click 'Community'" has an arrow pointing to the "Community" link. Below the navigation bar, a dropdown menu is open, listing various links. A blue box with the text "Select 'CDW Raw'" has an arrow pointing to the "CDW RAW" link in the dropdown menu. To the right, a section titled "WHAT'S IN THE WORKS?" lists "General Announcements", "Training Announcements", and "CDW Domain Status and Priority (Excel)".

Department of Veterans Affairs  
Corporate Data Warehouse

CDW Home > CDW HOME

CDW Home | CDW Support | **Community** | Domain Teams | MetaData | TechTeam

- Community Home
- CDW Governance Board
- CDW RAW**
- Data Access Committee
- Disease Cohorts
- iEHR Mapping
- NDS
- RDW
- SharePoint Governance Board
- VA GIS User Home
- Non-VA Care PC3 and Choice

WHAT'S IN THE WORKS?

- General Announcements
- Training Announcements
- CDW Domain Status and Priority (Excel)

Click "Community"

Select "CDW Raw"

# CDW Raw Reports

CDW Support ▾ Community ▾ Domain Teams ▾ MetaData ▾ TechTeam ▾

[What's new in CDW-Raw](#) [Access Permissions](#) [Customer Impact Statements](#) [Extractor Guide](#) [DBA Handbook](#)

CDW-Raw - 12/7/2015 6:53 PM – Steve Martin

Domain	Stakeholders	Schedule	Last Extract	Next Extract	Time	Records/Space	NDS Privilege	Project Notes
<a href="#">Beneficiary Travel (CBO)</a> v2 Schema: Travel since Dec 2010	<a href="mailto:Kristina.Ebersole@va.gov">Kristina.Ebersole@va.gov</a> ; <a href="mailto:Rex.Gilmore@va.gov">Rex.Gilmore@va.gov</a> ; <a href="mailto:Joseph.Erdosmd@va.gov">Joseph.Erdosmd@va.gov</a> ; <a href="mailto:David.Riley3@va.gov">David.Riley3@va.gov</a> ; <a href="mailto:Paul.Perry@va.gov">Paul.Perry@va.gov</a> ; <a href="mailto:Kathleen.Frisbee@va.gov">Kathleen.Frisbee@va.gov</a> ; <a href="mailto:Francis.Archer@va.gov">Francis.Archer@va.gov</a> ; <a href="mailto:Gina.Julian2@va.gov">Gina.Julian2@va.gov</a> ; <a href="mailto:Kenneth.Baker2@va.gov">Kenneth.Baker2@va.gov</a> ; <a href="mailto:Joshua.Dancy@va.gov">Joshua.Dancy@va.gov</a> ; <a href="mailto:Patrick.Champion@va.gov">Patrick.Champion@va.gov</a> ; <a href="mailto:Scot.Dingman@va.gov">Scot.Dingman@va.gov</a> ; <a href="mailto:Glen.Money@va.gov">Glen.Money@va.gov</a> ; <a href="mailto:David.Issel@va.gov">David.Issel@va.gov</a> ; <a href="mailto:William.Patterson7@va.gov">William.Patterson7@va.gov</a> ; <a href="mailto:Linda.Russell@va.gov">Linda.Russell@va.gov</a> ; <a href="mailto:Trina.Avery@va.gov">Trina.Avery@va.gov</a> ;	Bi-Weekly  Sunday before Payday	NOV 29 2015	DEC 12 2015	15 Hours	129 M recs 35 Gb	Basic (CDW_Full)	POC: Kristina Ebersole  Change extraction day from Wednesday to Monday
<a href="#">Bill Claims (CBO)</a> v6	<a href="mailto:Peter.Chang1@va.gov">Peter.Chang1@va.gov</a> ; <a href="mailto:Kathleen.Frisbee@va.gov">Kathleen.Frisbee@va.gov</a> ; <a href="mailto:John.Derderian@va.gov">John.Derderian@va.gov</a> ; <a href="mailto:Michael.Smerek@va.gov">Michael.Smerek@va.gov</a> ; <a href="mailto:Robert.Justus@va.gov">Robert.Justus@va.gov</a> ; <a href="mailto:Cheryl.Strickland@va.gov">Cheryl.Strickland@va.gov</a> ; <a href="mailto:Julie.Baker4@va.gov">Julie.Baker4@va.gov</a> ; <a href="mailto:Regina.Mccaskill@va.gov">Regina.Mccaskill@va.gov</a> ; <a href="mailto:Scot.Dingman@va.gov">Scot.Dingman@va.gov</a> ; <a href="mailto:Robert.Jacobs@va.gov">Robert.Jacobs@va.gov</a> ; <a href="mailto:John.Quinn@va.gov">John.Quinn@va.gov</a> ; <a href="mailto:Karen.Burbage@va.gov">Karen.Burbage@va.gov</a> ; <a href="mailto:Steve.Richards@va.gov">Steve.Richards@va.gov</a> ; <a href="mailto:Bruce.Foxe@va.gov">Bruce.Foxe@va.gov</a> ;				7-10	2.7 B recs		Ernesto Castro's team decides what data to extract next, then to their more comprehensive billing database. View the link  POC: Peter Change Peter.Chang1@va.gov

Find the names of the raw domain here.  
Scroll down to find radiology.

# Radiology Domain Report

<p><a href="#">Radiology v3</a></p> <p>Schema: Radiology</p> <p>since Mar 2011</p>	<p><a href="mailto:Hamid.Saoudian@va.gov">Hamid.Saoudian@va.gov</a>;  <a href="mailto:Evan.Lott@va.gov">Evan.Lott@va.gov</a>;  <a href="mailto:Mark.Love@va.gov">Mark.Love@va.gov</a>;  <a href="mailto:Joseph.Eccleston@va.gov">Joseph.Eccleston@va.gov</a>;  <a href="mailto:Ted.Fletcher@va.gov">Ted.Fletcher@va.gov</a>;  <a href="mailto:Jack.Bates@va.gov">Jack.Bates@va.gov</a>;  <a href="mailto:Kathleen.Frisbee@va.gov">Kathleen.Frisbee@va.gov</a>;  <a href="mailto:Shawn.Hardenbrook@va.gov">Shawn.Hardenbrook@va.gov</a>;  <a href="mailto:Ron.Moody@va.gov">Ron.Moody@va.gov</a>;  <a href="mailto:Jason.Ray@va.gov">Jason.Ray@va.gov</a>;  <a href="mailto:Timothy.Dove@va.gov">Timothy.Dove@va.gov</a>;  <a href="mailto:Christa.Kramer@va.gov">Christa.Kramer@va.gov</a>;  <a href="mailto:Cheryl.Canody@va.gov">Cheryl.Canody@va.gov</a>;  <a href="mailto:Rebecca.Gandillon@va.gov">Rebecca.Gandillon@va.gov</a>;  <a href="mailto:Scot.Dingman@va.gov">Scot.Dingman@va.gov</a>;  <a href="mailto:Jody.Pasell@va.gov">Jody.Pasell@va.gov</a>;  <a href="mailto:James.Prelerson@va.gov">James.Prelerson@va.gov</a>;</p>	<p>Twice per Month</p> <p>2nd &amp; 4th Friday</p>	<p>SEP 01 2014</p>	<p>SEP 21 2014</p>	<p>72 Hours</p>	<p>2 B recs</p> <p>415 GB</p>	<p>Basic (CDW_Full)</p>	<p>Initial requirements came from VISN20 ER diagrams and VINCI team.</p> <p>POC: Hamid Saoudian                  Radiology skipped 02/17/2012</p> <div style="border: 2px solid red; padding: 5px; display: inline-block;"> <p>Click here</p> </div>
--	--	--	--------------------	--------------------	-----------------	-------------------------------	-------------------------	--

## CDW-Raw Radiology Extracts - v3

3/19/2012 3:42 PM

### [CDW-Raw Radiology Extracts - v3](#)

- [Summary](#)
- [Key Contacts](#)
- [Extraction Schedule](#)
- [Extracted Tables](#)
- [Change History](#)
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### Summary

This document contains information about the CDW Raw Extraction of the Radiology grouping. This domain was a priority domain by the CDW Governance Board. This extract will be from all 130 Vista sites, starting the data can be accessed using the views in the CDWWork database on vhaacdwa06.

### Key Contacts

Current information as of 01/30/2012

Project/Domain	Radiology
Current Stakeholders	<a href="mailto:Evan.Lott@va.gov">Evan.Lott@va.gov</a> <a href="mailto:Nsta.Yao@va.gov">Nsta.Yao@va.gov</a> <a href="mailto:Mark.Love@va.gov">Mark.Love@va.gov</a> <a href="mailto:Joseph.Eccleston@va.gov">Joseph.Eccleston@va.gov</a> <a href="mailto:Nstall.Anderson@va.gov">Nstall.Anderson@va.gov</a> <a href="mailto:Ted.Fletcher@va.gov">Ted.Fletcher@va.gov</a> <a href="mailto:Jack.Bates@va.gov">Jack.Bates@va.gov</a> <a href="mailto:Kathleen.Frisbee@va.gov">Kathleen.Frisbee@va.gov</a>
Current Point of Contact	<a href="mailto:Hamid.Saoudian@va.gov">Hamid.Saoudian@va.gov</a>

### Extraction Schedule

Radiology is extracted according to the [CDW-Raw Weekly Extraction Schedule](#), currently the first and third Fridays of the month.

### Extracted Tables

The original requirements came from the VINCI team on 3/16/2011. The list included all of the files on the [VISN 20 data model](#) (below) and some additional tables needed by VINCI.

### Change History

#### 12/9/2011 - v3

Added these for Kathy Frisbee  
 rad\_modality\_defined\_term\_73\_1  
 digycptbyprodrttype\_73\_2

To arrive at this report

# List of Tables

8/29/2011

#	Schema	Table	Count	KBy
1	Radiology	complication_types_78_1	1,151	
2	Radiology	contractsharing_agreements_34	574	
3	Radiology	diagnostic_codes_78_3	5,887	
4	Radiology	examination_status_72	8,015	
5	Radiology	imaging_locations_79_1	3,932	
6	Radiology	imaging_stop_codes_71_5	1,761	
7	Radiology	imaging_type_79_2	1,211	
8	Radiology	nuc_med_exam_data_70_2	929,887	
9	Radiology	nuc_x_radiopharmaceutica_70_21	1,106,965	
10	Radiology	procedure_modifiers_71_2	8,416	
11	Radiology	procedux_type_of_imaging_71_23	11,253	
12	Radiology	radnuc_med_common_procedu_71_3	30,029	
13	Radiology	radnuc_med_division_79	502	
14	Radiology	radnuc_med_orders_75_1	114,631,527	
15	Radiology	radnuc_med_patient_70	13,003,262	
16	Radiology	radnuc_med_procedures_71	199,197	
17	Radiology	radnuc_med_reason_75_2	6,956	
18	Radiology	radnuc_med_reports_74	127,459,417	1
19	Radiology	radnuc_med_rx_other_case_74_05	12,464,589	
20	Radiology	radnuc_med_x_descendents_71_05	45,890	
21	Radiology	radnucx_contrast_media_71_0125	37,276	
22	Radiology	radnucx_registered_exams_70_02	118,788,661	
23	Radiology	radnux_hold_description_75_125	358,560	
24	Radiology	radnux_imaging_locations_79_01	3,279	
25	Radiology	radnx_clinical_history_f_75_11	355,277,404	

- Scroll down to find a list of tables in the domain.
- Notice the names are using the VistA naming traditions.
- The first table in the list is Radiology.complication\_types\_78\_1
- That corresponds to VistA file “Complication Types” #78.1

# VistA Documentation in DAR #78.1

http://enterprise.metadata.va.gov/pls/apex/f?p=VISTA:1:1808739254807661:..... Database - Raw Extractor

Convert Select

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VA Intranet Home About VA Organizations Locations Employee Resources

**VISTA METADATA REPOSITORY (VISTA)**

The DAR Veterans Health Information Systems and Technology Architecture (VistA) Metadata Repository provides a centralized location for VistA metadata maintained by the Standards and Compliance Office within the Office of Information and Technology. As VistA evolves, the repository will continue to grow.

A listing of VHA national databases can be found within the DAR VHA Corporate Database Monograph. Some of these databases include:

How to Find VistA Metadata

There are several options for searching VistA metadata:

- Use Tabs above to search within packages, files, fields, etc.
- Use the general Search VistA box below to search all packages, files, and field names, and descriptions.
- If you know the package name, you can navigate directly to a specific VistA package with drill down capabilities to find the file and field information.
- If you know the file name, you can navigate directly to a specific VistA file with associated field information using the field information.

General Search: 78.1 Search VistA

Search for file 78.1

Select "complication types"

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**VISTA METADATA REPOSITORY (VISTA)**

Home Search VistA

The Search VistA window provides the ability to search all packages, files, and field names, and descriptions. Additional filtering, advanced search, and sorting options are available.

78.1 Search VistA Reset

Search Rows 25 Actions

Src	Name	Description
File	COMPLICATION TYPES {78.1}	-
Field	COMPLICATION	This field points to the "COMPLICATION TYPES" file (#78.1) to indicate if this patient has had the addition of contrast media as an allergen in the Adverse Reaction Tracking (ART).

# Examine Content

VISTA METADATA REPOSITORY (VistA)

Home Files File Details

File Details History Data

File Num 78.1  
File Name COMPLICATION TYPES

Description  
This file contains the types of complications that may occur while a procedure is being performed. If there is a complication during an exam, then the technologist can indicate which of these complications in this file the exam should be associated with by using either the 'Case No. Edit' or 'Edit Exam By Patient' functions of the module. When the system is initialized, two complications are loaded into the module. They are 'no complications' and 'contrast reaction'. If a 'contrast medium reaction' is associated with an exam, then the patient's record in the Allergy Tracking System will automatically be updated to indicate he/she has had a reaction. As a result, everytime patient is registered for a procedure that may involve contrast material, the receptionist will be warned and he/she should then take appropriate action. Entries in this file should not be deleted. Adding new entries is always allowed. Data Storage ----- The data for the 'COMPLICATIONS TYPE' file is stored in the 'RA(78.1, global. At the present time this file is very static after day-one initialization is complete. However, it still should be journaled. It should also be translated if the operating system supports this function. Input Templates ----- The package does not use any input templates associated with this file. Print Templates ----- The package does not use any print templates associated with this file. Sort Templates ----- The package does not use any sort templates associated with this file.

Owning Package RADIOLOGY/NUCLEAR MEDICINE  
Parent File Num F 5  
Audit Access  
Data Dictionary Access  
Delete Access  
Laygo Access  
Read Access  
Write Access  
Global Reference ^RA(78.1,  
Special Lookup Routine  
Post Selection Action

The two fields are listed here. This is the same content that will be found in the CDW table.

View VHA Data Management

Search Reports 1: Primary Report Rows 50 Actions

Field Name	Field Num	Data Type	Description	Help Text	File Pointed To Name
COMPLICATION	.01	FREE TEXT	This field contains the name of the type of complication that may be associated with an exam. Initially, the system contains two complication types: 'Contrast Reaction', and 'No Complication'. Other complication types may be entered by the rad/nuc med coordinator at each site and can be 3 to 30 characters in length.	Enter a type of complication, between 3 and 30 characters in length, that may be associated with an exam.	-
CONTRAST MEDIUM REACTION?	2	SET	This field is used to indicate that a patient has had an allergic reaction to the contrast medium used during an exam. If this field contains a 'Yes', then it triggers a contrast medium as an allergen in the Allergy Tracking System. As a result, whenever the patient is registered for a procedure that involves contrast material, a warning message is displayed to the receptionist. Answering 'Yes' to this field also affects the Complications Report, since contrast medium reaction complications are tallied in an extra total line.	Enter 'Y' for YES if the complication is a contrast medium reaction.	-

Field Name	Field Num	Data Type	Description
COMPLICATION	.01	FREE TEXT	This field contains the name of the type of complication that may be associated with an exam. Initially, the system contains two complication types: 'Contrast Reaction', and 'No Complication'. Other complication types may be entered by the rad/nuc med coordinator at each site and can be 3 to 30 characters in length.
CONTRAST MEDIUM REACTION?	2	SET	This field is used to indicate that a patient has had an allergic reaction to the contrast medium used during an exam. If this field contains a 'Yes', then it triggers a contrast medium as an allergen in the Allergy Tracking System. As a result, whenever the patient is registered for a procedure that involves contrast material, a warning message is displayed to the receptionist. Answering 'Yes' to this field also affects the Complications Report, since contrast medium reaction complications are tallied in an extra total line.

# VINCI Raw Documentation

VINCI Central

[About](#)
[Using VINCI](#)
[Data](#)
[Guides](#)
[Support](#)
[VINCI Workspace](#)

**Applications**  
[Data Access Request Tracker](#)

**Shortcuts**  
[My Collaboration Sites](#)  
[VINCI Workspace](#)  
[VHA Data Portal](#)  
[HSR&D](#)  
[VIRec](#)  
[HSRData-L Listserv](#)

Home > Data > Available Data

## Available Data

The following is a list of the three categories of data available through VINCI. To see a description of the tables and columns contained within a domain, select it from the Data Descriptions on the right.

- [See CDW MetaData Reports Page on CDW site.](#)
- [See CDW-Raw Domains Page on CDW site.](#)

### CDW Production

The Veterans Administration's Corporate Data Warehouse (CDW) is a national repository comprising data from several Veterans Health Administration (VHA) clinical and administrative systems. The objective of CDW is to provide data and tools to support management decision making, performance measurement and research objectives. Its premise is that incorporating data from multiple differing data sets throughout the VHA into one standard database structure will facilitate reporting and data analysis at the enterprise level. The CDW operates within the VA Office of Information & Technology Field Operations Business Intelligence Service Line.

CDW data are stored in a relational database. Multiple VA data sources are being merged so that cohorts will be definable by attributes such as ICD-9 codes and CPT codes from both inpatient and outpatient encounters or from abnormal values of vital signs like blood pressure, weight and height, within a target time period. Data are kept current by refreshing on a nightly basis and is available beginning October 1, 1999. CDW is considered to be the best model data.

### CDW Raw

The purpose of CDW Raw is to hold domains that have not been obtained through the normal CDW process. The Raw extractor allows us to obtain data quickly and to make changes as subject area experts refine their requirements. Certain domains will be promoted to CDW Prod, and others will not. CDW Raw data domains have limited documentation, entail additional provisioning time, and are more difficult for studies to utilize.

The Raw extraction data are not as refined as the CDW primary data set. They are extracted directly from the Vista sites through a process as data snapshots, rather than continuously as does CDW. The Raw extractions are therefore not kept current. However, some are updated monthly depending on the domain. Extractions may be repeated as needed.

### SAS Data Sets

The SAS data sets are national administrative data for VHA-provided health care utilized primarily by veterans, but also by some non-veterans (e.g., employees, research participants). The data sets are provided in SAS format by fiscal year (Oct. 1 - Sept. 30). These data are extracted from the National Patient Care Database (NPCD) maintained by the VHA Office of Information at the Austin Information Technology Center (AITC), the central repository for VA data. Having historically been monitored by AITC mainframe, VINCI has acquired a complete copy of those data sets.

In all of the SAS data sets, each patient has a unique identifier referred to as the Scrambled SSN, which is a formula-based encryption of the Social Security Number. The identifier is consistent for a given patient across data sets and fiscal years.

Please note that VINCI consolidated the pre-2005 DSS data from the mainframe SAS files that were available at Austin (AITC). Since VINCI is not the data owner, no attempt was made by VINCI to modify, enhance, or change the data other than consolidating the original individual SAS files and making the data available as SQL Server tables. DSS is now known as MCA. Please visit the [VIRec site](#) to find more information MCA data.

### Data Descriptions

#### CDW PRODUCTION

- [Allergies](#)
- [Appointment](#)
- [BCMA](#)
- [CAN Score](#)
- [Consult](#)
- [Dimensions \(CDW\)](#)
- [Fee \(Purchased Care\)](#)
- [Health Factors](#)
- [Immunization](#)
- [Inpatient Encounters](#)
- [Lab Chemistry](#)
- [Lab Microbiology](#)
- [Mental Health Assessment](#)
- [Orders \(CPRS\)](#)
- [Outpatient Pharmacy](#)
- [Outpatient Visits](#)
- [Patient \(Demographics\)](#)
- [PCMM](#)
- [SPatient](#)
- [Staff](#)
- [Vital Signs](#)

#### CDW RAW

- [Beneficiary Travel \(CBO\)](#)
- [Bill Claims \(CBO\)](#)
- [Compensation & Pension Exam](#)
- [Dimensions \(CDW-Raw\)](#)
- [Echocardiogram](#)
- [Electronic Time Attendance](#)
- [Emergency Depc. Inc. Software](#)
- [Equipment Inventory](#)
- [Fee Basis](#)
- [IFCAP](#)
- [Inpatient Pharmacy, IV](#)
- [Inpatient Pharmacy, Unit Dose](#)
- [My Health's Vtc](#)
- [Non-VA Meds](#)
- [Oncology](#)
- [Paid](#)
- [Prosthetics](#)
- [Radiology](#)
- [Surgery](#)
- [TIU Documents](#)

#### SAS

- [MCA NDE \(was DSS NDE\)](#)
- [MedSAS](#)

#### OTHER

- [Vital Status](#)

Also find reports about raw domains in the VINCI data documentation.

# VINCI Radiology Report

## VINCI Data Description Raw Radiology Extract

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### Contents

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	 complication_types_78_1..... 32
	contractsharing_agreements_34..... 33
	diagnostic_codes_78_3..... 33
	examination_status_72 ..... 34
	Imaging_Locations_79_1 ..... 39
	imaging_stop_codes_71_5 ..... 43

# VINCI Table Description

Table Name	Table description
<b>complication_types_78_1</b>	<p>This file contains the types of complications that may occur while a procedure is being performed. If there is a complication during an exam, then the technologist can indicate which of these complications in this file the exam should be associated with by using either the 'Case No. Edit' or 'Edit Exam By Patient' functions of the module.</p> <p>When the system is initialized, two complications are loaded into the module. They are 'no complications' and 'contrast reaction'.</p> <p>If a 'contrast medium reaction' is associated with an exam, then the patient's record in the Allergy Tracking System will automatically be updated to indicate he/she has had a reaction. As a result, everytime the patient is registered for a procedure that may involve contrast material, the receptionist will be warned and he/she should then take appropriate action.</p> <p>Entries in this file should not be deleted. Adding new entries is always allowed.</p>

# VINCI Field Descriptions

## *complication\_types\_78\_1*

ColumnName	DataType	Description
sta3n	Smallint	
ComplicationTypesIEN	Varchar(50)	
Complication	Varchar(50)	<p>This field contains the name of the type of complication that may be associated with an exam.</p> <p>Initially, the system contains two complication types: 'Contrast Reaction', and 'No Complication'. Other complication types may be entered by the rad/nuc med coordinator at each site and can be 3 to 30 characters in length.</p>
ContrastMediumReaction	Varchar(30)	<p>Field Codes : Y:YES;N:NO;</p> <p>This field is used to indicate that a patient has had an allergic reaction to the contrast medium used during an exam. If this field contains a 'Yes', then it triggers a contrast medium as an allergen in the Allergy Tracking System. As a result, whenever the patient is registered for a procedure that involves contrast material, a warning message is displayed to the receptionist. Answering "Yes" to this field also affects the Complications Report, since contrast medium reaction complications are tallied in an extra total line.</p>

# Summary/Conclusion

- Some variety of these sites will prove useful in learning about the CDW content in which you are interested.
- These primary variation are based on whether or not the data is in a production domain or in a raw domain.
- However, there is also endless variety of considerations regarding where and when you find the specific documentation you are seeking.

# Real Life - How do I find DXPRIME in CDW?

- From the *MedSAS Inpatient RUG*, you can see:
  - On page 77 , DXPRIME originates in VistA's PTF (#45) file, PRINCIPAL DIAGNOSIS (#79) field
  - On page 74, DXF2-DXF13 originate in VistA's PTF (#45) file, SECONDARY DIAGNOSIS 1-12 (#79.16, 79.17, 79.18, 79.19, 79.201, 79.21, 79.22, 79.23, 79.24, 79.241, 79.242, 79.243) fields.
- Going to the *CDW Inpatient Factbook*, you can see:
  - On page 99 in table Inpat.InpatientDiagnosis, the column OrdinalNumber originates from the same source as DXPRIME and DXF2-DXF13.
- Then, you get the linking keys from CDW's SharePoint (or meta views) to connect to ICD codes. Identify the appropriate linking key to connect to Dim.ICD9 using ICD9SID (pre 10/2015) or Dim.ICD10 using ICD10SID (post 10/1/2015) depending the date of discharge.

# Questions?

Margaret Gonsoulin, PhD

**[VIReC@va.gov](mailto:VIReC@va.gov)**

708-202-2413

# Content Specific Resources



# Limitation of these sources

- The main limitation of these documentation sources is the frequent lack value descriptions.
- 4 places to look:
  - DAR (see tip on slide 38 – magnifying glass)
  - VIREC Sample Records
  - VIREC Discrete Counts (most tables)
  - VIREC Factbooks

# Additional Documentation & Assistance (1)

Domain	Source - Title
Consult	VIReC Factbook- Corporate Data Warehouse (CDW) Consult 2.0 Domain
Inpatient	CDW Insights Days Presentation 3/26/ 14 & Data Quality Report - Guide to Inpatient 2.0 Contents CDW Insights Days Presentation 3/26/14- Data Transformation from VistA files to CDW VIReC Factbook- Corporate Data Warehouse (CDW) Inpatient 2.1 Domain
Lab Microbiology	VIReC Researcher's Notebook - Issue 1: How do I identify the causative organism in CDW Lab Microbiology? An Example Using Staphylococcus Aureus
Lab Chem	VIReC Cyberseminar- A Practical Guide to Using the Corporate Data Warehouse LabChem Data: VA Informatics and Computing
Mental Health	CDW Insights Days Presentation 3/26/14- Tele-Mental Health: Preliminary Analysis of Unique Patients VIReC Factbook - Corporate Data Warehouse Mental Health Domain
Outpatient	VIReC Cyberseminar - Identification of Outpatient Workload in CDW Data Quality Report - Applying NPCD Business Rules to CDW Outpatient Visits to calculate Workload
Patient	Data Quality Report - Work on Race and Ethnicity Data Quality Report - Identifying Unique Patients in CDW (SPatient Only) Data Quality Report - Identifying Veterans in the CDW Data Quality Report - Identifying Test Patients in CDW
Patient Enrollment	VIReC Factbook - Corporate Data Warehouse Patient Enrollment Domain
Pharmacy	CDW Insights Days Presentation 4/30/14- Applied Research in the VINCI Environment
Purchased Care	HERC Fee Basis Data Data: A Guide for Researchers
Vital Status	Data Quality Report - CDW Date of Death Analysis and Vital Status File Comparison

# Additional Documentation & Assistance (2)

- Data Quality Page:

<http://vaww.vhadataquality.va.gov/index.php?lang=en>

- CDW Insights Days:

<https://vaww.dwh.cdw.portal.va.gov/Support/Training/cdwinsights/SitePages/Home.aspx>

- VIREC Cyberseminars:

<http://www.virec.research.va.gov/Resources/Cyberseminars.asp#Upcoming>

- VIREC HelpDesk:

<http://vaww.virec.research.va.gov/Support/HelpDesk.htm>

- HSRData-L ListServ:

<http://vaww.virec.research.va.gov/Support/HSRData-L.htm>