VIReC

VIReC RESEARCH USER GUIDE:

VHA PHARMACY PRESCRIPTION DATA

VA Information Resource Center

Health Services Research and Development Service

Department of Veterans Affairs

Edward J. Hines, Jr. VA Hospital (151V)

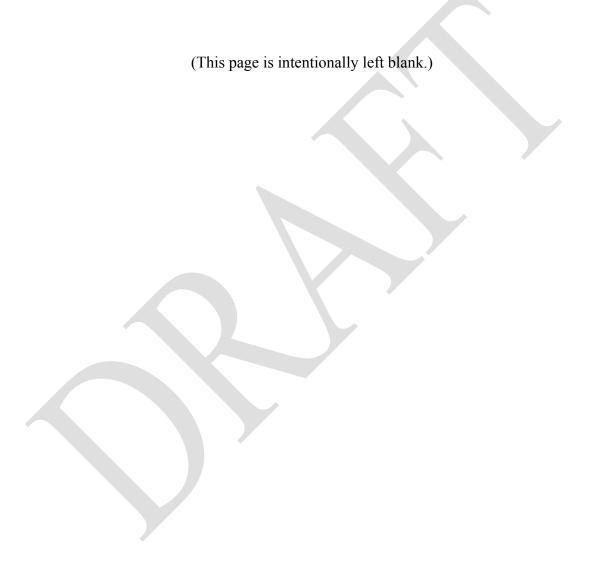Building 1, Room C303

5000 South 5th Avenue

Hines, IL 60141

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VA Information Resource Center
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Hines, IL
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VIReC Research User Guide: VHA Pharmacy Prescription Data

I. Introduction

VIReC Research User Guide: VHA Pharmacy Prescription Data is produced by the VA Information Resource Center (VIReC), a national resource center of the Health Services Research and Development Service (HSR&D), U.S. Department of Veterans Affairs (VA). This guide describes the various sources of pharmacy data in the Veterans Health Administration (VHA) and provides detailed information about two of these sources: the Pharmacy Benefits Management (PBM) Database and the Decision Support System (DSS) Pharmacy National Data Extracts (NDEs). VIReC issues this guide to assist health services researchers and other users of these data in understanding the availability of the data and definitions of the variables within the various data sources.

Using the Guide

This guide contains eight chapters with additional documents as appendices. References to Internet addresses are hyperlinked, whereas references to VA Intranet addresses include the name of the document or Web page and the VA Intranet URL.

Chapter II: Overview of the Pharmacy Prescription Data in the VHA
　　Briefly describes the three primary sources for pharmacy prescription data, and methods for accessing these data sources

Chapter III: Special Data Topics
　　Provides information on special topics related to pharmacy data

Chapter IV: DSS NDE Pharmacy Dataset Variables
　　Lists the variables available in the DSS Pharmacy NDE Dataset

Chapter V: DSS NDE Pharmacy Dataset Variable One-Page Descriptions
　　Presents a one-page description for each variable in the DSS Pharmacy NDE SAS® Dataset

Chapter VI: PBM Database Variables
　　Lists the variables available in the PBM Database for outpatient prescriptions and ordering provider

Chapter VII: PBM Database Variable One-Page Descriptons
　　Presents a one-page description for each variable in the PBM Database for outpatient prescriptions and ordering provider.

Chapter VIII: Selected Bibliography
　　Lists references to articles about studies that utilized VA pharmacy databases.

What's New

This guide was revised in September 2008. Updates to the Special Data Topics section include new information in theDSS NDE Pharmacy Costs, Ward Stock and Data Comparability sections. Additionally, the naming convention for the DSS NDE Pharmacy Datasets reflects naming changes and the Selected Bibliography contains recent publications.

Acknowledgments

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Contact Information

Denise Hynes, RN, MPH, PhD
Center Principal Investigator
denise.hynes@va.gov

Joanne M. Stevens, RN, BSN
Health Science Specialist
joanne.stevens@va.gov

VA Information Resource Center (151V)
Hines VA Hospital
Hines, IL 60141

Phone: (708) 202-2413
Fax: (708) 202-2415
VIReC Helpdesk: virec@va.gov

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II. Overview of Pharmacy Prescription Data in the VHA

There are currently three main sources of pharmacy prescription data for researchers:

1. VistA (Veterans Health Information Systems and Technologies Architecture)
2. Pharmacy Benefits Management (PBM) Database
3. Decision Support System (DSS) National Data Extract (NDE) Pharmacy SAS® Datasets

All prescription orders are captured in VistA. The other two sources of prescription data, PBM and DSS, originate from VistA extracts. (See Figure 1 on the following page.) While VistA provides data at the local level, PBM and DSS pull data from all facilities to create national files. A general description of the three sources and methods for accessing them are presented in this chapter. Smith and Joseph provide a more detailed discussion on several of these sources in their article, "Pharmacy Data in the VA Health Care System." [*]

VistA

All pharmacy data are entered, processed, and stored in VistA, which is the automated environment that supports day-to-day operation at local VA health care facilities. The VistA Pharmacy Package consists of thirteen applications that gather, process, and store data for prescription orders written and filled within the VA system:

1. Automatic Replacement/Ward Stock (AR/WS)
2. Bar Code Medication Administration (BCMA)
3. Consolidated Mail Outpatient Pharmacy (CMOP)
4. Controlled Substances
5. Drug Accountability/Inventory Interface (DA)
6. Inpatient Medications
7. Inpatient Medications-Intravenous (IV)
8. Inpatient Medications-Unit Dose (UD)
9. National Drug File (NDF)
10. Outpatient Pharmacy
11. Pharmacy Benefits Management (PBM)
12. Pharmacy Data Management (PDM)
13. Pharmacy Prescription Practices (PPP)

The VistA Monograph contains a description of these applications and their functions.

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[*] Smith MW, Joseph G. Pharmacy Data in the VA Health Care System. *Medical Care Research and Review* 2003;60(3 Suppl):92S-123S.

Figure 1. Flow of Pharmacy Prescription Data from Vista to Researcher Accessible DSS and PBM Data*

DSS

| Local Site | Austin Automation Center |

Local VistA File – Site 1 → DSS Local Extract Software - Site 1

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•
•
•
•
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Local VistA File – Site → DSS Local Extract Software - Site N

DSS Unit Dose Local Extracts

DSS VistA Prescription Extracts

DSS Pharmacy IV Detail

Other DSS Local Extracts

DSS National Data Extract Software

DSS NDE Pharmacy SAS

Other DSS NDE extracts with pharmacy activity costs

PBM

| Local Site | PBM Hines, IL |

Local VistA File – Site 1 → PBM Local Extract Software – Site 1

•
•
•
•
•

Local VistA File – Site → PBM Local Extract Software – Site N

PBM Local Provider, IV, Unit Dose, Outpatient Prescription, etc. Extracts

PBM Build Database Software

PBM Database

PBM Custom Extract Software

PBM Custom Extract for Researcher Extract

* Readers using Visual Devices may call the VIReC Help Desk at 708-202-2413 for a description of this figure and assistance with other information provided in this guide.

The following three pharmacy files used by the VistA Pharmacy Package contain information most relevant to prescription orders dispensed:

1. Prescription File (FILE 52)
2. Pharmacy Patient File (FILE 55)
    a. This file has two sub-files:
        i. IV Orders (FILE 55.01)
        ii. Unit Dose Orders (FILE 55.06)
3. Local Drug File (FILE 50)

Completed pharmacy transactions are stored in two locations in VistA: the Prescription File (FILE 52), which contains outpatient medications dispensed including those processed by a CMOP and the Pharmacy Patient File (FILE 55), which contains inpatient medications dispensed. Information specific to a particular prescription, such as patient identity, product dispensed, start date, and quantity dispensed, is stored in these files. In the prescription process, information about the drug product, supply, or diagnostic ordered will come from the Local Drug File (FILE 50).

Each VA station (site) operates its own VistA system; therefore, there will be a local set of VistA Pharmacy files at each site. Prescriptions filled by a CMOP will be stored in the local VistA system for the site from which the patient requested the fill or refill. Beginning in 1997 with the VistA Inpatient Medications Version 5.0 and Outpatient Pharmacy Version 7.0, pharmacy data could no longer be purged from or archived in VistA. Therefore, all VistA sites should have pharmacy inpatient and outpatient data beginning in 1997 when these versions were installed (installation dates varied by site). Some sites may have pharmacy data prior to 1997 depending on whether and when they archived or purged data. For example, at the Hines VA Hospital inpatient pharmacy data are available from 1987 and outpatient pharmacy data are available from April 1997. To determine which years of pharmacy data are available in a site's VistA system, contact the site's Pharmacy ADPAC (Administrative Data Processing Applications Coordinator).

VA FileMan is the hierarchical database management system used to access and manage VistA data. Documentation of VistA files and their fields is available under the FileMan List File Attributes [DILIST] option. There are three methods available for extracting data from VistA files: MUMPS, FileMan and Structured Query Language (SQL). MUMPS (Massachusetts General Hospital Utility Multi-Programming System) or M is the primary programming language used to access VistA files. FileMan can also be used to extract data from VistA files, and some sites have implemented an SQL interface to the VistA files. For further information on VistA and extracting data from VistA please consult the following *VIReC Insights*: *Veterans Health Information Systems and Technology Architecture (VistA) as a Research Tool*.

Some VISNs (Veterans Integrated Service Networks) have created warehouses of data from all VistA installations within their region. VISNs are VHA organizational business units comprised of multiple medical centers and clinics within a geographic region. These data warehouses may contain prescription data. For example, Consumer Health Information & Performance Sets (CHIPS), the VISN 20 Data Warehouse (see Appendix D), contains inpatient pharmacy and outpatient prescription data. For research that requires only VISN or site specific data,

researchers may find that prescription data is available in a VISN data warehouse and should contact the local Office of Information and Technology (OI&T) office to determine existence of a data warehouse and access procedures for the warehouse.

Because each site operates its own VistA system that requires local Institutional Review Board (IRB) approval for research access, and few researchers are trained in using MUMPS or accessing hierarchical databases, researchers will most likely find it easier to obtain the data they need from one of the other two primary data sources that are national in scope. These national sources are PBM Database and the DSS NDE Pharmacy SAS® Datasets for inpatient and outpatient pharmacy utilization and costs.

Decision Support System National Data Extracts (DSS NDE)

DSS NDE Pharmacy Datasets

The DSS NDE Pharmacy Datasets for inpatient and outpatient pharmacy utilization and costs are available beginning with Fiscal Year 2002 (FY2002). These datasets reside at the Austin Information Technology Center (AITC) (formerly known as the Corporate Franchise Data Center (CFD) and Austin Automation Center (AAC)) and are built from the DSS VistA Prescription Extracts (see Appendix D), Unit Dose Local Extracts, and Pharmacy IV Detail Extracts generated at each VistA site. Due to their size, the datasets are split into multiple files by VISN and inpatient or outpatient status at time the order was dispensed. Table 1 provides DSS NDE Pharmacy dataset names from FY2002-FY2003.

Table 1: DSS NDE Pharmacy Dataset Names, FY2002 – FY2003	
File Name	**VISNs and Inpatient/Outpatient Indicator**
RMTPRD.MED.DSS.SAS.FYXX.V1TO5I.PHA	VISNs 1 – 5, Inpatient
RMTPRD.MED.DSS.SAS.FYXX.V1TO5O.PHA	VISNs 1 – 5, Outpatient
RMTPRD.MED.DSS.SAS.FYXX.V6TO10I.PHA	VISNs 6 – 11, Inpatient
RMTPRD.MED.DSS.SAS.FYXX.V6TO10O.PHA	VISNs 6– 11, Outpatient
RMTPRD.MED.DSS.SAS.FYXX.V11TO16I.PHA	VISNs 11 – 16, Inpatient
RMTPRD.MED.DSS.SAS.FYXX.V11TO16O.PHA	VISNs 11 – 16, Outpatient
RMTPRD.MED.DSS.SAS.FYXX.V17TO22I.PHA	VISNs 17 – 22, Inpatient
RMTPRD.MED.DSS.SAS.FYXX.V17TO22O.PHA	VISNs 17 – 22, Outpatient
*XX represents the fiscal year	

Note: VISN 13 and VISN 14 were integrated into VISN 23 in January 2002, but DSS databases still have data under their original designation for Pharmacy datasets in FY02 and FY03.

The files contain a record for
1. each outpatient prescription filled by a VA Pharmacy or CMOP;
2. each day for every inpatient unit dose order; and
3. each additive and solution in every IV mixed and dispensed per day.

In FY2007, the naming convention of the DSS NDE Datasets was changed. For pharmacy data files from FY2004 onward, the naming convention was changed from the above to RMTPRD.MED.DSS.SAS.FYXX.VISN*.XXX (where XXX = the NDE; and * equals a VISN number from the ranges: 01-12 and 15-23). The pharmacy DSS NDE files for FY07 are: RMTPRD.MED.DSS.SAS.FY07.VISN*.PHA. Please refer to the VIReC DSS Research User Guide for the name of additional DSS NDE datasets.

The final SAS® datasets for a fiscal year are typically available in January (although it can be earlier for some datasets) after the end of the fiscal year (September 30). Interim SAS® datasets are created monthly and contain cumulative, year-to-date information. The interim datasets are usually not available until well into the year. Note that DSS smoothes month-to-month cost variations over the course of the year. Therefore, costs on the interim datasets may not agree with those on the final year's datasets.

Information about obtaining access to these datasets is available on the VSSC DSS Reports web site (see Appendix D). For a list and description of the contents of the DSS NDE Pharmacy SAS® datasets see Chapter IV and Chapter V.

The *VIReC Research User Guide: VHA Decision Support System (DSS) Clinical Extracts* also provides information about the DSS NDE Pharmacy SAS® Datasets as well as other clinical extracts, including laboratory and radiology extracts.

DSS VistA Extracts

The DSS VistA Prescription Extracts, Unit Dose Local Extracts, and Pharmacy IV Detail Extracts used to build the datasets do contain additional data elements. These extract files are not as easily accessible as the datasets and are short lived, especially the Prescription Extracts. Use of these extract files requires authorization from each site. For more details about these files, consult the DSS Technical Guides located at the DSS Web site (see Appendix D).

DSS NDEs with National Pharmacy Activity Costs

Five additional DSS National Data Extracts contain cost data. Three of them, the Outpatient Extract, Inpatient Discharge Extract, and Inpatient Treating Specialty Extract, are datasets created for each fiscal year beginning with 1998 (table 2). The remaining two, the Intermediate Product Department (IPD - Treating Specialty IPD) and Outpatient Intermediate Product Department (O-IPD), have pharmacy costs at the department level for all inpatient and outpatient encounters (respectively).

Although these DSS NDEs do not contain prescription data, they are noted here because they provide the pharmacy costs component within outpatient and inpatient encounters, which include pharmacy costs for

1. each outpatient encounter in the extract fiscal year,
2. an inpatient stay with a discharge date in the extract fiscal year, and
3. costs per month per treating specialty for each inpatient stay for the extract fiscal year.

Table 2: Cost Variable Available in Outpatient Extract, Inpatient Discharge Extract, and Inpatient Treating Specialty Extract

Field	Description
Pharmacy Fixed Direct Cost	Costs that can be directly attributed to the pharmacy department and are incurred regardless of the volume of services provided.
Pharmacy Variable Direct Cost	Costs of supplies, labor, etc., that vary with the workload of the pharmacy department. Includes the cost of the drug product, supply, or diagnostic dispensed.
Pharmacy Indirect Cost	Costs of overhead departments such as housekeeping, engineering, and administration.
Pharmacy Variable Supply Cost	This is a calculated cost that forms part of the Pharmacy Variable Direct Cost. It equals the Pharmacy Variable Direct Cost multiplied by a factor. The factor is the Total Pharmacy Variable Supply Cost for the year divided by the Total Pharmacy Department Direct Variable Cost for the year. A factor is developed for each medical center.

For more information on the DSS NDEs see the following: the VIReC DSS page, VIReC's DSS Resource Users Guide and Technical Report, the DSS Web site (see Appendix D), and the Health Economics Resource Center (HERC Web site).

PBM Database

To facilitate its work, Pharmacy Benefits Management Strategic Health Group (PBM/SHG) has developed software systems and databases to organize and analyze medication data. Every month, the PBM Database Extraction Software is run against each site's VistA system to create pharmacy data extracts for that site. Details of these data extracts may be found in the PBM Database Monographs in the VistA Documentation Library.

The extracted data are electronically sent to the PBM/SHG field office located on the campus of the Hines VA Hospital, Hines, IL. The data extracts are passed through a translation process and checked for quality. For example, if necessary, local drug names (**Generic Drug Name**) are assigned a VA standard drug name (**VA Product Name**) and local dispensing units are converted to a common dispensing unit. After translation, the monthly extracts are added to the PBM Database, which is a Microsoft®* SQL database. The PBM Database contains all individual pharmacy transactions (prescription orders, refills, etc.) from October 1, 1998, until about 60 days prior to the current date.

Extracts of the PBM Database are made available to researchers as a Visual FoxPro®*, Microsoft® Access, or SAS® file. The process to request an extract for research can be found at

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* Microsoft and Visual FoxPro are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

the PBM Web site (PBM Research Data Request Form, see Appendix D) or in *VIReC Insights: The Pharmacy Benefits Management (PBM) Database — A Primary Resource for Nation-Wide VA Medication Data on the PBM database.*

See Chapter VI and Chapter VII for a list and description of the outpatient prescription variables and inpatient IV and unit dose variables available in the PBM database.

National Drug File (NDF) and the VA National Formulary

There are two other files of interest to researchers that may be downloaded from the PBM/SHG Web site: the National Drug File (NDF) (see Appendix D) and the VA National Formulary. The NDF is created and maintained by the PBM/SHG and provides for standardization of the Local Drug Files (FILE 50) in all VA medical facilities. For drugs approved by the Food and Drug Administration (FDA), the NDF contains information concerning dosage form, strength, and unit; package size and type; manufacturer's trade name; and National Drug Code (NDC). The NDF is updated regularly.

A Microsoft® Access database version of the NDF is available for download from the PBM Web site (see Appendix D). A description of the variables in the database is also available on the PBM Web site.

The VA National Formulary is a list of products available for prescribing by all physicians providing services at VA facilities. A Microsoft® Excel spreadsheet version of the VA National Formulary is available for download from the PBM Web site. The spreadsheet includes the **VA Drug Class** and any restrictions on usage of the product.

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III. Special Data Topics

This section presents information that cuts across individual variables or relates to a single variable but goes beyond what can be covered in the one-page description of the variable. The information here is necessarily brief. VIReC welcomes suggestions of topics for expanded attention in the form of technical reports or peer-reviewed published manuscripts. Proposals of possible collaboration are also welcome.

Pharmacy ADPAC

The Pharmacy ADPAC (Administrative Data Processing Applications Coordinator) is responsible for administering the VistA Pharmacy Package for a VA station. When using pharmacy data, the researcher should discuss the medications under study with a local Pharmacy ADPAC to determine whether there are any issues affecting data quality and completeness of medications dispensed and administered.

Ward Stock

Some medications and supplies are delivered to a ward, specialty unit, or clinic as "ward stock". Ward stock often contains medications not available in unit dose form (e.g., nitroglycerin tablets, insulin, antacids, etc.) or needed for emergency situations. These medications are maintained on the ward as general stock; they are not ordered for a specific patient but are stored on the ward for future use. When ward stock is administered to a patient an order is entered into VistA and the administration is recorded via the Bar Code Medication Administration (BCMA) Application. If ward stock is administered without a VistA record, then the procedure will not appear in the patient's medical record. Unrecorded pharmacy adminstrations have been uncommon since the implementation of the BCMA Application. The BCMA Application for unit dose administration became available in September 1999 and for IV dosing in August 2002.

Medications dispensed in a Dialysis Unit such as EPO (erythropoietin) are often dispensed from ward stock. Because the amount of a drug dispensed can vary with each dialysis treatment, sites may differ in how the orders are recorded in VistA. Orders may or may not change with each change in the amount of drug administered in a treatment. If orders are not changed, the dispensing information found in VistA could vary significantly from what was administered. Thus, pharmacy-dispensing data may not be the most reliable source for records on the administration of drugs such as EPO. Additional information on ward stock can be found in the VIReC *Data Issues Brief: (6) Under Ascertainment of Medication Use in Pharmacy Datasets.*

Inpatient Medication Dispensed vs. Inpatient Medication Administered

The extracts described in this guide record medications dispensed rather than medications administered. A medication may be dispensed but not administered for several reasons. A patient may be unavailable, for example, or may refuse the medication.

Administration of inpatient medications is recorded via the BCMAl, which is not part of the extracts described in this guide. When medications are administered the patient's wristband and the medication are scanned with a bar code reader. The BCMA Application verifies and records the administration from the scanned bar codes in the BCMA Application Files. In some cases a medication may be administered but not recorded. If the BCMA Application is not functioning at the time of administration then someone must enter the data later. The BCMA Application requires the provider to scan the patient's wristband; if the patient has discharged or is otherwise unavailable then the administration cannot be entered.

Medications dispensed and not administered are returned to the VA Pharmacy or destroyed. This will be recorded in the Pharmacy Inpatient Files. Researchers should keep in mind that when using the extracts described in this guide they are working with the data that records medications dispensed which may differ from data that records administration of medications.

National Drug Code (NDC)

The NDC is a unique 10-digit, 3-segment number for each drug product consisting of a labeler code, a product code, and a package code. The labeler code is assigned by the FDA and identifies the firm that manufactures, repackages, or distributes a drug product. The product code identifies a specific strength, dosage form, and formulation. The package code identifies package sizes. The firm assigns both the product and package codes. The NDC will be in one of the following configurations: 4-4-2 (4-digit labeler, 4-digit product and 2-digit package), 5-3-2, or 5-4-1. See the FDA's National Drug Code Directory for additional information about the codes and links for searching or listing the codes.

You may also find an 11-digit or 12-digit version of the NDC. The 11-digit version has a 5-4-2 configuration and is a format often used in commercially available software. The 12-digit version has a 6-4-2 configuration and is generated by the PBM/SHG to provide a standardized configuration for use in their National Drug File (NDF).

PLEASE NOTE: The NDC on the dispensing record may not be the NDC for the drug product actually dispensed to the patient. It always will be an NDC for the same drug, but the manufacturer or package size may be different from the actual drug product dispensed. This will occur if the Local Drug File (FILE 50) has not been updated to reflect the currently stocked supply at the time the drug product was dispensed.

Outpatient Prescription Returns

Occasionally, outpatient prescriptions that have been "released" by the VA Pharmacy or CMOP (i.e., the pharmacist has scanned the bar code on the prescription label) may be refused, not picked up by the patient, or returned by the patient. Released prescriptions will have a **Release Date** in the dataset. Both PBM and DSS use the release date to extract prescriptions from VistA. All CMOP prescriptions released are mailed using the local medical center's address as the return address. VA Pharmacies usually mail released prescriptions to the patient if they are not picked up.

VA Pharmacies process all returns, including those from a CMOP. Most returns are due to incorrect addresses on a mailed prescription. The VA Pharmacy will correct the address and resend the prescription. If a valid address cannot be found the prescription record will be updated indicating that the prescription was returned, but the release date will remain unchanged. Therefore, it is possible that some prescriptions on the PBM and DSS extracts may have not actually reached the patient. These prescriptions apparently represent an insignificant number of all prescriptions. Gail Krug, Outpatient Pharmacy Supervisor at the Hines VAMC, indicates that they encounter only about ten returned prescriptions each month for which they cannot find a valid address.[*] Normally returns that cannot be resent to a patient are destroyed because of the possibility of tampering or alteration.

Data Quality Issues

We found no published studies on the quality of VHA pharmacy prescription data in our literature review. Researchers are encouraged to investigate and report on the quality of these data and are invited to contact VIReC if they encounter any data quality issues when using pharmacy prescription data so that their findings may be included in future versions of this guide. General information about the quality of VA health care data may be found on the VIReC website (see Appendix D), which includes a technical report on a comparison of PBM and DSS pharmacy data (*VIReC Technical Report 1*: Comparison of VA Outpatient Prescriptions in the DSS Datasets and the PBM Database).[**]

DSS NDE Pharmacy Dataset Cost Variables

There are three cost variables on the DSS NDE Pharmacy Datasets, **ACT_COST**, **DISPCOST** and **VS_COST**. The Pharmacy Department costs are unique in that DSS has two intermediate product costs for a Pharmacy product: 1) an average dispensing cost and 2) a drug product cost. Importantly, the costs that are included in each of the DSS NDE Pharmacy cost variables differ

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[*] Gail Krug, Outpatient Pharmacy Supervisor at the Hines VAMC, telephone conversation with author, December 10, 2003.

[**]Arnold N, Hynes DM, Stroupe KT. VIReC Technical Report 1: Comparison of VA Outpatient Prescriptions in the DSS Datasets and the PBM Database. Edward Hines, Jr. VA Hospital, Hines, IL: VA Information Resource Center, January 15, 2006.

by the dispensing location. The HERC Technical Report 22 contains detailed information on the components of each of the DSS Pharmacy cost variables by dispensing location.[*] Briefly, the **ACT_COST** variable contains the drug product cost for CMOP dispensed prescriptions and drug produc cost plus supplies for pharmacy window dispensed prescriptions. The **DISPCOST** variable contains the dispensing cost for the prescription (labor, supplies, mailing, overhead) for CMOP dispensed prescriptions and dispensing labor costs for pharmacy window dispensed prescriptions. Thus, for prescriptions dispensed from both locations the total cost of a prescription is the sum of the **ACT_COST** and the **DISPCOST.** Of note, the **VS_COST**variable in the fiscal year 2002 dataset does not contain the same components of cost as the variable from FY2003 onward and is not recommended for use.

The VA is required by the Joint Financial Management Improvement Program (JFMIP) standards and public law to tie workload (including pharmacy drug and supply costs) and labor costs (including pharmacists' labor) back to the actual costs reported by the VA cost centers. DSS uses Activity-Based Costing (ABC) to assign costs to products and services including those provided by VA Pharmacies. The ABC methodology volume-weights each component of cost (labor, supplies, equipment, and overhead). Minutes are used to weight pharmacist labor (ranging from five minutes for a refill to twenty minutes for dispensing an investigational drug) and the local VA Medical Center (VAMC) drug cost lists are used to weight drug products. A weight is also called a relative value unit (RVU).

For CMOP dispensed prescriptions, the **DISPCOST** variable contains the direct labor costs plus any mailing costs associated with dispensing the prescription. For pharmacy window dispensed prescriptions, the **DISPCOST** variable contains the dispensing labor associated with dispensing that prescription. The direct labor costs vary by type of prescription fill (new prescription, IV, unit dose, investigational, CMOP, mailed, etc.) and by site. For each activity associated with a fill type a number of minutes of labor (or RVUs) required for the activity is established along with the mailing costs. The cost of a labor minute is computed for each pharmacy department based on the department's annual costs and volumes (i.e., number of RVUs associated with the work performed). Table 3 contains the DSS recommended Dispensing RVUs and mailing costs. A site may modify these values.

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[*] Smith MW, King SS. Comparing Outpatient Cost Data in the DSS National Pharmacy Extract and the Pharmacy Benefits Management V3.0 Database. HERC Technical Report 22. Menlo Park, CA. Health Economics Resource Center; 2007.

Table 3: Pharmacy Dispensing RVUs		
Activity	LABOR RVUs (Minutes)	Mailing Supplies
New Prescription Counsel - Mailed by VA Pharmacy	5.00	–
New Prescription Counsel - Picked Up at VA Pharmacy Window	5.00	–
Outpatient Prescription - VA Pharmacy	5.00	–
Outpatient Prescription - VA Pharmacy Investigational Drug	20.00	–
Outpatient Prescription - VA Pharmacy Mailing	1.50	$3.00
Copay	0.00	–
New Prescription Counsel - CMOP Fill (performed at a VA Pharmacy Window)	5.00	–
Outpatient Prescription - CMOP Fill	0.00	$2.10
Unit Dose - Investigational Drug Dispensing	20.00	–
Unit Dose - Dispensing	0.85	–
IV - Investigational Drug	20.00	–
IV - Piggy Back	5.70	–
IV - Syringe	2.00	–
IV - Chemotherapy	14.00	–
IV – Large Volume Parenteral	5.70	–
IV - TPN (Total Parenteral Nutrition)	15.00	–
IV - Return	2.00	–

For CMOP prescriptions, the **DISPCOST** is calculated by summing the costs of each activity performed to fill the prescription. For example, the dispensing cost for a new outpatient prescription that is mailed from a VA Pharmacy will equal the sum of the basic fill cost (basic fill minutes multiplied by the cost per minute of pharmacist labor at the site), a new prescription counseling cost via mail (counseling via mail minutes multiplied by the cost per minute of labor), and the VA Pharmacy mailing costs (mailing minutes multiplied by the cost per minute of labor plus a flat rate mailing fee for supplies).

The method for populating the **DISPCOST** variable was different in the fiscal year 2002 Datasets than in the fiscal year 2003 Datasets. In 2002, the **DISPCOST** was an average of the dispensing costs for all prescriptions for a patient by day by feeder system (Unit Dose, IV, VA Pharmacy, or CMOP). For example, if a patient had three outpatient prescriptions filled by a VA Pharmacy (two refills and a new prescription) the cost in the **DISPCOST** for each of the three prescriptions was the same (the sum of the dispensing costs for the three prescriptions divided by three) even though the new prescription would have had a higher dispensing cost amount. In 2003, the **DISPCOST** was no longer an average for the patient day, but was the actual dispensing cost calculated for the prescription. Therefore, in fiscal year 2003, using the same example of three outpatient prescriptions, the new prescription will have a higher amount in the **DISPCOST** variable than the two refills.

As noted above, the components of the **VS_COST** variable are also different depending on the dispensing location. For CMOP prescriptions the **VS_COST** variable is the acquisition cost of the prescription, while for pharmacy window dispensed prescriptions, **VS_COST** contains the cost of the drug plus other supplies used to produce the dispensed product. At the beginning of every year, each VAMC establishes a cost or number of relative value units (RVUs) for a unit of each drug dispensed at the VAMC. RVUs for these costs are measured in dollars.

What follows is a simplified example of how DSS assigns the cost of the drug prescribed using RVUs to a prescription plus a comparison of the DSS method with the method used by PBM to obtain the cost of the drug dispensed. Table 4 lists the drug products purchased by the VAMC in fiscal year 2003 and the price paid to the supplier for the drug products. The VAMC paid $415,000 for two drug products during the year. Drug 1 was purchased three times during the year at a different price each time.

Table 4: VAMC Purchases for FY2003						
Drug Product	**Date**	**Units Purchased**	**Supplier Unit Cost**	**Supplier Total Cost**	**VistA Local Drug File (FILE 50) Unit Price**	**Average Annual Cost Per Unit**
Drug 1	10/1/2002	10,000	$10.00	$100,000	10.00	$12.50
Drug 1	1/15/2003	10,000	$12.50	$125,000	12.50	$12.50
Drug 1	9/1/2003	10,000	$15.00	$150,000	12.50	$12.50
Drug 2	7/22/2003	10	$4,000.00	$40,000	4,000.00	$4,000.00
Total		30,010		$415,000		

Table 5 shows how the cost per unit of drug product is calculated using the RVUs assigned to the drug at the beginning of the year. In this example, all drugs purchased were dispensed. The cost per RVU for each drug is calculated by multiplying the RVU for the drug product by the Total Supplier for all drug products from table 4 divided by the Total RVUs for all drug products. For example, the Cost per RVU for Drug 1

=   RVU Assigned to Drug x (Total Supplier Cost ÷ Total RVUs Dispensed);
= $10 x ($415,000 ÷ $340,000); and
= $12.206.

As you can see from this example the total costs assigned to dispensed prescriptions (Total Costs Dispensed) tie back to the total price paid to the suppliers ($415,000 in table 5).

Table 5: Calculation of DSS Drug Product Cost Per RVU					
Drug Product	**RVU Assigned**	**Dispensed**	**Total RVUs Dispensed**	**Cost Per RVU**	**Total Costs Dispensed**
Drug 1	$10	30,000	$300,000.00	$12.206	$366,176.47
Drug 2	$4,000	10	$40,000.00	$4,882.353	$48,823.53
Total		30,010	$340,000.00		$415,000.00

Finally, table 6 shows how the drug product cost assigned to a dispensed prescription by DSS and PBM can vary. This table contains two prescriptions dispensed on October 1st, one for each drug product. Ten units of Drug1 were dispensed for Prescription 1. The DSS drug product cost for Prescription 1 was calculated by multiplying the cost per RVU in Table 6 by the quantity dispensed ($12.206 x 10). The PBM Drug Product Cost for Prescription 1 was calculated by multiplying the unit price for the drug product in the Local Drug File (FILE 50) on the dispensing date by the quantity ($12.50 x 10). The Local Drug File had not been updated to reflect the price paid to the supplier for the current inventory from which the drug product was dispensed that was $15.00 per unit on October 1 (see, table 5). The product costs for Prescription 2 were calculated in the same manner.

Table 6: Assignment of the Cost of Drug Product Dispensed

Prescription	Date	Drug Product	Quantity	DSS Drug Product Cost	PBM Drug Product Cost	Price paid to Supplier for Drug Product
1	10/1/2003	Drug 1	10	$122.06	$125.00	$150.00
2	10/1/2003	Drug 2	1	$4,882.35	$4,000.00	$4,000.00

This example illustrates how several factors can cause drug product prices to vary between DSS and PBM, and within each system across prescriptions. The variation within DSS is based on how well the RVUs assigned to a drug product reflect the relationship between the cost of that drug product and the cost of all other drug products. The variation within PBM is dependent on how well the Local Drug File (FILE 50) is updated to reflect the price of the current inventory from which the drug product is dispensed. It is also important to note that DSS and PBM costs are established at the department level. Thus, costs will vary by VAMC because each VAMC
- purchases drugs from the suppliers and maintains a Local Drug File;
- establishes RVUs for each drug; and
- has a different ratio of Total Supplier Costs to Total RVUs Dispensed.

The **VS_COST** also contains the cost of other supplies used to produce the prescription (bottles, caps, labels, etc) for pharmacy window dispensed medications. These are similarly allocated to a prescription based on the prescriptions RVUs: total RVUs dispensed multiplied by the ratio of total departmental other supply costs to total departmental RVUs. For example, if the total annual costs of other supplies for the Pharmacy Department were $300, the **VS_COST** would include other supply costs in the amount of
= RVUs Dispensed in Prescription x (Total Other Supply Costs ÷ Total RVUs Dispensed)
= ($10 x 10) x ($300 ÷ $340,000)
= $.09 for Prescription 1 in Table 6 and $3.53 [($4,000 x 1)($300 ÷ $340,000)] for Prescription 2.

The sum of the **ACT_COST** and the **DISPCOST** in the DSS NDE pharmacy datasets for an encounter is equal to the sum of the Pharmacy Fixed Direct Cost, the Pharmacy Variable Direct Cost, and the Pharmacy Indirect Cost on the DSS NDE Outpatient Extract, Inpatient Discharge Extract, and Inpatient Treating Specialty Extract for the same encounter. An encounter may be the outpatient prescription fills for a day, the prescriptions dispensed for an inpatient stay or the prescriptions dispensed for an inpatient treating specialty month. The **VS_COST** and

DISPCOST are types of Pharmacy Variable Direct Costs and would be included in the Pharmacy Variable Direct Costs for the encounter on the DSS NDE Outpatient Extract, Inpatient Discharge Extract, and Inpatient Treating Specialty Extract.

Choosing Between PBM and DSS Data Sources

Decisions on using the PBM Database versus the DSS NDE Pharmacy Datasets should be based on two main factors: 1) availability of the data source and 2) contents of the data source.

Availability

The PBM Database contains pharmacy prescription data beginning with fiscal year 1999 prescription orders through FY2006 at the time this document was updated. The DSS NDE Pharmacy Datasets have data beginning with fiscal year 2002 prescription orders. Starting in FY2008, the PBM/SHG has intravenous (IV) inpatient data available beginning with FY2003. The DSS Datasets are available at the Corporate Franchise Data Center and can be accessed directly by the researcher once access is granted. Researchers cannot directly access the PBM Database as custom extracts are processed for each request submitted by a researcher.

Contents

In general the PBM Database contains more information about the medication dispensed and the dispensing details than the DSS NDE pharmacy datasets, and the DSS Datasets contain more demographic and clinical information about the patient than the PBM Database. See Chapters IV and VI, respectively, for a list of the variables in the DSS Datasets and the PBM Database.

The most significant difference in the contents of these two data sources is in the dispensing details. The DSS Datasets do not contain the dosing instructions or dispensing unit variables that are available in the PBM Database. In addition, the quantity for a unit dose order reflects the number of doses dispensed, not the quantity of the drug dispensed. Therefore, for some orders it is impossible to determine the amount of drug dispensed to a patient or daily dosage when using the DSS Datasets.

It is also important to note that the cost variables in the DSS Datasets include labor and overhead. The PBM Database variables contain only the cost of the drug product. In addition, the origin of the drug product costs differs between these two data sources. The PBM drug product costs contain the value in the VistA Local DRUG File (FILE 50) on the dispensing date. The DSS drug product costs are obtained from a local DSS standard table. This local DSS table is originally populated based on values in the Local DRUG File, but the table is usually updated not more than once a year. Also, as noted in other sections of this guide, the Local DRUG File is not always updated to reflect the costs of the most current supply. Therefore, the drug product costs are more an approximation than an actual cost. For some drug products, such as generic drugs, it will be a rather close approximation.

Data Comparability

VIReC produced a technical report comparing the outpatient prescriptions in the PBM Database and the DSS NDE Pharmacy Datasets. The objective was to determine if the same prescriptions were appearing in both datasets in a cohort of patients enrolled in a VA Cooperative Studies Program study (CSP Study 456). The main findings of this analysis showed that nearly all of the same prescriptions appeared in both files. There was a discrepancy rate of only 1.5% between the two data sources. The full report is available at http://www.virec.research.va.gov/References/TechnicalReports/VIReCTechnicalReport1.pdf.

Because this was a specific population enrolled in a VA study it is not clear how generalizable these results are to the entire VA population. VIReC has received reports from researchers that have compared the two data sources that reported much higher discrepancy rates between the two data sources. Researchers that are making comparisons between the two data sources are encouraged to share their findings with VIReC.

IV. DSS NDE Pharmacy Dataset Variables

Table 7 lists the variables contained on the DSS NDE Pharmacy datasets and indicates if the variable is extracted for inpatients or outpatients. This list of variables is based on the contents of the final FY2006 files.

Table 7: Pharmacy Dataset Variables				
Variable Name	**Name**	**Inpatient**	**Outpatient**	**Page Number**
A_PCP	Associate Provider for Primary Care	X	X	
ACT_COST	Drug Product Total Cost	X	X	
ADMITDAY	Date of Admission	X		
BORNDAY	Date of Birth	X	X	
CLSNUM	Clinic Stop Code		X	
CLSTOP	Clinic Stop Code		X	
CMOP*	CMOP Flag	X	X	
DAY_SUPPLY*	Days Supply	X	X	
DCM_DEPT	Department Cost Manager Department	X	X	
DISDAY	Date of Discharge	X		
DISPCOST	Average Dispensing Labor Cost	X	X	
DIVPERF	Division Performed	X	X	
DRUGDESC	Drug Description	X	X	
DXCODE	Diagnosis Code	X	X	
ENC_NUM*	Encounter Number	X	X	
ENRLPRTY*	Enrollment Priority	X	X	
FEED_KEY	DSS Feeder Key (Includes National Drug Code)	X	X	
FEED_LOC	Feeder Location	X	X	
FP	Fiscal Period	X	X	
FY	Fiscal Year	X	X	
IN_OUT	Inpatient/Outpatient Indicator	X	X	
INVEST*	Investigational Drug Flag	X	X	
IPNUM	Intermediate Product Number	X	X	
MEANS	Means Test Indicator Code	X	X	

Table 7: Pharmacy Dataset Variables				
Variable Name	**Name**	**Inpatient**	**Outpatient**	**Page Number**
ORD_PROV	Ordering Provider's IEN	X	X	
ORD_PROV_TYPE	Ordering Provider Type	X	X	
PCP_DSS	Primary Care Provider	X	X	
PCTEAM	Primary Care Team	X	X	
QUANTITY	Quantity of Drug Dispensed	X	X	
SCRSSN	Scrambled Social Security Number	X	X	
SEX	Sex of Patient	X	X	
STA3N	Parent Station	X	X	
STA6A	Substation Identifier	X	X	
SVC_DTE	Date of Service	X	X	
TRTSP	Treating Specialty	X	X	
TRTSP_C	Treating Specialty	X	X	
VA_CLASS	VA Drug Classification	X	X	
VISN	Veterans Integrated Service Network	X	X	
VS_COST	Variable Supply Cost	X	X	
WARD	Inpatient Ward	X	X	
ZIP	Zip Code	X	X	
ZIP_4	Zip Code + 4	X	X	

*Available beginning with fiscal year 2003 files

V. DSS NDE Pharmacy Dataset Variable One-Page Descriptions

Each description includes a table with the following information, when applicable.

Data Type: This indicates whether the variable is numeric, character, or a date.
VistA File: This is the VistA file where data for the variable originate. In VistA, files are identified by both a number and a name.
VistA Field: This is the field where data for the variable originate in VistA. In VistA, fields are identified by both a number and a name.

Where applicable, and where space allows, a second table lists the values that the variable can assume with a description of each value. In cases where the possible values exceed the space available, the table will be in an Appendix. For selected variables, the reader is given a reference source to obtain the possible values and their descriptions.

(One-page descriptions begin on the following page.)

Name: **A_PCP**

Definition: Associate primary care provider

Remarks: This variable contains the Internal Entry Number (IEN) of the Patient's Associate
                Provider for Primary Care prefixed with the character "2", which indicates the
                source file is the VistA NEW PERSON File (#200). The IEN may be used as a
                pointer to obtain information about the provider in the VistA NEW PERSON File
                (#200). The Primary Care Management Module (PCMM) is the source of the
                IEN. (Refer to VHA Directive 2005-059 "Person Class File Taxonomy" availale
                at http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=1355). The
                VHA Person Class List (Version XU*8*377) (May 2005) is available on the
                Intranet.

                The field is null in the great majority of records.

                For any provider in Station 506 (Ann Arbor), these numbers will not be unique
                and thus, cannot be used as a pointer to the VistA NEW PERSON File (#200).
                Ann Arbor provider numbers are too long and the least significant digit is
                truncated. In FY2004, the Ann Arbor provider numbers will not be preceded by a
                "2" and will not be truncated. Therefore, the Ann Arbor provider numbers will be
                unique beginning with the FY2004 files. This change began in mid-FY2003, and
                you will see a mixed format (i.e., some provider numbers will be preceded by a
                "2" and some will not) for this variable in the FY2003 files for Ann Arbor.

Data Type	Character
Label	ASSOC. PCP
VistA File	NEW PERSON (#200)
Fiscal Years	2002 forward

Name: **ACT_COST**

Definition: Actual total cost

Remarks: For prescriptions fills, this variable is the total of the pharmacy fixed direct costs, variable direct costs excluding the direct labor costs of dispensing, and indirect costs. It includes the cost of the drug product, supply, or diagnostic dispensed. **ACT_COST** includes the value in the **VS_COST** variable. For CMOP dispensed prescriptions, the **ACT_COST** includes the acquisition cost of the medication, while for pharmacy window dispensed prescriptions **ACT_COST** contains the acquisition cost, supplies and overhead.

The direct labor costs of dispensing for pharmacy window dispensed prescriptions can be found in the variable **DISPCOST**. For CMOP prescriptions, DISPCOST includes labor costs, supplies, mailing costs and CMOP overhead. For both types of prescriptions, the sum of **DISPCOST** and **ACT_COST** represents the total cost of filling the prescription order.

The value of this variable will be negative on returns (dispensed orders not administered and returned to the VA Pharmacy).

The fiscal year 2002 files have records other than dispensing records, and the value of this variable in these records contains other costs such as ward stock charges and consulting charges. It is recommended that only those costs included on dispensing records in fiscal year 2002 be utilized. Dispensing records can be identified as containing one of the values documented as such in the **FEED_LOC**.

For a more detailed discussion of the cost variables see the DSS NDE Pharmacy Dataset Cost Variables special data topics section in Chapter III.

Data Type	Numeric
Label	ACTUAL TOTAL COST
VistA File	Not applicable
VistA Field	Not applicable
Fiscal Years	2002 forward

Name: **ADMITDAY**

Definition: Date of admission

Remarks: This variable indicates the date when an episode of care began in the hospital or other setting. Because the DSS system requires a value in admission date, outpatient records will contain a date that is usually the **SVC_DTE** (date of service). Even though the variable ADMITDAY is populated, it should not be used for outpatients, except observation cases.

Similar to CMS, and unlike other VHA systems, DSS creates outpatient records for observation cases. The DSS observation record contains all products for the period of time the patient was in observation status. In DSS, patients are always admitted to a separate observation encounter, even if they are "transferred" from an acute or long-term-care encounter by the VA medical center. For observation cases ADMITDAY is valid.

Data Type	Numeric
Print Format	MMDDYY10
Label	ADMIT DAY
VistA File	PATIENT MOVEMENT (#405)
VistA Field	DATE/TIME (#.01)
Fiscal Year	2002 forward

Name: **BORNDAY**

Definition: Date of birth

Remarks: This variable indicates the patient's date of birth and may be between December 31, 1870, and the current date. If the date cannot be determined from the data in the VistA field specified below, the date will be set to July 4, 1776. Prior to 04/03/06, the default date was January 1, 1942.

Data Type	Numeric
Print Format	MMDDYY10.
Label	DATE OF BIRTH
VistA File	PATIENT (#2)
Vista Field	DATE OF BIRTH (#.03)
Fiscal Year	2002 forward

Name: **CLSNUM**

Definition: Clinic stop code (Numeric)

Remarks: This variable indicates the primary clinical area providing the services. Stop codes are also called DSS Identifiers. This variable may be null for inpatients. For outpatients it is the value contained in the VistA field specified below referenced by the VistA Field CLINIC (#5) in the PRESCRIPTION File (#52). This field will usually contain the value "160" indicating "Clinical Pharmacy". Other values found in this field represent outpatients held for observation.

Use of the standard format "YCLINIC." will provide stop code descriptions. For a full list of DSS Identifiers, visit the VA Intranet Web site (See Appendix D)

Data Type	Numeric
VistA File	INSTITUTION File (#4)
VistA Field	STOP CODE (#8)
Fiscal Year	2002 forward

Name: **CLSTOP**

Definition: Clinic stop code (Character)

Remarks: This variable contains the value of the **CLSNUM** variable stored in character
format. See **CLSNUM** for more information.

Data Type	Character
Print Format	YCLINIC.
Label	CLINIC NUMBER
VistA File	INSTITUTION (#44)
VistA Field	STOP CODE (#8)
Fiscal Year	2002 forward

Name: **CMOP**

Definition: Indicator of whether Consolidated Mail Outpatient Pharmacy (CMOP) filled the prescription

Remarks: This variable indicates whether a CMOP processed the fill and mailed it to the patient. Routine high-volume medications are most often processed by a CMOP. Some drugs, such as controlled substances, may not be mailed.

Data Type	Character
Label	CMOP FLAG
Fiscal Years	2003 to date
VistA File	Not applicable
VistA Field	Not applicable
Fiscal Year	2002 forward

CMOP can assume the following values:

Value	Description
Blank	Dispensed at VA Pharmacy
Y	Dispensed by CMOP

Name: **DAY_SUPPLY**

Definition: Number of days of dosing the fill will satisfy

Remarks: The maximum value of this field is 180 (i.e., a six month supply). Values greater than 180 likely represent errors, although a small number of these high values may be valid. The value of this variable may be zero or missing for a small percent of fills. Occasionally VistA is unable to calculate an appropriate days supply or the value of zero was entered manually.

Data Type	Numeric
Label	DAYS SUPPLY
If this is a new prescription the source is	
VistA File	PRESCRIPTION File (#52)
VistA Field	DAYS SUPPLY (#8)
If this is a refill the source is	
VistA File	REFILL Sub-file (#52.1)
VistA Field	DAYS SUPPLY (#1.1)
If this is a partial fill the source is	
VistA File	PARTIAL Sub-file (#52.2)
VistA Field	DAYS SUPPLY (#.041)
Fiscal Year	2002 forward

Name: **DCM_DEPT**

Definition: Department Cost Manager (DCM) department

Remarks: The Department Cost Manager is the DSS cost accounting system that
            focuses on the control and management of costs at the department and
            product level. A DCM department is a cost center for the assignment of
            costs at a department or division level. The naming convention for a DCM
            department follows:

   - the first character identifies the clinical service responsible for products;
   - the second and third characters indicate the national DSS production unit or
     department; and
   - the fourth, fifth and sixth characters may be used locally to indicate multiple
     divisions for a DSS department type identified by the second and third
     characters.

            A list of all valid **DCM_DEPT** codes and their descriptions can be found at the
            DSS Intranet Web site (Appendix D).

Data Type	Character
Label	DCM DEPT
VistA File	Not applicable
VistA Field	Not applicable
Fiscal Year	2002 forward

Name: **DISDAY**

Definition: Date of discharge

Remarks: Because the DSS system requires a value in the discharge date, outpatient records will contain a date that is usually the **SVC_DTE** (date of service). Even though this field is populated for outpatients, only the **SVC_DTE** should be used for outpatients (with the exception of observation cases; please see the observation note for the variable ADMITDAY).

Data Type	Numeric
Print Format	MMDDYY10
Label	DISCHARGE DAY
VistA File	PATIENT MOVEMENT (#405)
VistA Field	DATE/TIME (#.01)
Fiscal Year	2002 forward

.

Name: **DISPCOST**

Definition: Labor cost to process the fill

Remarks: This variable contains the direct labor costs associated with dispensing the prescription order. It is an average cost for the type of prescription filled. Average direct labor costs are established for new prescriptions, refills, CMOP fills, IV piggybacks, IV syringes, IV chemotherapy preparations, unit dose fills, etc. Average costs vary by site according to the salary level of pharmacy employees. For CMOP prescriptions, this variable includes dispensing labor costs, cost of supplies, mailing costs and CMOP overhead.

The sum of **DISPCOST** and **ACT_COST** represents the total cost of filling the prescription order.

PLEASE NOTE: Unlike **ACT_COST**, **DISPCOST** will be positive not negative on returns (dispensed orders not administered and returned to the VA Pharmacy).

Data Type	Numeric
Label	AVG DISPENSING COST
VistA File	Not applicable
VistA Field	Not applicable
Fiscal Year	2002 forward

Name: **DIVPERF**

Definition: Division where service was performed

Remarks: This variable contains the three-digit station number with modifiers if the
             DIVPERF is a substation. If this is a CMOP fill, this variable will contain the
             facility the patient contacted to request the fill or refill.

Data Type	Character
Label	DIVISION PERFORMED
Outpatient Prescription	
VistA File	OUTPATIENT SITE File (#59)
VistA Field	SITE NUMBER (#.06)
IV or Unit Dose	
VistA File	MEDICAL CENTER DIVISION File (#40.8)
VistA Field	FACILITY NUMBER (#1)
Fiscal Year	2002 forward

Name: **DRUGDESC**

Definition: Drug description

Remarks: The drug description is obtained from the DSS Product Table (Appendix D),
                which originates from the National Drug File (Appendix D). The intermediate
                product number (**IPNUM)** is used to point to the appropriate entry in the DSS
                Product Table. If no entry is found for the **IPNUM**, the **DRUGDESC** will contain
                blanks. The **DRUGDESC** will also be blank if the record is not a dispensing
                record. The variable will be blank for ward stock charges and clinical pharmacy
                consults in the 2002 data.

                The **DRUGDESC** is limited to 30 characters, but the VA Product Name field has
                64 characters in the NDF. Therefore, the **DRUGDESC** has been shortened
                through the elimination of spaces in and truncation of the VA Product Name.

                For new products the **DRUGDESC** may contain the description of one of ten
                price categories below or one of three DSS standard categories of low, medium or
                high. The ten price categories are:

NEW DRUG 1	≤$0.01
NEW DRUG 2	$.011- .02
NEW DRUG 3	$.021- .10
NEW DRUG 4	$.11- 1.00
NEW DRUG 5	$1.01- 2.00
NEW DRUG 6	$2.01- 5.00
NEW DRUG 7	$5.01-10.00
NEW DRUG 8	$10.01-25.00
NEW DRUG 9	$25.01-50.00
NEW DRUG 10	≥$50.01

The most current version of the DSS Product Table may be found on the DSS web site
(Appendix D).

Data Type	Character
Label	DRUG DESCRIPTION
VistA File	Not applicable
VistA Field	Not applicable
Fiscal Year	2002 forward

Name: **DXCODE**

Definition: Primary diagnosis code

Remarks: This variable contains *International Classification of Diseases, Version 9, Clinical Modification* (ICD 9-CM) codes for patient diagnosis.

For outpatient prescriptions, this variable contains the primary diagnosis for the encounter. The source field specified below is obtained using the pointer in the VistA DIAGNOSIS Field (#.01) that has a value of "1" in the corresponding VistA DIAGNOSIS RANKING Field (#.03) in the OUTPATIENT DIAGNOSIS File (#409.43) record for that encounter.

For inpatients, this variable contains the same value as the variable DXLSB in the VHA Medical SAS® Inpatient Bed Section Datasets record for the corresponding service date (**SCV_DTE**). DXLSB is the ICD-9-CM diagnostic code responsible for the length of stay within the bed section. A description of this field may be found in the *VIReC Research User Guide: FY2002 VHA Medical SAS® Inpatient Datasets*.

Data Type	Character
Label	DIAGNOSIS CODE
Outpatient Prescription	
VistA File	ICD DIAGNOSIS (#80)
VistA Field	DIAGNOSIS (#.01)
IV and Unit Dose	
VistA File	Not applicable
VistA Field	Not Applicable
Fiscal Year	2002 forward

Name: **ENC_NUM**

Definition: Encounter number

Remarks: The encounter number is a unique identifier for a patient encounter. The encounter number can be used to link records for one encounter across all DSS National Data Extracts. For example, pharmacy records in the DSS Pharmacy NDE can be linked to laboratory records on the DSS Laboratory Results NDE for the same encounter. This variable is not available on the FY2002 files.

The last 3 digits of this field will contain "161" if the prescription was filled under the Transitional Pharmacy Benefits program (VHA Directive 2003-047, dated August 14, 2003).

For inpatients, this variable contains a number derived from the combination of the patient's Social Security Number (SSN) and the date of the encounter (**ADMITDAY** in YYMMDD format) followed by an "I" (e.g., SSSSSSSSSYYMMDDI). Multiple admissions on the same day will have a number indicating the admission (e.g., 2, 3, etc) following the 'I'.

For outpatients, this variable contains a number derived from the SSN, the date of the encounter (**VIZDAY** in a Julian format of YYDDD), and the clinic stop code (**CLSTOP**) (e.g., SSSSSSSSSYYDDDCCC).

Observation encounters receive an outpatient encounter number with the date of the visit equal to the Admit Date and the stop code value dependent on the observation treating specialty. The observation treating specialty to stop code translation is:

Treating Specialty	Stop Code
18	293 (Neurology)
23	295 (SCI)
24	290 (Medicine)
36	294 (Blind Rehab)
41	296 (Rehab Med)
65	291 (Surgery)
94	292 (Psychiatry)

Data Type	Character
Label	ENCOUNTER NUMBER
VistA File	Not Applicable
VistA Field	Not Applicable
Fiscal Year	2003 forward

Name: **ENRLPRTY**

Definition: Patient's enrollment priority

Remarks: Based on a veteran's specific eligibility status for VA health care, he or she is assigned a priority group. The priority groups have been established to help ensure that VA resources are allocated to veterans with the highest priority for VA health care. Priority groups range from 1 to 8, with 1 being the highest priority for enrollment.

See the table "enrollment priority descriptions" in Appendix A.

Data Type	Character
Label	ENROLL PRIORITY
VistA File	PATIENT ENROLLMENT (#27.11)
VistA Field	ENROLLMENT PRIORITY (#.07) Field
Fiscal Year	2002 forward

Name: **FEED_KEY**

Definition: DSS Feeder Key

Remarks: This variable contains a 17-digit number that identifies the drug or supply
             dispensed. The first five digits contain an IEN (Internal Entry Number) which
             points to the entry in the VistA VA PRODUCT File (#50.68) for the drug
             dispensed. The last 12 digits contain the 12-digit version of the National Drug
             Code (NDC).

             The 17-digit number may be used to link the records to the National Drug File
             (NDF; Appendix D) and obtain additional information about the drug product
             dispensed such as formulary status.

             The **FEED_KEY** may contain values other than a 17-digit number. Non-drug
             pharmacy items (e.g., coal-tar shampoo, adult diapers) will have FEED_KEY
             values with 12 zeroes in place of an NDC. Only records with a 17-digit number
             should be used to identify drugs dispensed.

Data Type	Character
Source for the first five digits:	
VistA File	DRUG File (#50)
VistA Field	PSNDF VA PRODUCT NAME ENTRY (#22)
Source for the last 12 digits:	
VistA File	DRUG File (#50)
VistA Field	NDC (#31)
Fiscal Year	2002 forward

Name: **FEED_LOC**

Definition: Feeder location

Remarks: This variable indicates the site-specific location where the drug was dispensed. It includes a number that identifies an operational unit within the facility. Operational units are established and differ by site and refer to a medical center division, outpatient site or pharmacy site. This variable field holds up to 10 characters. The value of this variable will vary depending on the location and type of service as specified below.

Location/Type	Contents
IV Order	"IVP" concatenated with the operational unit
Unit Dose Order	"UDP" concatenated with the operational unit
Outpatient Prescription Order - VA Pharmacy	"PRE" concatenated with the operational unit
Outpatient Prescription Order - CMOP	"CMOPDSU" concatenated with the operational unit

In fiscal year 2002, this variable may also contain numbers indicating the record type is other than a dispensing record (e.g., records that contain data regarding consultations or ward stock charges). Only records that contain one of the values in the above table should be used to select prescription data for dispensed drugs, supplies or diagnostics.

Data Type	Character
Label	FEEDER LOCATION
	Lab Tests
VistA File	ASSESSION (#68)
Vista Field	ABBREVIATION (#.09)
	Radiology Procedures
VistA File	RADIOLOGY LOCATIONS (79.1)
Fiscal Year	2002 forward

Name: **FP**

Definition: Fiscal Period

Remarks: Fiscal Period indicates the month in which a service is performed. October is the first period in a fiscal year. The period is based on the **SVC_DTE** (date of service).

Data Type	Numeric
VistA File	Not Applicable
VistA Field	Not Applicable
Fiscal Year	2002 forward

FP can assume the following values:

Value	Description
1	October
2	November
3	December
4	January
5	February
6	March
7	April
8	May
9	June
10	July
11	August
12	September

Name: **FY**

Definition: Fiscal year

Remarks: This is the fiscal year (4-digit) in which service was performed and is based on
             the **SVC_DTE** (date of service).

Data Type	Numeric
VistA File	Not Applicable
VistA Field	Not applicable
Fiscal Year	2002 forward

Name: **IN_OUT**

Definition: Inpatient/outpatient indicator

Remarks: Code identifying if the patient was an inpatient or outpatient on the day when the service was performed. The field is initialized as "O" indicating an outpatient. Software then uses the patient IEN and event date in a call that looks up the In/Out indicator in the DSS Treating Specialty Translation file (#727.831). If this call indicates an inpatient status, the field is set to "I".

Data Type	Character
Label	INPAT/OPAT CODE
VistA File	Not Applicable
VistA Field	Not applicable
Fiscal Year	2002 forward

IN_OUT can assume the following values:

Value	Description
I	Inpatient
O	Outpatient

Name: **INVEST**

Definition: Investigational drug indicator

Remarks: This variable is set to "I" if the VistA DEA, SPECIAL HDLG field specified
                below contains an "I".

Data Type	Character
VistA File	DRUG (#50)
VistA Field	DEA, SPECIAL HDLG (#3)
Fiscal Year	2002 forward

INVEST can assume the following values:

Value	Description
(Blank)	Not an investigational drug
I	Investigational drug

Name: **IPNUM**

Definition: Intermediate Product Number

Remarks: This number is a pointer to the DSS Product Table which contains information specific to the service provided. The product table includes feeder system, intermediate product department, feeder key, and a description (name) of the procedure. The value in the IP Number field is assigned by the DSS system, sequentially. As such, it has no intrinsic value. More than one Feeder Key may be assigned to the same product (and have the same IP Number). For instance, all 65 mg aspirin tablets would have the same IP Number, but their Feeder Key values would differ based on their manufacturer, bottle size, etc.

             The DSS Product Table can be accessed at the DSS Intranet Home Page (Appendix D).

Data Type	Numeric
Label	IP NUMBER
VistA File	Not Applicable
VistA Field	Not applicable
Fiscal Year	2002 forward

Name: **MEANS**

Definition: Means Test indicator code

Remarks: Certain non-service-connected and 0% non-compensable service-connected
                veterans are required to fill out a financial worksheet, referred to as the "Means
                Test". A means test is the assessment of a veteran's financal information that is
                used by the VA to determine a veteran's priority group for enrollment in the VA
                health care system, and whether or not the veteran is required to make co-
                payments for the services received. A veteran is rated as either below or above the
                Means Test threshold. Below the Means Test threshold is defined as those
                veterans whose attributable income and net worth are such that they are unable to
                defray the expenses of care and therefore are not subject to co-payments. Above
                the Means Threshold is defined as those veterans whose attributable income and
                net worth are such that they are able to defray the expenses of care and must agree
                to pay a co-payment for inpatient, outpatient and long-term care and sometimes
                for pharmacy services.

                A separate pharmacy co-payment exemption test is required for the prescription
                co-payment. Service-connected veterans rated 50% or more, service-connected
                veterans receiving medications for a service-connected condition, or non-service-
                connected veterans who meet the low-income criteria are exempt from the
                prescription co-payment. To meet the low-income criterium a veteran's annual
                income must not exceed the maximum annual rate of a VA pension that would be
                payable to the veteran if the veteran were eligible for a pension. A veteran may be
                exempt from inpatient and outpatient co-payments, while still required to pay a
                pharmacy co-payment.

                The Means Test thresholds are established on January 1, of each year (see VHA
                Directive 2004-026). A veteran's rating may change over time due to changes in
                income and in the threshold.

                This variable contains the current means test status (NOT the result of the means
                test) in the VistA field specified below referenced by the VistA CURRENT
                MEANS TEST STATUS Field (#.14) in the PATIENT File (#2).

                MEANS can assume the values shown in Appendix A.

Data Type	Character
Label	MEANS TEST
VistA File	MEANS TEST STATUS (#408.32)
VistA Field	CODE (#.02)

Name: **ORD_PROV**

Definition: Ordering provider's Internal Entry Number (IEN)

Remarks: This variable contains the IEN of the ordering provider preceded by the character "2" which indicates the source file is the VistA NEW PERSON File (#200). The IEN may be used as a pointer to obtain information about the provider from the VistA NEW PERSON File (#200). This variable may contain the character string "NONE" for records containing ward stock charges.

For any provider in Station 506 (Ann Arbor) these numbers will not be unique and they cannot be used as a pointer to the VistA NEW PERSON File (#200) before FY2004. Ann Arbor provider numbers are too long, and the least significant digit is truncated. In FY2004, the Ann Arbor provider numbers will not be preceded by a "2" and will not be truncated. Therefore, the Ann Arbor provider numbers will be unique beginning with the FY2004 files. This change began in mid-FY2003, and the values are recorded in a mixed format (i.e., some provider numbers will be preceded by a "2" and some will not) for this variable in the FY2003 files for Ann Arbor.

Data Type	Character
Label	ORDERING PROVIDER
VistA Data Source	NEW PERSON (#200) File
Outpatient Prescription	
If this is a New Prescription, the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	PROVIDER (#4)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52.1)
VistA Field	PROVIDER (#15)
If this is a Partial Fill, the source is:	
VistA File	PARTIAL Sub-file (#52.2)
VistA Field	PROVIDER (#6)
IV or Unit Dose	
If this is an IV order, the source is:	
VistA File	IV Sub-file (#55.01)
VistA Field	PROVIDER (#.06)
If this is a Unit Dose order, the source is:	
VistA File	UNIT DOSE Sub-file (#55.06)
VistA Field	PROVIDER (#1)
Fiscal Year	2002 forward

Name: **ORD_PROV_TYPE**

Definition: Ordering provider type

Remarks: The ordering provider type is the Person Class value, including the leading "V", in the VistA New Person file (#200). For a list of provider types, see Appendix J of the FY08 DSS Medical Records Book on the DSS web site (see Appendix D).

Data Type	Character
Label	ORDERING PROVIDER TYPE
VistA Field	Value is based on provider field
Fiscal Year	2002 forward

Name: **PCP_DSS**

Definition: Primary care provider, as indicated in the VistA Primary Care Management Module (PCMM)

Remarks: This variable contains the Internal Entry Number (IEN) of the primary care provider preceded by the character "2", which indicates the source file is the VistA NEW PERSON File (#200) for the provider marked as the Primary Provider in the PCMM Team to which the patient is assigned in the PCMM module. The IEN may be used as a pointer to obtain information about the provider from the VistA NEW PERSON File (#200). This code is computer-generated and specific to the site. If a provider practices at more than one station, she/he will have a different provider number at each station.

The value of this variable is the IEN of the primary care provider for the patient on the **SVC_DTE**, as listed in VistA's Scheduling package. Note: the PCP in the Scheduling file might not be the provider who saw the patient.

For any provider in Station 506 (Ann Arbor), these numbers will not be unique and thus, they cannot be used as a pointer to the VistA NEW PERSON File (#200). Ann Arbor provider numbers are too long and the least significant digit is truncated. In FY2004, the Ann Arbor provider numbers will not be preceded by a "2" and will not be truncated. Therefore, the Ann Arbor provider numbers will be unique beginning with the FY2004 files. This change began in mid-FY2003, and the values are recorded in a mixed format (i.e., some provider numbers will be preceded by a "2" and some will not) for this variable in the FY2003 files for Ann Arbor.

Data Type	Character
Label	PCP
VistA File	NEW PERSON (#200)
Fiscal Year	2002 forward

Name: **PCTEAM**

Definition: Primary care team

Remarks: This variable contains the Internal Entry Number (IEN) of the primary care team. The IEN may be used as a pointer to obtain information about the team from the VistA Primary Care Management Module (PCMM), in the TEAM File (#404.51).

                  The value of this variable is populated through an automated call to the Scheduling API, which returns the IEN of the primary care team for the patient on the **SVC_DTE** (date of service). If no primary care team was identified, the field will contain blanks.

Data Type	Character
Label	PRIM. CARE TEAM
VistA File	TEAM (#404.51)
Fiscal Year	2002 forward

Name: **QUANTITY**

Definition: Quantity of drug dispensed

Remarks: For outpatient prescriptions, this variable contains the quantity of drug dispensed for each fill of a prescription. For an IV additive order, this quantity equals the quantity of additive used. For an IV solution order, this variable contains the volume dispensed measured in milliliters. For a unit dose order, this is the number of doses dispensed on the SVC_DTE. Only one record is generated per day for each unit dose order.

Data Type	Numeric
Outpatient Prescription	
If this is a New Prescription the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	QTY (#7)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52.1)
VistA Field	QTY (#1)
If this is a Partial Fill the source is:	
VistA File	PARTIAL Sub-file (#52.2)
VistA Field	QTY (#.04)
IV and Unit Dose	
If this is an IV order additive the source is:	
VistA File	ADDITIVE Sub-file (#55.02)
VistA Field	STRENGTH (#.02)
If this is an IV order solution the source is:	
VistA File	SOLUTION Sub-file (#55.11)
VistA Field	VOLUME (#1)
If this is a Unit Dose order the source is:	
VistA File	DISPENSE DRUG Sub-file (#53.53)
VistA Field	#DOSES ACTUALLY DISPENSED (#.03)
Fiscal Year	2002 forward

Name: **SCRSSN**

Definition: Scrambled Social Security Number

Remarks: Scrambled Social Security Number was created in FY1986 as a replacement for the patient's real Social Security Number (SSN). It is a formula manipulation of the real SSN and not a randomly generated number. Therefore, SCRSSN may be used to identify a patient across fiscal years and datasets. Any patient with "00000" in the first five digits of their SSN will not be included in the DSS Extract. The real SSN from the source listed below is scrambled

Data Type	Numeric
VistA File	PATIENT (#2)
VistA Field	SOCIAL SECURITY NUMBER (#.09)
Fiscal Year	2002 forward

Name: **SEX**

Definition: Sex of patient

Remarks: The variable indicates the gender of the patient.

Data Type	Character
Label	GENDER
VistA File	PATIENT (#2)
VistA Field	SEX (#.02)
Fiscal Year	2002 forward

SEX can assume the following values:

Value	Description
F	Female
M	Male

Name: **STA3N**

Definition: Parent station identifier

Remarks: This is the 3-digit numeric identifier of a VAMC facility. This variable indicates the parent station (VA hospital) or the parent station of a branch to which the patient was admitted or received outpatient services.

STA3N can assume the values shown in Appendix A.

Data Type	Numeric
Print Format	STA3NL
Label	STATION
Outpatient	
VistA File	INSTITUTION File (#4)
VistA Field	STATION NUMBER (#99)
IV and Unit Dose	
VistA File	MEDICAL CENTER DIVISION File (#40.8)
VistA Field	FACILITY NUMBER (#1)
Fiscal Year	2002 forward

Name: **STA6A**

Definition: Substation identifier

Remarks: In most cases, the first three characters of this variable contain the **STA3N**. The last three characters identify either the substation identifier or an operational unit within the facility. Operational units are established and differ by site and refer to an outpatient site or medical center division.

STA3N and STA6A values are added and deleted each year. For example, in FY2006 there were three VAMCs for which the first three digits of STA6A were not the STA3N:
* Syracuse, NY   STA3N=670, all STA6A values start with 528
* Des Moines, IA   STA3N=555, all STA6A values start with 636
* Iowa City, IA   STA3N=584, all STA6A values start with 636

Since there are over one thousand substations, they are not listed in this document. Instead, users are referred to the VA Site Tracking (VAST) database, maintained by the Planning Systems Support Group (PSSG) of the Office of Policy and Planning and available on their Web site (see Appendix D). Users should be aware that DSS includes the PTF divisions, such as Community Living Centers (formerly called Nursing Home or Nursing Home Care Unit), Residential Rehabilitation Programs, and domiciliaries as separate divisions. These divisions, if located on the same campus as the parent medical center, may not be included in VAST.

For inpatients, the DIVISION Field (#3.5) in the HOSPITAL LOCATION File (#44) is used to link the VistA field specified in the table below. For outpatients with IV orders, the DIVISION Field (#.02) in the IV ROOM File (#59.5) is used to link the VistA field specified in the table below.

Data Type	Character
Print Format	($STA6AL. or $STA52AL.)
Label	DIVISION
VistA Data Source	INSTITUTION FILE (#4) File, STATION FILE (#99) Field; MEDICAL CENTER DIVISION FILE (#40.8) File, FACILITY NUMBER (#1) Field
Outpatient	
VistA File	INSTITUTION File (#4)
VistA Field	STATION NUMBER (#99)
IV and Unit Dose	
VistA File	MEDICAL CENTER DIVISION File (#40.8)
VistA Field	FACILITY NUMBER (#1)
Fiscal Year	2002 forward

Name: **SVC_DTE**

Definition: Date of service

Remarks: This variable represents the date the service was performed. For an IV or Unit Dose order, this variable is the date the medication was dispensed. For an outpatient prescription, it is the date when the prescription was released from the VA Pharmacy to the patient or mailed by a CMOP.

Data Type	Numeric
Print Format	MMDDYY10
Outpatient Perscriptions	
If this is a New Prescription the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	RELEASE DATE/TIME (#31)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52.1)
VistA Field	RELEASED DATE/TIME (#17)
If this is a Partial Fill the source is:	
VistA File	PARTIAL Sub-file (#52.2)
VistA Field	RELEASED DATE/TIME (#8)
IV and Unit Dose	
If this is an IV order the source is:	
VistA File	IV EXTRACT DATA File (#728.113)
VistA Field	DATE/TIME (#4)
If this is a unit dose order the source is:	
VistA File	UNIT DOSE EXTRACT DATA File (#728.904)
VistA Field	DATE (#2)
Fiscal Year	2002 forward

Name: **TRTSP**

Definition: Treating specialty associated with the patient when the drug product was dispensed

Remarks: This variable contains the IEN (internal entry number) to the SPECIALTY File (#42.4), which contains information about the treating specialty such as the name of the treating specialty. This variable normally contains null values for outpatients but may contain a value if the patient was held for observation. The standard format "BEDSECN." may be used with this variable to obtain a description of the Treating Specialty.

TRTSP can assume the values shown in Appendix A.

Data Type	Numeric
Print Format	(BEDSECN.)
Label	TREAT. SPECIALTY
VistA File	SPECIALTY (#42.4)
VistA Field	NAME (#.01)
Fiscal Year	2002 forward

Name: **TRTSP_C**

Definition: Treatment specialty

Remarks: This variable contains the value of the **TRTSP** variable in character format.

Data Type	Character
Label	TREAT. SPEC. (CHAR)
VistA File	Not Applicable
VistA Field	Not applicable
Fiscal Year	2020 forward

Name: **VA_CLASS**

Definition: VA Drug Classification of the drug, supply, or diagnostic dispensed

Remarks: The VA Drug Classification system separates drugs, supplies, and diagnostics into different categories based upon their characteristics. The classes are assigned by Pharmacy Benefits Management (PBM). A more detailed description of this classification system may be found in the *VistA National Drug File Technical Manual* (http://www.va.gov/vdl/documents/Clinical/Pharm-National_Drug_File_(NDF)/psn_4_tm_r0206.pdf).

Diagnostic classes begin with "DX" and contain drugs or items used in diagnostic tests such as barium sulfate or glucose test strips. Supply classes begin with "XA" or "XX". Supply classes contain items such as solutions, syringes, ostomy belts and pouches, bandages, and catheters. All other classes are drugs.

The VA drug class is obtained from the VA Class Index or the National Drug File (**NDF**) (Appendix D). The **IPNUM**, also found in the NDF is used to point to the appropriate entry in the DSS Product Table. This variable may be blank when there is no entry in the DSS Product Table for the **IPNUM**. The **VA_CLASS** will also be blank if the record is not a dispensing record. For example, it will be blank for ward stock charges and clinical pharmacy consults.

A list of the most current VA Drug Class values is available on the PBM Web site (see Appendix D). If the drug product, supply, or diagnostic does not have a VA Drug Class identified by the PBM, you may see a non-standard name in this field such as "SUPPLY" or "STUDY".

Data Type	Character
VistA File	Not Applicable
VistA Field	Not applicable
Fiscal Year	2002 forward

Name: **VISN**

Definition: Veterans Integrated Service Network (VISN) where the care was received

Remarks: The value of this field is established by the software that creates the SAS® file based on the value of the **STA3N** (Parent station) variable.

Data Type	Numeric
VistA File	Not Applicable
VistA Field	Not Applicable
Fiscal Year	2002 forward

VISN can assume the following values:

Value	Description
1	VA New England Healthcare System
2	VA Healthcare Network Upstate New York
3	VA NY/NJ Veterans Healthcare Network
4	VA Stars & Stripes Healthcare Network
5	VA Capitol Health Care Network
6	VA Mid-Atlantic Network
7	The Atlantic Network
8	VA Sunshine Healthcare Network
9	Mid South Veterans Healthcare Network
10	VA Healthcare System of Ohio
11	Veterans In Partnership
12	The Great Lakes Health Care System
15	VA Heartland Network
16	South Central VA Health Care Network
17	VA Heart of Texas Health Care Network
18	VA Southwest Healthcare Network
19	Rocky Mountain Network
20	Northwest Network
21	Sierra Pacific Network
22	Desert Pacific Healthcare Network
23	VA Midwest Health Care Network

Name: **VS_COST**

Definition: Variable supply cost

Remarks: The **VS_COST** is calculated by DSS and is included in the **ACT_COST** variable. It contains the cost of the drug and supplies used to fill the prescription such as bottles, caps and labels for pharmacy window dispensped prescriptions and the acquisition cost for CMOP dispensed prescriptions.

The value of this variable will be negative on returns (dispensed orders not administered and returned to the VA Pharmacy).

Due to data quality issues, this variable on the FY2002 datasets should not be used.

Data Type	Numeric
Label	VARIABLE SUPPLY COST
VistA File	Not Applicable
VistA Field	Not Applicable
Fiscal Year	2003 forward

Name: **WARD**

Definition: Inpatient ward. Location of the patient on the date a drug was dispensed

Remarks: The ward on which the patient's IV drug was administered or the location of the
                patient when he/she received a unit dose. Values are the IEN for the ward in the
                VistA hospital location file. The IEN may be used as a pointer to obtain
                information about the ward in the VistA HOSPITAL LOCATION File (#44). This
                field is normally blank for outpatients but may contain a value for outpatients
                admitted for observation.

Data Type	Character
VistA File	HOSPITAL LOCATION File (#44)
VistA Field	IEN (#.001)
Fiscal Year	2002 forward

Name: **ZIP**

Definition: ZIP Code

Remarks: This variable is the five-digit zip code of the patient's residence.

Data Type	Numeric
VistA File	PATIENT (#2)
VistA Field	ZIP CODE (#.1112)
Fiscal Year	2002 forward

Name: **ZIP_4**

Definition: ZIP Code plus 4

Remarks: This is the ZIP Code with optional four-digit extension of the patient's residence.

Data Type	Character
Label	ZIP + 4
VistA File	PATIENT (#2)
VistA Field	ZIP+4 (#.1112)
Fiscal Year	2002 forward

VI. PBM Database Variables

The following table 8 lists those variables extracted from VistA Systems for the PBM Prescription Extract, Unit Dose Extract, and IV Extract. The variables documented in this section are those extracted in the VistA Pharmacy Benefits Management Application V. 3.0, PBM Extracts Enhancements Phase 1 (patch, PSU*3*19). This version became available in June 2002.

The PBM Extract columns indicate which variables are extracted from VistA or created in each of these extracts. The Prescription Extract ("PRE EXT" column) pulls information about each outpatient new prescription, refill, and partial fill. The Unit Dose Extract ("UNT EXT" column) pulls information about each inpatient unit dose order. The IV Extract ("IV EXT" column) pulls information about each inpatient IV order. The SAS® Name in the table is the commonly used variable name for research extracts provided as a SAS® file by the PBM in 2007.

Table 8: PBM Dataset Variables				
Variable Name	**PBM Extract**			**SAS® Name**
	PRE EXT	**UNT EXT**	**IV EXT**	
Cancel Date	X			CANC_DATE
CMOP Indicator	X			CMOP_IND
Days Supply	X			DAY_SUPPLY
DEA Special Handling	X	X	X	DEA_SHF
Dispense Unit	X	X		DSP_UNT
Dispense Units Per Dose			X	DISP_OCCUR
Dispensed Amount		X	X	DISP
Dispensing Occurrences			X	
Dosing Instructions (Outpatient Prescription)	X			SIG
Dosing Instructions (IV)			X	SIG
Drug Cost per Unit			X	PRICE_DSP
Fill/Refill/Partial Date	X			FRP_DATE
Generic Drug Name	X	X	X	STN_NAME
IV Additive or Solution Indicator			X	IV_IND
IV Additive or Solution Print Name			X	IV_PRN
IV Order Number			X	IV_ORDER
IV Type			X	IV_TYPE
Mail/Window Indicator	X			MW_IND
Medication Counseling	X			MED_C
National Drug Code (NDC)	X	X	X	NDC
National Formulary Indicator	X	X	X	NFORM

Table 8: PBM Dataset Variables				SAS® Name
Variable Name	**PBM Extract**			**SAS® Name**
	PRE EXT	**UNT EXT**	**IV EXT**	
National Formulary Restriction	X	X	X	NFORMR
New/Refill/Partial Indicator	X			NRP_IND
Order Indicator			X	ORD_IND
Outpatient IV			X	OP_IV
Patient's ICN	X	X	X	PAT_ICN
Patient SSN	X	X	X	PAT_SSN
Prescription Number	X			PRE_NUM
Price Per Dispense Unit	X	X		PRICE_DSP
Provider ID (SSN)	X	X	X	PROV_ID
Provider Local IEN	X	X	X	PROV_IEN
Provider Type	X			PROV_TYPE
Release Date	X			REL_DATE
Schedule		X		SCHEDULE
Scrambled SSN				
Sender	X	X	X	STN_NUM
Start Date of Order			X	
Stop Date/Time of Order			X	
Total Quantity Dispensed	X			TL_QTY
Total Units Dispensed			X	
Unit Dose Order Number		X		UD_ORDER
Units Per Dose		X		UNITS_DOSE
VA Drug Class	X	X	X	VA_CLASS
VA Product Name	X	X	X	VA_PRODUCT
VISN Formulary Indicator	X	X	X	VFORM

VII. PBM Database Variable One-Page Descriptions

Each description includes a table with the following information, when applicable.

Data Type:　This indicates whether the variable is numeric, character, or a date.
VistA File:　This is the VistA file where data for the variable originate. In VistA, files are identified by both a number and a name.
VistA Field:　This is the field where data for the variable originate in VistA. In VistA, fields are identified by both a number and a name.

Where applicable and where space allows, a second table lists the values that the variable can assume with a description of each value. In cases where the possible values exceed the space available, the table will be in an Appendix. For selected variables, the reader is given a reference source to obtain the possible values and their descriptions.

(One-page descriptions begin on the following page.)

Variable: **Cancel Date**

Definition: Date on which a prescription was cancelled or explicitly discontinued

Remarks: This date applies only to those prescriptions specifically cancelled or discontinued
                 by authorized providers or under their authority.

Data Type	Date
VistA File	PRESCRIPTION File (#52)
VistA Field	CANCEL DATE (#26.1)

Variable: **CMOP Indicator**

Definition: Indicates whether Consolidated Mail Outpatient Pharmacy (CMOP) filled the prescription

Remarks: This variable indicates that a CMOP processed the fill and mailed it to the patient. Routine high-volume medications are most often processed by a CMOP. Some drugs, such as controlled substances, may not be mailed.

Even though the CMOP Indicator is set to "N", a local VA Pharmacy may have mailed the prescription. Please refer to **Mail/Window Indicator** variable to determine whether the prescription was actually mailed.

The PBM/SHG Extraction Software sets the value of this field. If the fill was processed by the CMOP, evidenced by an entry in the CMOP Event File (#52.01), the **CMOP Indicator** is set to "Y"; otherwise, it is set to "N".

Data Type	Character
VistA File	Not applicable
VistA Field	Not applicable

CMOP Indicator can assume the following values:

Value	Description
Y	Yes, the prescription was processed by a CMOP
N	No, the prescription was not processed by a CMOP

Variable: **Days Supply**

Definition: Number of days of dosing the fill will satisfy

Remarks: The maximum value of this field is 180 (i.e., a six month supply). Values greater than 180 likely represent errors, although a small number of these large values may be valid. The value in this variable may be zero or missing for a small percent of fills. Occasionally VistA is unable to calculate an appropriate days supply or the value of zero was entered manually.

Data Type	Numeric
If this is a New Prescription the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	DAYS SUPPLY (#8)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52)
VistA Field	DAYS SUPPLY (#1.1)
If this is a Partial Fill the source is:	
VistA File	PARTIAL Sub-file (#60)
VistA Field	DAYS SUPPLY (#.041)

Variable: **DEA, Special Handling**

Definition: Drug Enforcement Agency (DEA) schedule code and/or special handling codes

Remarks: This variable contains the special handling codes associated with a drug product, which include an indication whether a drug is on the DEA's Controlled Substance List. Up to six codes may be associated with a drug. If applicable, the schedule code (DEA Controlled Substances Schedule) must appear in the first position. For example, a Schedule III narcotic will be coded "3A". See list of allowed codes below.

Each site can set the values of these codes for a drug product so the **DEA, Special Handling** variable may vary across VistA systems for the same drug product.

Data Type	Character
VistA File	LOCAL DRUG FILE (#50)
VistA Field	DEA, SPECIAL HDLG (#3)

DEA, Special Handling variable may contain up to six of the following codes:

Value	Description
0	Manufactured in pharmacy
1	Schedule I item
2	Schedule II item
3	Schedule III item
4	Schedule IV item
5	Schedule V item
6	Legend item
9	Over-the-counter
L	Depressants and stimulants
A	Narcotics and alcohols
P	Dated drugs
I	Investigational drugs
M	Bulk compound items
C	Controlled substances – non-narcotic
R	Restricted items
S	Supply items
B	Allow refill
W	Not renewable
F	Non-refillable

Variable: **Dispense Unit**

Definition: Dispense unit of the prescription

Remarks: Examples of a dispense unit include:

"TAB"	tablet
"ML"	milliliter (liquid;)
"CAP"	capsule
"GM"	gram
"EA" or "EACH"	products such as inhalers

Each site can establish the value of the **Dispense Unit** for a drug product so the **Dispense Unit** variable may vary across VistA systems for the same drug product.

Data Type	Character
VistA File	LOCAL DRUG FILE (#50)
VistA Field	DISPENSE UNIT (#14.5)

Variable: **Dispense Units per Dose**

Definition: Number of dispensed units per IV order.

Remarks: Represents the number of dispensed units per dose.

Data Type	Numeric
VistA File	MEDICATION INSTRUCTION (#113)
VistA Field	DISPENSE UNITS PER DOSE (#1)

Variable: **Dispensed Amount**

Definition: Total quantity dispensed for a unit dose order

Remarks: The quantity unit of measure is the **Dispense Unit**. The total quantity dispensed
                equals the total of all units for every unit dose dispensed less returns from the
                Start Date of Order through the **Stop Date of Order**. Therefore, this is the
                number of units sent to the floor, not the number of doses.

                Unit doses may be returned to the pharmacy if not administered. This usually
                occurs if an order is cancelled between the time a unit dose was sent out from the
                VA Pharmacy and the scheduled administration time or if a patient is not
                available for a dose or refuses a dose.

                The **Dispensed Amount** is calculated based on the values in the VistA fields
                specified below. The **Dispensed Amount** is incremented by the value in the
                AMOUNT field for every unit dose logged with a value of "1" (from pick list),
                "2" (pre-exchange units), or "3" (extra units dispensed) in the HOW field. The
                Dispensed Amount is decremented by the value in the AMOUNT field for every
                unit dose logged with a value of "4" (returns) in the VistA HOW field.

                The **Dispensed Amount** multiplied by the **Price Per Dispense Unit** will equal
                the total cost of the drug dispensed from the **Start Date of Order** through the
                Stop Date of Order for a unit dose order.

Data Type	Numeric
VistA File	UNIT DOSE Sub-file DISPENSE LOG Multiple (#71)
VistA Field	AMOUNT (#.03) HOW (#.05)

Variable: **Dispensing Occurrences**

Definition: Number of times an IV preparation (i.e., bag, syringe, etc.) was dispensed from the **Start Date of Order** until the **Stop Date of Order**

Remarks: This variable is only populated on parent orders (see **Order Indicator**).

The PBM/SHG Extraction Software calculates the **Dispensing Occurrences** based on the values in the VistA Fields ACTION and DAILY USAGE. **Dispensing Occurrences** will be incremented if the DAILY USAGE field is set to "1" (label printed counted as daily usage) and ACTION is set to "1" (dispensed). **Dispensing Occurrences** will be decremented if ACTION is set to "2" (recycled) or "4" (canceled).

Data Type	Character
VistA File	IV Sub-file LABEL TRACKING (#55.1111)
VistA Field	ACTION (#2)
	DAILY USAGE (#6)

Variable: **Dosing Instructions (Outpatient Prescription)**

Definition: Dosing instructions printed on the prescription

Remarks: When an authorized provider places the prescription order, he or she may select
                 dosing instructions from a standard menu, enter the instructions free format, or
                 use a combination of standard options with additional free format text. The dosing
                 instructions extracted by the PBM/SHG Extraction Software may include Latin
                 abbreviations. For example, for a medication that should be taken twice a day,
                 you may find "twice a day" in some instructions and "bid" in others.

Data Type	Character
If the order is placed via VistA the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	SIG (#10)
If the order place via CPRS the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	SIG1 (#52.04)

Variable: **Dosing Instructions (IV)**

Definition: Dosing instructions for the IV

Remarks: This variable contains the dosing instructions either as a schedule or infusion rate. If the variable contains an infusion rate the format will be either a number or "free text@number of items per day". Examples include:
                 "125" = 125 ml/hr
                 "TITRATE@1" or "T@1" = titrate with 1 label per day
                 "125@2" = 125ml/hr with 2 labels per day

                 Label per day indicates how many labels print automatically with the "morning" IV batch of labels. The pharmacy will prepare and send one bag for each label printed.

                 Schedules may be a standard schedule or nonstandard schedule and may include Latin abbreviations. Examples of standard schedules include:
                 "TID" = three times a day
                 "Q5H" = every five hours

                 The PBM/SHG Extraction Software sets the value of this variable to either the VistA Field SCHEDULE or INFUSION RATE specified below based on the IV type.

Data Type	Character
VistA File	IV Sub-file (#55.01)
VistA Field	SCHEDULE (#.09)
	INFUSION RATE (#.08)

Variable: **Drug Cost Per Unit**

Definition: Average cost per Drug Unit

Remarks: For solutions this will be the average cost per milliliter. For additives this will be the average cost per Drug Unit. The Average Cost Per Unit is calculated and entered by the Pharmacy ADPAC. The Average Cost Per Unit may not reflect the actual price of the dispense unit of the drug product dispensed. This will occur if VistA files specified below have not been updated to reflect the price of the currently stocked supply at the time the drug was dispensed.

The total cost of the IV order from the **Start Date of Order** until the **Stop Date of Order** will equal the sum of the Average Cost Per Unit multiplied by the **Total Units Dispensed** for each solution and additive in the IV preparation.

Data Type	Character
If the IV Additive or Solution Print Indicator equals "A" the source is:	
VistA File	IV ADDITIVE (#52.6)
VistA Field	AVERAGE DRUG COST PER UNIT (#7)
If the IV Additive or Solution Print Indicator equals "S" the source is:	
VistA File	IV SOLUTION (#52.7)
VistA Field	AVERAGE DRUG COST (#7)

Variable: **Fill/Refill/Partial Date**

Definition: Process date of new fill, refill, or partial fill

Remarks: This variable should be used in conjunction with the **New/Refill/Partial Indicator** variable that specifies whether the date refers to a new prescription, a refill, or a partial fill.

The **Fill/Refill/Partial Date** is the date the fill was processed by a VA Pharmacy or CMOP and the prescription label was printed. For new prescriptions, this date may be the same day or several days following the date the provider entered the order. In general, VA policy requires that a refill cannot be processed more than ten days before the previous fill's supply is due to run out. CMOPs are allowed to process refills earlier than this authorized refill date. Whether a VA Pharmacy or a CMOP processes a refill, the patient must request the refill.

There is one case where the **Fill/Refill/Partial Date** is not the date the fill was processed. When the CMOP receives notification of a refill request, it may actually fill and mail the prescription up to ten days prior to the authorized refill date. Even so, the **Fill/Refill/Partial Date** will never be earlier than ten days before the previous fill's supply is due to run out. For example, assuming the previous fill's supply will run out on January 30th and the CMOP processes and mails the refill on January 15th, the **Fill/Refill/Partial Date** will still be January 20th. The **Release Date** will be January 15th.

Data Type	Date
If this is a New Prescription the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	FILL DATE (#22)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52.)
VistA Field	REFILL DATE (#.01)
If this is a Partial Fill the source is:	
VistA File	PARTIAL Sub-file (#60)
VistA Field	PARTIAL DATE (#.01)

Variable: **Generic Drug Name**

Definition: Generic name assigned by the individual station to the drug, supply, or diagnostic product

Remarks: A given drug, supply, or diagnostic product may not have the same **Generic Drug Name** across all VA sites because this name is assigned at the station level. Therefore, it is best to use the **VA Product Name** for drugs, which is standard across all stations. However, the **Generic Drug Name** may be more descriptive for supplies and diagnostics. A **VA Product Name** is not assigned to <u>all</u> supplies and diagnostics because the names and types of medical supplies and diagnostics are too numerous and change frequently. Thus, for diagnostics and supplies you may need to check both the **Generic Drug Name** and the **VA Product Name** for a descriptive name of the product.

Data Type	Character
VistA File	LOCAL DRUG File (#50)
VistA Field	GENERIC NAME (#.01)

Variable: **IV Additive or Solution Indicator**

Definition: IV additive or solution record indicator

Remarks: This variable indicates whether information for the record is extracted for the IV solution from the VistA IV SOLUTION File (#52.6) or the IV additive from the VistA IV ADDITIVE File (#52.7). For an IV order there may be multiple records in the PBM/SHG Database: one for each additive and solution in the IV preparation. These records will have the same **IV Order Number**.

Data Type	Character
VistA File	Not applicable
VistA Field	Not applicable

IV Additive or Solution Print Indicator can assume the following values:

Value	Description
A	Additive
S	Solution

Variable: **IV Additive or Solution Print Name**

Definition: Name of the additive or solution printed on the IV label, Ward list, Manufacturing list, etc.

Remarks: This name should contain only the name of the drug or solution. It should be free of any indication of strength or volume. The Pharmacy ADPAC establishes the **IV Additive or Solution Print Name** at every VistA site; therefore, this name may vary across sites for the same drug or solution.

Data Type	Character
If the IV Additive or Solution Print Indicator equals "A" the source is:	
VistA File	IV ADDITIVE (#52.6)
VistA Field	PRINT NAME (#.01)
If the IV Additive or Solution Print Indicator equals "S" the source is:	
VistA File	IV SOLUTION (#52.7)
VistA Field	PRINT NAME (#.01)

Variable: **IV Order Number**

Definition: Record number of the IV order

Remarks: This is a unique number for the IV order and patient. An order may cover multiple administrations of an IV preparation.

Data Type	Numeric
VistA File	IV Sub-file (#55.01)
VistA Field	ORDER NUMBER (#.01)

Variable: **IV Type**

Definition: Indicator of IV type

Remarks: This indicator specifies the type of IV as detailed in the table below. This
              indicator is only set on parent orders (see **Order Indicator**).

Data Type	Character
VistA File	IV Sub-file (#55.01)
VistA Field	TYPE (#.04)

IV Type can assume the following values:

Value	Description
A	Admixture
C	Chemotherapy
H	Hyperalimentation
P	Piggyback
S	Syringe
(Blank)	Not a parent order. See **Order Indicator**.

Variable: **Mail/Window Indicator**

Definition: Fill mail or pick up flag

Remarks: This variable indicates whether the fill was picked up at the window or mailed out
               to the patient. A CMOP or a local VA Pharmacy may mail a fill.

Data Type	Character
If this is a New Prescription the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	MAIL/WINDOW (#11)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52.1)
VistA Field	MAIL/WINDOW (#2)
If this is a Partial Fill the source is:	
VistA File	PARTIAL Sub-file (#52.2)
VistA Field	MAIL/WINDOW (#.02)

Mail/Window Indicator can assume the following values:

Value	Description
M	Fill was mailed to the patient
W	Fill was picked up by the patient or their representative at a VA Pharmacy

Variable: **Medication Counseling Indicator**

Definition: Medication counseling flag

Remarks: This variable indicates whether the pharmacist counseled a patient about his or her prescription. The pharmacist sets the **Medication Counseling Indicator** to "Y" if he or she counseled the patient.

Data Type	Character
VistA File	PRESCRIPTION File (#52)
VistA Field	WAS THE PATIENT COUNSELED (#41)

Medication Counseling Indicator can assume the following values:

Value	Description
Y	Yes, the patient was counseled
N	No, the patient was not counseled

Variable: **National Drug Code (NDC)**

Definition: NDC code for the drug dispensed

Remarks: The NDC is a unique three-segment number (labeler code - product code - package code) for a drug product. This code is explained in Chapter III, Special Data Topics.

Data Type	Character
Outpatient Prescription	
If the Fill was processed by a CMOP the source is:	
VistA File	CMOP EVENT File (#400)
VistA Field	NDC (#4)
If this is a New Prescription not processed by a CMOP the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	NDC (#27)
If this is a Refill not processed by a CMOP the source is:	
VistA File	REFILL Sub-file (#52)
VistA Field	NDC (#11)
If this is a Partial Fill not processed by a CMOP the source is:	
VistA File	PARTIAL Sub-file (#60)
VistA Field	NDC (#1)
If there was no NDC on the fill the source is:	
VistA File	Drug File (#50)
VistA Field	NDC (#31)
If there was no NDC on the fill or in the Drug File (#50), set to "NO NDC".	
IV or Unit Dose	
VistA File	Drug File (#50)
VistA Field	NDC (#31)

Variable: **National Formulary Indicator**

Definition: VA National Formulary flag

Remarks: This variable indicates whether or not a drug is on the VA National Formulary. If
a drug is on the VA National Formulary, it may be prescribed by all providers
authorized to write prescription orders anywhere in the VA.

The VA National Formulary is available in a Microsoft® Excel spreadsheet on the
PBM Web site (see Appendix D).

Data Type	Numeric
VistA File	VA PRODUCT FILE (#50.68)
VistA Field	NATIONAL FORMULARY INDICATOR (#17)

National Formulary Indicator can assume the following values:

Value	Description
1	Yes, the drug is on the VA National Formulary
0	No, the drug is not on the VA National Formulary

Variable: **National Formulary Restriction**

Definition: VA National Formulary restrictions flag

Remarks: This variable indicates if the VA National Formulary has any restrictions on usage of the drug. The PBM/SHG Extraction Software converts the contents of the VistA Field NATIONAL FORMULARY RESTRICTION specified below to one of two values. If the NATIONAL FORMULARY RESTRICTION field contains any data (i.e., a restriction), the value of the **National Formulary Restrictions Indicator** is set to "1"; otherwise, it is set to "0".

The VA National Formulary, available on the PBM/SHG Web site, lists all drugs on the formulary and their restrictions (see Appendix D).

Data Type	Numeric
VistA File	VA PRODUCT FILE (#50.68)
VistA Field	NATIONAL FORMULARY RESTRICTION (#50.6818, .01)

National Formulary Restrictions Indicator can assume the following values:

Value	Description
1	Yes, the VA National Formulary has restrictions on the drug
0	No, the VA National Formulary does not have restrictions on the drug

Variable: **New/Refill/Partial Indicator**

Definition: New prescription, refill, or partial fill flag

Remarks: This variable indicates if the prescription is a new prescription, a refill, or a partial
                 fill. The PBM/SHG Extraction Software sets the value of this variable based on
                 the origin of the prescription as follows:
                       "N" if the origin is the PRESCRIPTION File (#52)
                       "R" if the origin is the REFILL Sub-file (#52.1)
                       "P" if the origin is the PARTIAL Sub-file (#52.2).

                 A partial fill is where a quantity smaller than requested on the prescription is
                 dispensed. Partial fills are processed for several reasons. For example, a patient
                 may accidentally lose or spoil medication. Partial refills do not count against the
                 total number of refills for a prescription.

Data Type	Character
VistA File	Not applicable
VistA Field	Not applicable

New/Refill/Partial Indicator can assume the following values:

Value	Description
N	New Prescription
R	Refill Prescription
P	Partial Prescription

Variable: **Order Indicator**

Definition: Parent order record flag

Remarks: This variable indicates whether the record is the parent order. For an IV order there will be multiple records all with the same **IV Order Number**: one for each solution in the IV preparation and one for each additive in the IV preparation. Only one record will be identified as a parent order, and thus contain a "P" in this variable. All other records will contain a blank.

The following variables will only be populated on the parent order: **Dispensing Occurrences**, **IV Type**, and **Outpatient IV**.

Data Type	Character
VistA File	Not applicable
VistA Field	Not applicable

Order Indicator can assume the following values:

Value	Description
P	Parent order
(Blank)	Not the parent order

Variable: **Outpatient IV**

Definition: Outpatient IV indicator

Remarks: This variable indicates if the IV was administered to an outpatient. This indicator
                is only set on parent orders (see **Order Indicator**).

                The PBM/SHG Extraction Software translates the values in the VistA Field
                WARD specified below to one of two values. If the WARD is set to ".5"
                (Outpatient IV), the value of the **Outpatient IV** is set to "Y"; otherwise, it is set
                to "N".

Data Type	Character
VistA File	IV Sub-file (#55.01)
VistA Field	Ward (#104)

IV Type can assume the following values:

Value	Description
Y	Yes, outpatient IV
N	No

Variable: **Patient ICN**

Definition: Patient's Integration Control Number (ICN)

Remarks: This number is a unique patient identifier. There are two types of ICNs: a local
              ICN and a national ICN. The local ICN begins with the station number and a
              national ICN begins with "100" or "101". A patient is temporarily assigned a
              local ICN until a national ICN can be assigned.

              The ICN is used to tie together all of a patient's records found within the Veterans
              Health Administration's information systems. The Master Patient Index (MPI) is
              the authoritative source for a patient's ICN (see Appendix D).

Data Type	Numeric
VistA File	PATIENT File (#2)
VistA Field	INTEGRATION CONTROL NUMBER (#991.01)

Variable: **Patient SSN**

Definition: Patient's Social Security Number (SSN)

Remarks: Even though the PBM/SHG does extract the patient's real SSN from VistA, only
                a coded SSN will be provided to the researcher. If the researcher needs to link the
                prescription data to other VA Health Services data on an individual patient level,
                the PBM/SHG will provide a method for the researcher to decode the SSN for
                linkage.

Data Type	Character
VistA File	PATIENT File (#2)
VistA Field	SOCIAL SECURITY NUMBER (#.09)

Variable: **Prescription Number**

Definition: Unique number assigned to the prescription by the pharmacy

Remarks: This number is assigned only to the original prescription. All initial fills, refills, and partial fills of a prescription will have the same prescription number. This number is unique to the station where the prescription was finished (i.e., the new prescription was checked by a pharmacist) and the date when the prescription was filled.

Data Type	Character
VistA File	PRESCRIPTION File (#52)
VistA Field	PRESCRIPTION NUMBER (#.01)

Variable: **Price Per Dispense Unit**

Definition: Price of the **Dispense Unit** at the time of dispensing

Remarks: For example, this will be the price of each tablet dispensed. The **Price Per Dispense Unit** multiplied by the **Total Quantity Dispensed** equals the total cost of prescription for outpatient prescriptions.

The **Dispensed Amount** multiplied by the **Price Per Dispense Unit** will equal the total cost of the drug dispensed from the **Start Date of Order** through the **Stop Date of Order** for a unit dose order.

The **Price Per Dispense Unit** may not reflect the actual price of the dispense unit of the drug product dispensed. This will occur if Drug File (#50) has not been updated to reflect the price of the currently stocked supply.

Data Type	Numeric
Outpatient Prescription	
If this is a New Prescription the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	UNIT PRICE OF DRUG (#17)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52.1)
VistA Field	CURRENT UNIT PRICE OF DRUG (#1.2)
If this is a Partial Fill the source is:	
VistA File	PARTIAL Sub-file (#52.2)
VistA Field	CURRENT UNIT PRICE OF DRUG (#.042)
Unit Dose	
VistA File	DRUG File (#50)
VistA Field	PRICE PER DISPENSE UNIT (#16)

Variable: **Provider ID (SSN)**

Definition: Provider's Social Security Number (SSN)

Remarks: Even though the PBM/SHG does extract the provider's real SSN from VistA, only a coded SSN will be provided to the researcher. If the researcher needs to link the prescription data to other VA Health Services data on an individual provider level, the PBM/SHG will provide a method for the researcher to decode the SSN for linkage.

Data Type	Numeric
VistA File	NEW PERSON File (#200)
VistA Field	SSN (#9)

Variable: **Provider Local IEN**

Definition: Locally assigned Internal Entry Number (IEN) for the provider

Remarks: This is an internal number assigned to a provider that is unique to a particular site
               and is constant for the duration of service of the provider at that particular site.

Data Type	Numeric
VistA File	NEW PERSON File (#200)
VistA Field	Internal Entry Number

Variable: **Provider Type**

Definition: Staff or fee provider indicator

Remarks: This variable indicates whether the provider is employed by the VA, has a
                 contract with the VA to provide services, or wrote the prescription under the
                 Transitional Pharmacy Benefits program (VHA Directive 2003-047, dated August
                 14, 2003). The PBM/SHG Extract maps the contents of the VistA Field
                 PROVIDER TYPE specified below to one of two values. If the contents of the
                 PROVIDER TYPE field equals "4" (Fee Basis), the value of the **Provider Type**
                 variable is set to "F"; if not it is set to "S".

Data Type	Character
VistA File	NEW PERSON File (#200)
VistA Field	PROVIDER TYPE (#53.6)

Provider Type can assume the following values:

Value	Description
S	Staff (Provider is employed by the VA)
F	Fee (Provider performs services for the VA under contract and is paid a fee for those services)

Variable: **Release Date**

Definition: Date when the prescription was released from the VA Pharmacy to the patient or mailed by a CMOP

Remarks: This date is recorded in the system when the pharmacist scans the bar code on the prescription label.

For prescriptions processed by a VA Pharmacy, this date will be the same day as or several days after the **Fill/Refill/Partial Date**.

For prescriptions processed by a CMOP, this date may actually be before the **Fill/Refill/Partial Date**.

Please note that you may find missing values in the **Release Date** prior to 2002. These records should be ignored because they indicate that a prescription was filled but never picked up or mailed to the patient.

Data Type	Date
If this is a New Prescription the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	RELEASED DATE/TIME (#31)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52)
VistA Field	RELEASED DATE/TIME (#17)
If this is a Partial Fill the source is:	
VistA File	PARTIAL Sub-file (#60)
VistA Field	RELEASED DATE/TIME (#8)

Variable: **Schedule**

Definition: Dosage frequency for a unit dose

Remarks: The schedule is entered as a free form text usually in an abbreviated form.
Examples include:
"Q6H" – Every six hours
"09-12-15" – At 9:00 A.M., 12:00 P.M., and 3:00 P.M.
"0900-1200-1500" - At 9:00 A.M., 12:00 P.M., and 3:00 P.M.
"STAT" – Immediately
"QOD" – Every other day
"MO-WE-FR@1100" – Monday, Wednesday, and Friday at
11:00 A.M.

Outpatient Prescription

Data Type	Character
VistA File	MEDICATION INSTRUTION (#113)
VistA Field	SCHEDULE (#7)

Unit Dose

Data Type	Character
VistA File	UNIT DOSE (#62)
VistA Field	SCHEDULE (#26)

Variable: **Scrambled SSN**

Definition: Corporate Franchise Data Center (CFD (formerly known as the Austin Automation Center) scrambled social security number.

Remarks: This field is not downloaded directly from VistA but matched to the real social security number at the PBM.

Data Type	Numeric
VistA File	
VistA Field	

Variable: **Sender**

Definition: Outpatient site/station number of the facility where the prescription was ordered

Remarks: This field could have either a three-digit parent station number or a six-character substation identifier. The parent station number may be entered even though the prescription was ordered at a substation.
If **Sender** is a parent station number it can assume the values shown in Appendix A on page 140 for the variable **STA3N**. Since there are over one thousand substations, they are not listed in this document. Instead, users are referred to the VA Site Tracking (VAST) database, maintained by the Planning Systems Support Group (PSSG) of the Office of the Assistant Deputy Under Secretary for Health for Policy and Planning. VAST is available on the PSSG Web site (see Appendix D).

Data Type	Character
Outpatient Prescription	
VistA File	OUTPATIENT SITE (#59)
VistA Field	SITE NUMBER (#.06)
IV or Unit Dose	
VistA File	MEDICAL CENTER DIVISION (#40.8)
VistA Field	FACILITY NUMBER (#1)

Variable: **Start date of order**

Definition: Start date of IV order.

Remarks:

Data Type	Numeric
VistA File	IV multiple (#100) within the PHARMACY PATIENT file (#55)
VistA Field	START DATE/TIME field (#.02)

Variable: **Stop date of order**

Definition: Stop date of IV order.

Remarks:

Data Type	Numeric
VistA File	IV multiple (#100) within the PHARMACY PATIENT file (#55)
VistA Field	STOP DATE/TIME field (#.03)

Variable: **Total Quantity Dispensed**

Definition: Total quantity of the drug, supply, or diagnostic dispensed for this fill

Remarks: The quantity's unit of measure is the **Dispense Unit**. For example, if the **Dispense Unit** is a tablet, the **Total Quantity Dispensed** will be the number of tablets dispensed.

Data Type	Numeric
If this is a New Prescription the source is:	
VistA File	PRESCRIPTION File (#52)
VistA Field	QTY (#7)
If this is a Refill the source is:	
VistA File	REFILL Sub-file (#52)
VistA Field	QTY (#1)
If this is a Partial Fill the source is:	
VistA File	PARTIAL Sub-file (#60)
VistA Field	QTY (#.04)

Variable: **Total Units Dispensed**

Definition: Total number of units dispensed of a solution or additive in an IV preparation
                 from the **Start Date of Order** until the **Stop Date of Order**

Remarks: The unit of measure is the **Drug Unit**. The value in this variable for additives is
                 calculated by multiplying **Dispensing Occurrences** by either of the two VistA
                 fields specified below depending on the value of the **IV Additive or Solution
                 Print Indicator**.

Data Type	Character
If the IV Additive or Solution Print Indicator equals "A" the source is:	
VistA File	IV Sub-file – IV ADDITIVE Multiple (#55.02)
VistA Field	STRENGTH (#7)
If the IV Additive or Solution Print Indicator equals "S" the source is:	
VistA File	IV Sub-file - IV SOLUTION Multiple (#55.11)
VistA Field	VOLUME (#1)

Variable: **Unit Dose Order Number**

Definition: Record number of the order

Remarks: This is a unique number for the order. Multiple doses may be administered under
                a single order number.

Data Type	Numeric
VistA File	UNIT DOSE Sub-file (#62)
VistA Field	ORDER NUMBER (#.01)

Variable: **Units Per Dose**

Definition: Number of **Dispense Units** (tablets, capsules, etc.) to be dispensed in the unit
                 dose

Remarks: The number may be a fraction. For example, if the **Dispense Unit** is a 60ml
                 bottle, the **Units Per Dose** may be .5 if half the bottle or 30ml should be
                 dispensed.

Data Type	Numeric
VistA File	UNIT DOSE Sub-file DISPENSE DRUG Multiple (#2)
VistA Field	UNITS PER DOSE (#.02)

Variable: **VA Drug Class**

Definition: VA Drug Classification of the drug, supply, or diagnostic dispensed

Remarks: The VA Drug Classification system separates drugs, supplies, and diagnostics into
               different categories based upon their characteristics. The classes are assigned by
               the PBM. A more detailed description of this classification system may be found
               in the *VistA National Drug File Technical Manual*
               (http://www.va.gov/vdl/documents/Clinical/Pharm-
               National_Drug_File_(NDF)/psn_4_tm_r0206.pdf .)

               Diagnostic classes begin with "DX" and contain drugs or items used in diagnostic
               tests such as barium sulfate or glucose test strips. Supply classes begin with "XA"
               or "XX". Supply classes contain items such as solutions, syringes, ostomy belts,
               pouches, bandages, and catheters. All other classes are drugs.

               A list of the most current **VA Drug Class** values is available on the PBM Web
               site (see Appendix D). If a drug product, supply, or diagnostic does not have a **VA
               Drug Class** identified by the PBM you may see a non-standard name in this field
               such as "SUPPLY" or "STUDY".

Data Type	Character
VistA File	LOCAL DRUG File (#50)
VistA Field	VA CLASSIFICATION (#2)

Variable: **VA Product Name**

Definition: Official standardized VA name for a drug product, supply, or diagnostic
                 established by the PBM for formulary and non-formulary items

Remarks: This is a unique name assigned to a product. For drug products, the name includes
                 strength, unit, and dosage form. It does not vary by station unlike the **Generic
                 Drug Name**, which varies by site.

                 The National Drug File (see Appendix D) contains the most current **VA Product
                 Name** values and is the original source of the **VA Product Name**. If a drug
                 product, supply, or diagnostic does not have a **VA Product Name** established by
                 the PBM, you may see a non-standard name in this field such as "*SUPPLY",
                 "*LOCAL", or "*STUDY".

Data Type	Character
VistA File	LOCAL DRUG File (#50)
VistA Field	VA PRODUCT NAME (#21)

Variable: **VISN Formulary Indicator**

Definition: VISN Formulary flag

Remarks: This variable indicates if the drug is included on the VISN Formulary. If a drug is
               on the VISN Formulary, it is available for prescribing by all providers authorized
               to write prescription orders for any station within the VISN.

               The PBM/SHG Extract maps the contents of the VistA Field VISN NON-
               FORMULARY specified below to a one of two values. If the contents of the
               VISN NON-FORMULARY field equals "1" (Non-Formulary), the value of the
               VISN Formulary Indicator will be set to "N/F"; otherwise, it will be set to null
               values.

Data Type	Character
VistA File	LOCAL DRUG File (#50)
VistA Field	VISN NON-FORMULARY (#52)

VISN Formulary Indicator can assume the following values:

Value	Description
N/F	Drug is not on the VISN formulary
Null	Drug is on the VISN formulary

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VIII. Selected Bibliography

This bibliography contains references to articles about studies that utilized VA pharmacy data. To construct this bibliography, a PubMed search was conducted using the following search criteria in all text fields:

> [(veteran OR veterans) OR (VA AND patient) OR (VA AND patients))

> AND   (medication OR medications OR prescription OR prescriptions OR drug OR drugs OR pharmaceutical OR pharmaceuticals OR pharmacy OR pharmacies OR formulary OR formularies)

> AND   (PBM OR "pharmacy benefit" OR "pharmacy benefits" OR VISTA OR MUMPS OR DSS OR "decision support system" OR database OR databases OR "data base" OR "data bases" OR warehouse OR warehouses)]

The abstract of each of the articles was reviewed to determine whether or not VA pharmacy data was utilized. For those articles where it appeared VA data may have been utilized or if it was uncertain, the full text of each article was read to evaluate VA pharmacy data use. The relevant references are listed alphabetically by author and year.

Ten additional articles will be found in this bibliography and are noted with an asterisk (*) after the hyperlink to the PubMed abstract. These articles were contributed by the reviewers of this guide.

We have identified, where possible, the VA pharmacy databases or files that were used in the research reported in the article. The databases or files used are indicated by bracketed numbers following the hyperlink to the PubMed abstract. The table below specifies the correspondence between data sources and bracketed numbers.

Brackets [ ]	Data Source
1	PBM/SHG Database
2	Local VistA file
3	VISN data warehouse
4	DSS National Data Extract
5	DHCP (Decentralized Hospital Computer Program) – the original VistA system

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Appendix A: Values for Selected Variables

(Values and their descriptions begin on the following page.)

ENRLPRTY can assume the following values:

Value	Description
1	Veterans with service-connected disabilities rated 50 percent or more disabling.
2	Veterans with service-connected conditions rated 30 to 49 percent disabling.
3	Veterans who are former POWs Veterans awarded the Purple Heart Veterans with service-connected disabilities rated 10 to 29 percent disabling. Veterans discharged from active duty for a disability incurred or aggravated in the line of duty Veterans awarded special eligibility classification under 38 U.S.C., Section 1151, "benefits for individuals disabled by treatment or vocational rehabilitation."
4	Veterans who are receiving aid and attendance or housebound benefits. Veterans who have been determined by VA to be catastrophically disabled.
5	Non-service-connected veterans and noncompensable service-connected veterans rated 0 percent disabled whose annual income and net worth are below the established VA Means Test thresholds. Veterans receiving VA pension benefits. Veterans eligible for Medicaid benefits.
6	All other eligible veterans who are not required to make co-payments for their care, including: World War I veterans. Mexican Border War veterans. Veterans solely seeking care for disorders associated with: Exposure to herbicides while serving in Vietnam; or Exposure to ionizing radiation during atmospheric testing or during the occupation of Hiroshima and Naasaki; or For disorders associated with service in the Gulf War; For any illness associated with service in combat in a war after the Gulf War or during a period of hostility after November 11, 1998; or Compensable zero percent service-connected veterans.

7	Veterans who agree to pay specified copayments with income and/or net worth above the VA Means Test threshold and income below the HUD geographic index. Subpriority a: Noncompensable 0 percent service-connected veterans who were enrolled in the VA Health Care System on a specified date and who remained enrolled since that date. (Also known as 7-1 or 7a) Subpriority c: Nonservice-connected veterans who were enrolled in the VA Health Care System on a specified date and who have remained enrolled since that date. (Also known as 7-2 or 7c) Subpriority e: Noncompensable 0 percent service-connected veterans not included in Subpriority a above. Subpriority g: Nonservice-connected veterans not included in Subpriority c above.
8	Veterans who agree to pay specified copayments with income and/or net worth above the VA Means Test threshold and the HUD geographic index. Subpriority a: Noncompensable 0 percent service-connected veterans enrolled as of January 16, 2003 and who have remained enrolled since that date. (Also known as 8-1or 8a) Subpriority c: Nonservice-connected veterans enrolled as of January 16, 2003 and who have remained enrolled since that date. (Also known as 8-2 or 8c) Subpriority e: Noncompensable 0 percent service-connected veterans applying for enrollment after January 16, 2003. Subpriority g: Nonservice-connected veterans applying for enrollment after January 16, 2003.
11	A non-veteran.
90	A veteran who is not enrolled and, therefore, does not have a priority level.

MEANS can assume the following values:

Value	Description
A	Category A. Veteran is below the Means Test Threshold and is exempt from co-payments.
AN	Category A Veteran, Non-Service Connected (NSC). The veteran is exempt from co-payments. This means test category includes NSC veterans who are required to complete a means test and those NSC veterans in receipt of VA pension, aid and attendance or housebound allowance or entitled to State Medicaid. This category may also include 0% non-compensable service-connected veterans when they are not treated for a service connected condition and are placed in this category based on completion of a means test.
AS	Category A Veteran, Service Connected. The veteran is exempt from co-payments. This means test category includes all compensable service-connected (0-101%) veterans and Special Category veterans. This category also includes 0% non-compensable service connected veterans when they are treated for a service-connected condition and those veterans treated for any condition during their first year after their discharge from active duty
C	Category C. Veteran is above the Means Test Threshold, and co-payments are required.
I	The veteran is below the Means Test Threshold, but the pharmacy co-pay test is incomplete.
N	This value for outpatients indicates that the means test is not required and for inpatients indicates that the person receiving care is a non-veteran.
P	Results of means test are pending adjudication.
R	A means test is required, but the veteran has not submitted a financial worksheet.
X	This Means Test category includes treatment of patients who are not required to complete the Means Test for the care being provided. If the veteran was admitted prior to July 1, 1986, with no change in the level of care being received, (i.e., if the patient was in the Nursing Home Care Unit (NHCU) on June 30, 1986, and has remained in the NHCU since that date with no transfer to the hospital for treatment), the "X" Means Test indicator will be accepted. This category also includes patients admitted to the domiciliary, patients seen for completion of a compensation and pension examination and Class II dental treatment.

STA3N can assume the following values:

Value	Description
402	Togus
405	White River Junction
436	Fort Harrison, Montana Health Care System (HCS)
437	Fargo
438	Sioux Falls
442	Cheyenne
452	VAMC Wichita, KS
459	Honolulu
460	Wilmington
501	New Mexico Health Care System (HCS)
502	Alexandria
503	James E. Van Zandt VAMC (Altoona)
504	Amarillo Health Care System (HCS)
506	Ann Arbor Health Care System (HCS)
508	Decatur, Atlanta
509	Augusta
512	Baltimore
515	Battle Creek
516	Bay Pines
517	Beckley
518	Bedford
519	West Texas Health Care System (HCS)
520	Gulf Coast Health Care System (HCS)
521	Birmingham
523	VA Boston Health Care System (HCS) – Boston Division
526	Bronx
528	Upstate New York Health Care System (HCS)
529	Butler
531	Boise
534	Charleston
537	Chicago Health Care System (HCS)
538	Chillicothe
539	Cincinnati
540	Clarksburg
541	Cleveland – Wade Park
542	Coatesville
544	Columbia SC
546	Miami
548	West Palm Beach

STA3N can assume the following values (continued):

Value	Description
549	Dallas VAMC
550	Illiana Health Care System (HCS) (Danville)
552	Dayton
553	Detroit (John D. Dingell)
554	Denver, Eastern Colorado Health Care System (HCS)
556	North Chicago IL
557	Dublin
558	Durham
561	East Orange, New Jersey Health Care System (HCS)
562	Erie
564	Fayetteville AR
565	Fayetteville NC
568	Fort Meade
570	Fresno, Central California Health Care System (HCS)
573	North Florida/South Georgia Health Care System (HCS) – Gainesville
575	Grand Junction
578	Hines
580	Houston
581	Huntington
583	Indianapolis
585	Iron Mountain MI
586	Jackson, G. V. (Sonny) Montgomery VAMC
589	VAMC Heartland, Kansas City
590	Hampton
593	Las Vegas, Southern Nevada Health Care System (HCS)
595	Lebanon
596	Lexington – Leestown
598	Little Rock, Central AR Veterans Health Care System (HCS)
600	Long Beach Health Care System (HCS)
603	Louisville
605	Loma Linda VAMC
607	Madison WI
608	Manchester
610	N. Indiana Health Care System (HCS) – Marion
612	NCHC Martinez
613	Martinsburg
614	Memphis
618	Minneapolis
619	Montgomery

STA3N can assume the following values (continued):

Value	Description
620	Montrose, Hudson Valley Health Care System (HCS)
621	Mountain Home
623	Muskogee
626	Middle Tennessee Health Care System (HCS)
629	New Orleans
630	New York Harbor Health Care System (HCS) – NY Division
631	Northampton
632	Northport
635	Oklahoma City
636	Omaha Division – Central Plains Health Network
637	Asheville – Oteen
640	Palo Alto – Palo Alto
642	Philadelphia
644	Phoenix
646	Pittsburgh Health Care System (HCS) – University Dr
648	Portland
649	Northern Arizona Health Care System (HCS)
650	Providence
652	Richmond
653	Roseburg Health Care System (HCS)
654	Sierra Nevada Health Care System (HCS)
655	Saginaw
656	St Cloud
657	St Louis – John Cochran
658	Salem
659	W.G. (Bill) Hefner Salisbury VAMC
660	Salt Lake City Health Care System (HCS)
662	San Francisco
663	Seattle, Puget Sound Health Care System (HCS)
664	San Diego Health Care System (HCS)
666	Sheridan
667	Shreveport, Overton Brooks VAMC
668	Spokane
671	San Antonio VAMC
672	San Juan
673	Tampa
674	Temple VAMC
675	Orlando
676	Tomah
678	S. Arizona Health Care System (HCS)

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STA3N can assume the following values (continued):

Value	Description
679	Tuscaloosa
687	Walla Walla
688	Washington
689	West Haven
691	Greater Los Angeles Health Care System (HCS)
693	Wilkes Barre
695	Milwaukee WI

TRTSP can assume the following values:

Value	Description
1	Allergy[1]
2	Cardiology
3	Pulmonary Tuberculosis (TB)
4	Pulmonary Non-TB
5	Gerontology
6	Dermatology
7	Endocrinology 1
8	Gastroenterology
9	Hematology/Oncology
10	Neurology
11	Epilepsy Center
12	Medical ICU/CCU[2]
13	Cardiac Intensive Care Unit 2
14	Metabolic
15	General (Acute) Medicine
16	Cardiac Step Down
17	Telemetry
19	Neurology Off Board Server (OBS)
20	Rehabilitation Medicine
21	Blind Rehabilitation
22	Spinal Cord Injury
25	Psychiatric Residence Rehabilitation Treatment
27	Substance Abuse Residence Rehabilitation
29	Substance Abuse Compensated Work Therapy (CWT)/Trans
30	Pediatrics[3]
31	Geriatric Evaluation and Management (GEM) Acute Medicine
32	GEM Intermediate
33	GEM Psychiatry
34	GEM Neurology 1
35	GEM Rehabilitation
36	Blind Rehabilitation OBS
37	Domiciliary Care for Homeless Veterans (DCHV)
38	Post Traumatic Stress Disorder (PTSD)/CWT/TR
39	General CWT/TR
40	Intermediate Medicine
41	Rehabilitation Medicine OBS
48	Cardiac Surgery 3
49	Transplantation 3

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[1] Deleted in 2008

[2] Description/Name change in 2008

[3] New value added in 2008

(TRTSP values continued)

Value	Description
50	General Surgery/or not when defined below 2
51	Gynecology
52	Neurosurgery
53	Ophthalmology
54	Orthopedic
55	Otorhinolaryngology 2
56	Plastic Surgery, Inc Head/Neck Surgery 2
57	Proctology
58	Thoracic Surgery, Inc Cardiac 2
59	Urology
60	Oral Surgery/Dental 2
61	Podiatry
62	Peripheral Vascular
63	Surgical Intensive Care Unit
65	Surgical OBS
70	Acute Psychiatry
71	Long-Term Psychiatry
72	Alcohol Dependency – High Intensity
73	Drug Dependency – High Intensity
74	Substance Abuse – High Intensity
75	Halfway House
76	Psychiatric Medically Infirm
77	Psychiatric Residence Rehabilitation
78	Anesthesiology 3
79	Special Inpatient PTSD Unit
80	Nursing Home Care
81	GEM Nursing Home Care Unit (NHCU)
82	PM&R Transitional Rehab 3
83	Respite Care
84	Psychiatric Substance Abuse (Intermediate Care)
85	Domiciliary
86	Domiciliary Substance Abuse
87	GEM Domiciliary
88	Domiciliary PTSD
89	Sustained Treatment and Rehabilitation (STAR) I, II, & III Programs
90	Substance Abuse Star I, II, & III
91	Evaluation/Brief Treatment PTSD
92	Psychiatry – General Intervention
93	High Intensity General Psychiatry – Inpatient
94	Psychiatric OBS
95	NHCU – Intermediate Long-Term Care LTC

Value	Description
50	General Surgery/or not when defined below 2
51	Gynecology
96	NHCU – Hospice Long-Term Care
97	Surgical Stepdown [4]
98	Non-Department of Defense (DOD) Beds
99	DOD Beds
1A	Short Stay GRECC- NHCU 3
1B	Long Stay GRECC-NHCU 3
1C	Short Stay GRECC-GEM-NHCU 3
1D	GRECC-GEM-Rehab 3

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[4] New value added in 2007

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Appendix B: VistA Mapping of Prescription Patient Status Field From One Site

VistA values	PBM Values*
SC (Service Connected)	SC
HB/A&A/WWI (House Bound/Aid and Attendance/World War I)	AA
SC LESS THAN 50% (Service Connected less than 50%)	SC
PENSION NSC (Pension Non Service Connected)	OT
OPT NSC (Out-Patient Treatment Non Service Connected)	OT
OTHER FEDERAL	OT
AUTH ABS –96 (Authorized Absence for less than 96 hours)	AA
AUTH ABS +96 (Authorized Absence for more than 96 hours)	AA
INPATIENT	IP
EMPLOYEE	OT
REG DISCH (Regular Discharge)	OT
NBC (Non-Bed Care)	OT
PBC (Pre-Bed Care)	OT
CNH (Community Nursing Home)	OT
OPC (Outpatient Care)	OT
OTHER	OT
BLIND CENTER	IP
DOM (Domiciliary)	IP
FEE A&A	AA
FEE-SC	SC

*SC= Service Connected, AA=Aid and Attendance, OT=Other, IP=Inpatient.

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Appendix C: Mapping of the VistA Provider Service/Section Field to the PBM Abbreviation

SERVICE/SECTION FIELD VALUE	PBM ABBREVIATION
AMBU	AMB
PRIMARY	AMB
CBOC	AMB
ANESTH	ANES
CARDIO	CV
PHARM	CPHAR
DENT	DDS
INTERMED	IM
MEDIC	MED
NEUROL	NEUR
NUCLEAR	NUM
NURSING	RN
OPHTH	OPH
ORTHOPED	ORTHO
PSYCHIA	PSY
MENTAL	PSY
PULM	PUL
RADIOL	RAD
SURG	SUR
UROLOG	U

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Appendix D: Pharmacy Prescription Data Intranet References

LOCATION	NAME OF SITE	ADDRESS
Sect II, above DSS and NDE (XX)	VISN 20 Data Warehouse	http://vaww.visn20.med.va.gov/technology/datman/index.html
Sect II DSS VistA Extracts (XX)	DSS Website	vaww.dss.med.va.gov
Sect. II, PBM Database (16)`	PBM Research Data Request Form	http://vaww.pbm.va.gov/research-qualityimprovement/rdrf.asp
Sect. II, (top of XX)	DSS Website	http://vaww.dss.med.va.gov/index.asp
Sect II, National Drug File (NDF) and the VA National Formulary (XX)	NDF	http://vaww.pbm.va.gov/pbm/natform.htm http://vaww.national.cmop.va.gov/PBM/National%20Formulary/Forms/AllItems.aspx
Sect III, Data Quality Issues (XX)	VA Health Data Quality	http://vaww.virec.research.va.gov/DataSourcesCategory/DataQuality/Quality.htm
Sect III: Data Quality Issues / VIReC Technical Report #1 (XX)	VIReC / Data Topics by Category / Pharmacy	http://vaww.virec.research.va.gov/References/TechnicalReports/VIReCTechnicalReport1.pdf
SAS® Name: A_PCP (XX)	VHA Person Class list	http://vaww.metadata.med.va.gov/docs/PersonClassReport.pdf
SAS® Name: **CLSNUM** (XX)	Program Documents DSS Identifiers	http://vaww.dss.med.va.gov/programdocs/pd_oident.asp

SAS® Name: DCM_DEPT (XX)	DSS Website	http://vaww.dss.med.va.gov
SAS® Name: DRUGDESC (XX)	DSS Website – Product Table	http://vaww.dss.med.va.gov
SAS® Name: DRUGDESC (XX)	National Drug File	http://vaww.national.cmop.va.gov/PBM/National%20Formulary/Forms/DispForm.aspx?ID=66
SAS® Name: ORD_PROV_T (p. XX)	DSS – FY2008 DSS Medical Record Book	http://vaww.dss.med.va.gov/programdocs/pd_Med_Rec.asp
SAS® Name: STA6A (XX)	VA Site Tracking (VAST)	http://vaww.pssg.med.va.gov
SAS® Name: VA_CLASS (XX)	PBM Website (VA Drug Class Values)	http://vaww.pbm.va.gov/natform/vaclass.xls
PBM Variable: National Formulary Indicator (XX)	VA National Formulary – PBM Website	http://vaww.pbm.va.gov/pbm/natform.htm
PBM Variable: National Formulary Restriction (XX)	VA National Formulary, available on the PBM/SHG Web site	http://vaww.pbm.va.gov/pbm/natform.htm
PBM Variable: Patient ICN (XX)	Master Patient Index (MPI)	http://vaww.vhaco.va.gov/dataquality/mpidqteam.htm
PBM Variable: Sender (XX)	VA Site Tracking (VAST) database, maintained by the Planning Systems Support Group (PSSG)	http://vaww.pssg.med.va.gov

PBM Variable: VA Product Name (XX)	National Drug File – Most current VA Product Name	http://vaww.pbm.va.gov/pbm/natform.htm