VIReC RESEARCH USER GUIDE:

VHA Decision Support System (DSS) Clinical National Data Extracts (NDEs)

FY2000 – FY2004

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I. Introduction

VIReC Research User Guide: VHA Decision Support System (DSS) Clinical National Data Extracts (NDEs) is produced by the Veterans Affairs Information Resource Center (VIReC), a national resource center of the Veterans Health Administration (VHA) Health Services Research and Development Service (HSR&D). The guide is issued by VIReC to assist health services researchers and other users of DSS clinical data in understanding basic elements of the DSS production database, the availability of data elements, and the definitions of the variables within the DSS Clinical NDEs in SAS®* datasets. The background information on DSS will also be useful for those working with other DSS NDEs and for interactions with the Veterans Integrated Service Network (VISN) and facility DSS managers and staff.

This guide concentrates on the clinical national extracts that include Laboratory, Laboratory Results, Radiology, and Pharmacy NDEs. These extracts are referred to as LAB, LAR, RAD, and PHA, respectively. These extracts are all in SAS datasets and stored on either tape cartridges or disk at the Austin Automation Center (AAC) mainframe. Even though this document lists all variables from the Pharmacy inpatient and outpatient NDEs, detailed information on these variables and datasets are available in another VIReC Research User Guide specifically dedicated to the prescription drug datasets.[1]

A strength of DSS databases is that they contain cost data that may be of interest to researchers and other database users. Specific information regarding the financial information in the DSS system is available through the VHA Health Economics Resource Center (HERC) at http://www.herc.research.med.va.gov/. Access to cost data is addressed in the HERC *Research Guide to Decision Support System National Cost Extracts 1998-2004*[2] and in the technical reports *Reconciliation of DSS Encounter-Level National Data Extracts and the VA National Patient Care Database: FY2001*,[3] *Reconciliation of DSS Encounter-Level National Data Extracts with the VA National Patient Care Database FY 2001-FY2002*[4] and *A Comparison for Inpatient Costs from the HERC and DSS National Data Extract Datasets*[5] . Data from national rollups of DSS data extracts, which include cost data, are available at [redacted], a VA Intranet Web site.

Using the Guide

This guide is divided into six chapters, and additional documents are included as appendices. When relevant information is available on an Internet site, a hyperlink is

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given for an online user of the guide to click and get to the site directly. When VA Intranet sites are referenced, the Intranet address is provided.

Chapter II. DSS Overview provides an overview of the entire DSS system and the DSS structure and data sources.

Chapter III. Special Data Topics provides information on data quality and integrity as well as standardization, along with references to the technical aspects of the DSS system.

Chapter IV. VHA DSS National Data Extracts: Variables & their Dataset Locations contains a table that lists and describes all the variables contained in the datasets documented in this guide.

Chapter V. Variable One-Page Descriptions presents a one-page description for each variable in the datasets documented in this guide. The description includes a table with the following information, when applicable.

Data Type:	This indicates if the variable is numeric or character.
Print Format:	This is the name of the print format, if there is one. Date variables have SAS-defined print formats. Formats that are not attached in the dataset but can be used are put in parentheses. For example, no print format is defined for **TRTSP** (Treating Specialty) in the datasets. But one can use the format inside the parentheses (e.g., "BEDSECN.") to print out what each value in the variable means. The format library is found in MDPPRD.MDP.FMTLIB6 on the AAC mainframe or can be requested from VIReC by sending an email to virec.research.hines.med.va.gov.
Label:	This is the label for the variable as it appears in the datasets.
Datasets / Fiscal Years:	This indicates the datasets and fiscal years where the variable occurs. Some variables such as **ENRLPRTY** (Enrollment priority) do not exist in all years. For the availability of a variable for a specific year in a given dataset, users should rely on this table.
VistA Data Source:	This is the file and field where data for the variable originate in the VA's decentralized clinical database, known as VistA (Veterans Health Information Systems and Technology Architecture). VistA comprises many software applications; they utilize more than 1,940 files that include more than 44,960 data fields in total. Detailed information about the VistA applications is available online at the VistA Document Library (http://www.va.gov/vdl). An issue of *VIReC Insights* (Vol. 3, No. 1) on VistA is available at the VIReC Web site (http://www.virec.research.va.gov/insights.htm).

Chapter VI. Works Cited lists publications referred to in this guide.

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This guide is the product of the efforts of many peoples' efforts, experiences, and insights. The guide was written by Margaret Kraft, VIReC Consultant, with contributions from Noreen Arnold, Denise M. Hynes, Patricia Murphy, and Min-Woong Sohn. Debbie Sieloff (VA Hines Laboratory ADPAC), Theresa Weber (National LMIP Coordinator), and Arlene Runk (VISN 12 Radiology Business Manager) also contributed to this guide. April Kopp and Daniel Miller helped in editing and putting final touches on the guide.

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VIReC accepts responsibility for any deficiencies in this first edition of the DSS guide and welcomes suggestions for improving this research guide to better meet the needs of users.

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II. DSS Overview

Background

DSS in Healthcare

Healthcare administrators and managers depend on timely, reliable, and accurate information to make business decisions. The availability of such information depends on how data are collected, stored, retrieved, and transformed into meaningful information. "Business decision processes include strategic planning, budgeting, financial analysis and quality management, process improvement, and benchmarking."[6] Decision support systems are designed to utilize the enormous amounts of data that exist in information systems to facilitate business decision processes. Key information from various transaction systems is extracted and loaded into a decision support system to form an integrated derived database. Since this process does not change the transaction systems, decision support databases are secondary or derived databases.

Decision support systems in health care are the source of evidence to support clinical decisions and policy choices but often, available evidence is inadequate to support decisions. "Reliable evidence is essential to improve health care quality and to support the efficient use of limited resources."[7] Within the complexity of today's fast-paced healthcare environment, there is a need for accessible information that supports and improves the effectiveness of decision making and promotes managerial and clinical accountability. The primary goal of health decision support systems is to optimize both the efficiency and effectiveness with which decisions are made.[8]

DSS in the VHA

In recognition of the importance of objective data in making the right decisions, the VHA began the implementation of a decision support system known as DSS in 1994 under the VA Chief Information Officer. The VHA DSS system is based on commercial software from Eclipsys with interfaces developed to transport VA data into the system. Both the commercial and the VHA software received national development support while phased implementation occurred at the local level. Full implementation was completed in 1999, and DSS is now used throughout the VA healthcare system. In 2001, the VHA Chief Financial Officer took on responsibility for the DSS program.

The VHA DSS is a longitudinal, secondary relational database combining selected clinical data (resource utilization, patterns of care, patient outcomes, and workload) and fiscal (cost) data. DSS provides a mechanism for integrating expenses, workload, and patient utilization and allows

monitoring of patient treatment patterns for a user-defined population over an extended time period. The VHA DSS database system includes a set of tools useful for reporting and analysis that can promote stewardship of resources with decisions supported by information about patient care patterns and associated resource costs. DSS information supports process and performance improvement by measuring quality of care, clinical outcomes, and financial impact. Observations related to patient outcomes combined with information about resource utilization provide an understanding of the value of VHA medical center health care services. DSS focuses on providing aggregate information to help in finding opportunities to improve care delivery. A substantial database now exists from which complex historical patterns may be determined.

In the DSS system, each episode of care is an "end" product with all care activities and their costs attached to individual patient care episodes. An episode of inpatient care incorporates care processes from admission to discharge. An episode of outpatient care includes data from all clinic stops during a patient visit.

Technical support for DSS is provided by the national Decision Support Office (DSO), formerly known as the DSS Bedford Technical Support Office (BTSO), and administrative oversight once provided by the DSS Steering Committee is now provided by the DSO Advisory Board with members from VHA Central Office Staff, the National Leadership Board (NLB) Finance Committee, NLB Health Systems Management Committee, and the NLB Informatics and Data Management Committee as well as representatives from Networks and VA Medical Centers. Members are appointed by the VHA Chief Financial Officer (CFO).

The DSS Program Office, working with the VHA VISN Support Services Center (VSSC), has created SAS datasets with data extracted from selected DSS database fields. These sets of national data are referred to as the National Data Extracts or NDEs. Rollups of production data are now done periodically to produce the NDEs. These datasets reflect the status of processing at each VHA medical center at the time of the creation of the dataset. Final SAS datasets for a fiscal year are normally produced in January after the close of a fiscal year that ends on September 30th. These SAS DSS NDE datasets are housed at the AAC and can be utilized via a time-sharing option account on a mainframe computer.

Data Sources

DSS does not create any data. The DSS database is created from data extracted from existing administrative and clinical data captured in financial records and clinical records in the VHA Veterans Health Information Systems & Technology Architecture (VistA) information system at each facility. Financial extracts, VistA extracts, national database extracts, and extracts from some additional specialized databases are used as DSS feeder systems. DSS site teams run monthly jobs to extract data after monthly closeouts of source data are completed. The extracted data are then transmitted to the AAC. Once extracts are in place in Austin, each site or VISN begins a monthly processing cycle that builds and updates financial and clinical records. DSS team members at individual facilities access the data through PC workstations with network connections. Because

DSS is a derived database, it is not a "real time" information system. At the beginning of a fiscal year, each facility must update its DSS database to include new or discontinued departments, stop codes, and products that reflect the structural changes at the facility before processing can begin on the new fiscal year's data. As a result, DSS information is always retrospective in nature.

Financial Extracts from AAC files

Extract	Name
Account Adjustments	ACADJ
Building Depreciation	BDR
Equipment Depreciation	CMR
Labor: MD	PAIDMD
Labor: Non-MD	PAID
National Program Allocation	NPRA
Obligations	OBLIG
Payroll Accruals: Computerized	ACCRCM
Payroll Accruals: Manual	ACCRMN
Personal Services	CALM
Unfunded Pension & Others	UPRB
VHA HQ Allocation	VHQA
VISN Allocation	VSNA

Fiscal data from these accounts allow VA users to determine costs at the product level and ultimately at the encounter level. Indirect department costs are allocated to direct departments.

VistA Extracts

Extracts from VistA files are run on a monthly basis by facility or VISN DSS Teams. They include the following:

Extract	Name
Admissions	ADM
Clinic Visits	CLI
Dental	DEN
QUASAR (Audiology and Speech)	ECQ
Event Capture	ECS
IV Pharmacy	IVP
Laboratory	LAB
Laboratory Results	LAR
Mental Health	MTL
Physical Movement (Transfer and Discharge)	MOV

Extract	Name
Clinic No-Show	NOS
Nursing	NUR
Patient Assessment Instrument (PAI)	PAS
Prescription	PRE
Prosthetics	PRO
Radiology	RAD
Surgery	SUR
Treating Specialty Change	TRT
Unit Dose	UDP

Feeder locations within the feeder systems are unique to each facility. Feeder keys for each intermediate product are built when the extracts are run. The feeder key format depends on the individual feeder system.

Note: Detailed information about VistA DSS software applications is available online at the VistA Document Library (VDL) located on the VHA Office of Information Health System Design and Development Web page at http://www.va.gov/vdl.

Reference material for DSS FY2004 Extract Enhancements is located through the DSS home page at [redacted]. This site also includes the 2004 Extract Users Manual and the 2004 Extract Formats Manual.

National Database Extracts

Extract	Name
Ambulatory Surgery Codes	ASC
National Patient Care Database	NPC
Patient Assessment file	PAF
Patient Treatment File: Main	PTFM
PTFM-Comm Nsg Home (since 2003)	CNH
PTFM-Observation (since 2003)	OBM
Patient Treatment File: Bed Section	PTFB
PTFB-Comm Nsg Home (since 2003)	CNB
PTFB-Observation (since 2003)	OBB
Patient Treatment File: Procedures (Surg)	PTFP
PTFP-Comm Nsg Home (since 2003)	CNP
PTFP-Observation (since 2003)	OBP
Resident Assessment Instrument	RAI

Extracts from Other Sources

Extract	Name
Alcohol Severity Index (Pittsburgh)	ASI
Denver Distribution Center (Prosthetics)	DDC
PTSD Data (Pittsburgh)	PSF
Homeless (Pittsburgh) (since 2003)	HOM

DSS Structure

DSS is a complex system. At each local site the DSS structure is a reflection of that facility's organization, and each site has a unique list of cost centers designated as direct or indirect depending on whether the center is responsible for direct patient care or non-patient care services. Cost centers do, however, use national standardized DSS codes. Monthly financial data from VCNV (VA Conversion Module) is distributed to the appropriate account level budget cost center (ALBCC) for processing. After ALBCC monthly processing is complete, the financial data are pushed into DCM (department cost manager), which contains DSS departments where clinical data built through the medical record post reside. DCM departments are the workload production units where information is available for intermediate products or total encounters. These departments also use a national standardized coding system. Processing in DCM allows for the summarization of monthly product and encounter costs and volumes and the allocation of indirect costs.

Costing within the DSS structure is based on labor mapped to cost centers and the relative value unit (RVU) for each intermediate product. RVUs are based on the average time required by each level of staff for the product and costs related to supplies and fixed costs and are facility specific. When product audits indicate problems with costs and/or the RVU structure, re-costing can be included as a processing step. It should be noted, however, that re-costing within DSS may occur quarterly but is always done as part of the end-of-year processing. For this reason, the NDE done after the close-out of a fiscal year contains the most accurate cost information.

After site-specific monthly processing is completed, data are available for standardized, facility-designed, or customized reports.

Medical records in DSS are created through the MRPOST (Medical Records Post) job that is a step in the monthly DCM processing. This action assigns utilization data to patient encounters and then costs are added. System costs are re-costed periodically, usually once a quarter and at the end of the fiscal year processing. If cost information is of particular importance to the researcher, use of the final fiscal year NDE data might be most appropriate. The final NDE for any fiscal year is done in early January of the next year.

Detailed information about medical records that researchers may find helpful in specifying criteria to identify a patient population of interest or a subset of encounters for which special information is desired is available in the *FY2004 DSS Medical Records Technical Documentation Manual* available on the DSS Home Page at [redacted].

DSS Departments: A DSS department is an organizational production unit with a discrete labor pool, distinct intermediate products, and a specified area of responsibility. Direct departments produce the products and services used in direct patient care, and departmental workload is driven by patterns of patient care. Indirect departments are responsible for non-patient care services. A list of departments can be found at [redacted].

ALB Structure: Account Level Budgeter (ALB) is the DSS module that provides detailed expense information for costing, budgeting, forecasting, and reporting at the cost center, account, and job code level. Monthly financial records are posted into ALB to provide detailed expense records for each ALBCC. The individual facility's list of cost centers reflects the local organizational structure but cost center codes are standardized at the national level. The ALB account code uses a seven-digit identifier that includes the four-digit VA budget object code (BOC) and the three-digit VA cost center code. Resources necessary to do the work of each ALB account are mapped to that account and include labor, supplies, equipment, and space.

DCM Structure: Department Cost Manager (DCM) is the DSS module that contains cost and workload information at the intermediate product and department level. An intermediate product is an element of care that produces the workload. Examples include a specific x-ray or laboratory test, or a clinic visit, or an inpatient bed day. DCM is a process cost accounting system that identifies direct and indirect costs utilizing RVUs as the standards within the costing process. DCM costs represent individual product costs. The naming convention for DCM departments follows the rule that the first character identifies the clinical service responsible for products while second and third characters match the National DSS Department List.

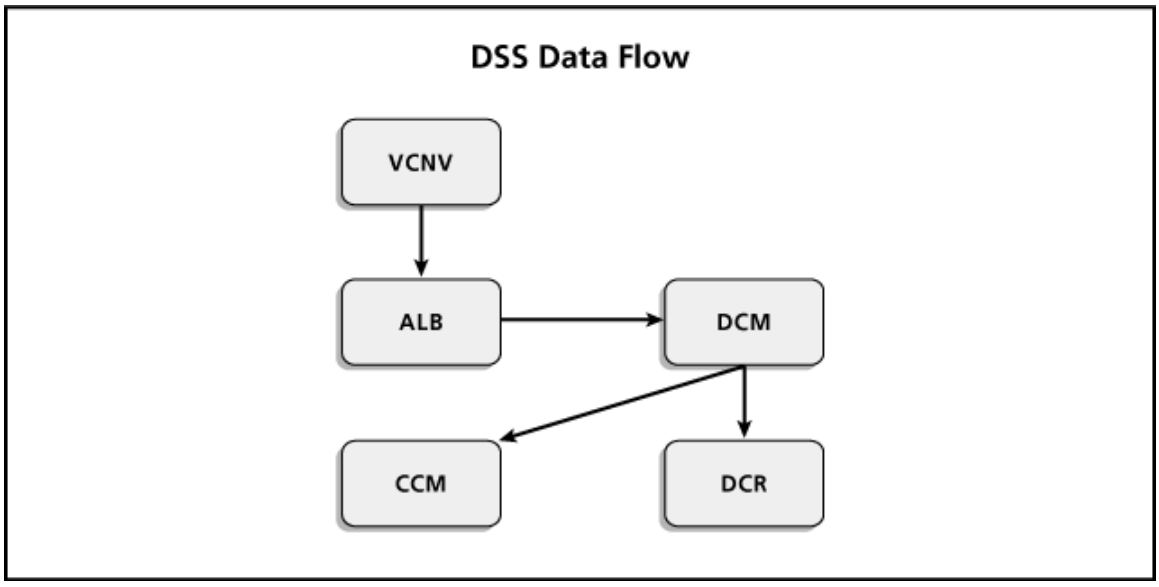
DSS Products: The DSS system identifies two levels of products in the process of patient care, *the intermediate product* and *the end product*. The end product is an episode of patient care. This may be an inpatient hospital stay or an outpatient visit and these episodes of care include bundled intermediate products. Intermediate products represent the work performed in each department involved in the episode of patient care. Intermediate products are procedures and services used in treating patients and may be bed-days of care, drugs dispensed, lab tests, radiology exams, nursing acuities, or operating room time. Intermediate products are assigned an Intermediate Product (IP) number from a national standardized list so that similar products across all facilities use the same IP number. Direct departments may also have an "other" product with an assigned LOW, MEDIUM, or HIGH value to allow for the capture of new products with a temporary IP number. Updated product lists are issued annually as part of the DSS transition process.

CCM Structure (Clinical Cost Manager): This module contains patient care data at the end product or encounter level and aggregates data by patient encounter. CCM is a job order cost accounting system that allows the facility to determine and control end product costs. The cost of intermediate products used to produce end product costs is obtained from DCM. CCM costs represent the accumulation of products used in one hospital stay or clinic visit.

DCR Daily Cost and Resource Profiler: This module contains events and costs of patient care recorded by day of stay. Days are tied to day of week, ward type, provider, and treating specialty. DCR allows detailed clinical analysis and provides utilization and cost data.

DSS Data Flow

The diagram below shows the data flow within the DSS system. The data are inputted from various feeder systems to the VCNV, which is the data conversion module specifically designed for the VA. VCNV converts the input records of financial data into detailed records for input to the ALB. When ALB processing is done, data are pushed into DCM and processed for use in DCR and CCM.



Data Availability

Data are compiled at the facility or VISN level in a "production" database. Production databases exist at the local level and VISN level and are housed at the AAC. NDEs and summary reports are produced from production database roll-ups. The NDEs create SAS datasets stored at the AAC. These SAS datasets are used for the summary reports found

on the VSSC Web site. VHA DSS data are available for VA researchers from these data sources. Currently 4 terabytes of data exist online.

Production Level Data

The VHA DSS is based on commercial software with interfaces developed to transport VHA data into the system. These data are compiled as a "production" database at the facility or VISN level. In addition to cost data, selected clinical data such as resource utilization, patterns of care, patient outcomes, and workload are captured at the "production" level. The system includes tools that allow modeling, forecasting, and budgeting. Data are available at the Case (ENCTR), Day (ENCDAY), Utilization (CHGTL), and Results (Lab only) levels.

ENCTR data contains encounter information for inpatients including demographic data and summarized cost and product information. ENCDAY data contains costs and volumes summarized to the day level by encounter. CHGTL data contains detailed product information for each encounter. RESULTS data in the Lab Result File contains Lab result data by encounter. The fields for these data file views can be seen at the following intranet web site: [redacted].

Local DSS teams at the facility and/or VISN level are responsible for production database management including monthly extracts, audits, data processing, and reports. Because local DSS processing can only proceed after files from which data are extracted are closed for the month, DSS data are not available in real time. Fiscal year transitions known as conversions also affect the availability of DSS data. A final fiscal year summation of data is done in January of the following year.

Access to production data at the facility level is requested through the local or VISN DSS Manager. Once the data of interest are identified, the local site DSS staff will generate requested reports. To determine who should be contacted regarding local production data, see the listing of local/VISN DSS staff available on the DSS Web site [redacted] under "DSS and VA Healthcare" "Who's Who".

Access to production data at the national level requires a special request to the DSO and may require complex data queries and incur costly processing fees. This office is willing to accept requests for customized reports and also invites suggestions for new reports to be added to the reports database in DSS. Requests for DSO assistance in data retrieval can be sent through the VHA DSS Reports Help Desk mail group in Outlook. Whenever possible, researchers should consider using the NDEs before requesting production level data.

National Data Extracts

The DSS Program Office working with the VHA VSSC has created SAS datasets with data extracted from selected DSS database fields. These extracts are called National Data Extracts or NDEs. Rollups of production data are now done periodically to produce the NDEs. These datasets reflect the status of processing at each VHA medical center at the time of the creation of the dataset. Final SAS datasets for a fiscal year are normally produced in January after the close of a fiscal year that ends on September 30th. These SAS NDE datasets are housed at the AAC and can be utilized via time-sharing on a VHA mainframe computer. The schedule for data pulls and reports can be found on the DSS Home Page [redacted] or at [redacted].

Currently, the following extracts are available:

- Discharge: DSS NDE Discharge Datasets for inpatients became available in FY1999. Data are sorted by station, scrambled SSN, admit day, and discharge day.
  The file name for this NDE is RMTPRD.MED.DSS.SAS.FYXX.DISCH.

- Laboratory: DSS NDE Laboratory Datasets with both inpatient and outpatient test utilization and costs became available in FY2002. Because of the large numbers of records within this extract, data files are grouped by VISNs and separated into inpatient and outpatient files.

- Laboratory Results: DSS NDE Laboratory Results (LAR) Datasets for a specific list of tests first became available in FY2003. Because of the large numbers of records within this extract, data files are grouped by VISNs and separated into inpatient and outpatient files. LAR data from 2000, 2001, and 2002 are also now available. See Appendix A for the list of all tests whose results are available in LAR by year. For a small number of tests, the LAR extract may pull results from calculations. They are:

Test	Name	Units
0011	Creatinine Clearance	ML/MIN
0027	LDLC*	MG/DL
0036	CD-4 Ratio (T Cell Screen)	%
0052	INR (International Normalized Ratio)	RATIO
0056	Microalbumin/Creatinine Ratio	MG/G

* Test results for this test can be obtained either from a test or a calculation.

- Outpatient: DSS NDE Outpatient Datasets became available in FY1999. Because of the large numbers within this extract, data files are grouped by VISNs and are divided into Clinic Stop 160 (Pharmacy) and all other stops. An example of the file name for this NDE is either RMTPRD.MED.DSS.SAS.V1TO5.FYXX.OPAT for VISNs 1-5 (all other stops) or

RMTPRD.MED.DSS.SAS.V1TO5P.FYXX.OPAT for VISNs 1-5 (clinic stop 160).

- Pharmacy: DSS NDE Pharmacy Datasets for inpatient and outpatient utilization and costs became available in FY2002. They include prescription, unit dose, and IV pharmacy detail. Because of the size of these extracts, the data files are grouped by VISNs and separated into inpatient and outpatient files. For detailed information regarding the DSS Pharmacy SAS datasets and dataset variables, please see: *The VIReC Research User Guide: VHA Pharmacy Prescription Data.*[1] This guide can be accessed on the VIReC Web site at http://www.virec.research.va.gov/References/RUG/RUG-Pharmacy03.pdf.

- Radiology: DSS NDE Radiology Datasets for inpatient and outpatient utilization and costs of radiological procedures became available in FY2002.

- Treating Specialty: DSS NDE Treating Specialty Datasets became available in FY1999. Data are sorted by Station, VISN, scrambled SSN, admission date, fiscal period, Day to Treating Specialty, and day from Treating Specialty. The file name for this NDE is RMTPRD.MED.DSS.SAS.FYXX.TRT.

Some NDEs are extremely large files, and they are stored by VISN groups. The datasets broken down in VISN groups include Laboratory (LAB), Laboratory Results (LAR), Outpatient (OPAT), and Pharmacy (PHA). The VISN groups are as follows:

- VISN 1-5
- VISN 6-10
- VISN 11-16
- VISN 17-23.

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

Summary Reports

The VSSC provides Web-based reports on the VA Intranet. The VSSC Web site point-and-click interface enables users to obtain reports using national DSS SAS datasets in Austin. The DSS Reports and Extracts Department has created canned reports that are available on the DSS Reports home page at [redacted]. Many of the VSSC reports are almost instantaneously available for downloading to a personal computer. Other reports with longer processing times are routed to the user's account on the AAC mainframe computer for downloading to the user's personal computer. Examples of reports available include:

- Costs by Diagnostic Related Groups (DRGs)
- Specific Disease Cohorts (Diabetes, Congestive Heart Failure, Osteoporosis and Mental Depression)

- Readmissions with Certain Numbers of Days
- Average Patient Costs
- Cost Details for Selected Clinic Stops
- Resource Utilization and Staffing
- Pharmacy: Top 20 drugs utilized, Costs by Provider type and Provider ID

Descriptions of the VSSC KLFMenu and instructions on obtaining summary reports are available on the VIReC Web site in two issues of *VIReC Insights*, *Vol. 3*, *No. 2 and No. 3* (http://www.virec.research.va.gov/References/VirecInsights/Insights.htm).

Financial and Clinical Data Mart

DSS data from VSSC/KLF became the basis of the VHA National Data Warehouse beginning with 2001 data. In June 2003, after approval of the Warehouse by the National Leadership Board, the warehouse was expanded to include 2002 and 2003 data. This warehouse is now the Financial and Clinical Data Mart (FCDM), an interactive information management system that uses SQL(Standard Query Language) and OLAP (On-line Analytical Processing) cube technology.

Datasets currently available in the DSS data warehouse include: Inpatient Discharge, Inpatient Treating Specialty, Lab Results, Radiology, Pharmacy, Outpatient, and ALBCC. After data from the production system are moved to the FCDM, they can be aggregated, cleaned, and restructured to facilitate the reporting process. The FCDM will provide VISNs with enhanced capabilities to run reports that can identify trends or treatment patterns not readily detected by other techniques. This data mart resides on a multiMicrosoft-SQL server environment at AAC. Future plans for the new DSS data warehouse include a filter system that will separate records with invalid values into a separate database for review and analysis.

Further information about the FCDM is available in the DSO *Data Verification Report for DSS Data Warehouse* published in November 2003. The Intranet site for the FCDM is [redacted]. Users can also access the FCDM through the VSSC Web site.

File Names of NDE Datasets Covered in This Guide

Dataset	File Name on AAC	Remarks
Laboratory	RMTPRD.MED.DSS.SAS.FYyy.V1TO5I.LAB	VISN 1 – 5, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V1TO5O.LAB	VISN 1 – 5, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V6TO10I.LAB	VISN 6 – 10, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V6TO10O.LAB	VISN 6 – 10, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V11TO16I.LAB	VISN 11 – 16, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V11TO16O.LAB	VISN 11 – 16, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V17TO 22I.LAB	VISN 17 – 22, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V17TO22O.LAB	VISN 17 – 22, Outpatient
Laboratory Results	RMTPRD.MED.DSS.SAS.FYyy.V1TO5I.LAR	VISN 1 – 5, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V1TO5O.LAR	VISN 1 – 5, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V6TO10I.LAR	VISN 6 – 10, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V6TO10O.LAR	VISN 6 – 10, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V11TO16I.LAR	VISN 11 – 16, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V11TO16O.LAR	VISN 11 – 16, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V17TO 22I.LAR	VISN 17 – 22, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V17TO22O.LAR	VISN 17 – 22, Outpatient
Radiology	RMTPRD.MED.DSS.SAS.FYyy.RAD	
Pharmacy	RMTPRD.MED.DSS.SAS.FYyy.V1TO5I.PHA	VISN 1 – 5, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V1TO5O.PHA	VISN 1 – 5, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V6TO10I.PHA	VISN 6 – 10, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V6TO10O.PHA	VISN 6 – 10, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V11TO16I.PHA	VISN 11 – 16, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V11TO16O.PHA	VISN 11 – 16, Outpatient
	RMTPRD.MED.DSS.SAS.FYyy.V17TO 22I.PHA	VISN 17 – 22, Inpatient
	RMTPRD.MED.DSS.SAS.FYyy.V17TO22O.PHA	VISN 17 – 22, Outpatient

"yy" in the file names are to be replaced by the last two digits of the fiscal year. The Laboratory, Laboratory Results, and Pharmacy datasets are on tapes rather than disks. All the datasets are sorted by **STA3N**, **SCRSSN**, and **SVC_DTE**. Currently, Laboratory, Radiology, and Pharmacy datasets are available from FY 2002 to the present. Laboratory Results datasets are available from FY 2000 to the present.

III. Special Data Topics

Data Quality and Integrity

Data integrity begins with accurate, complete, and timely data entry into VistA. In order to maintain a high level of integrity for DSS data, DSS site teams audit their data as part of the monthly processing cycle. Extracts are audited before transmission to Austin. In FY2004, DSS site teams will be able to identify Pharmacy, Surgery, and Prosthetics extract records with unusual values for review before extracts are transmitted to Austin. After data are transmitted and received at the AAC, monthly audits are done by the DSS team to ensure that the data in DSS tie back to the source systems from which data are extracted. DSS monthly audits look at the financial structure, the cost structure, and the patient care database. A list of the audits included in the monthly DSS processing is provided in Appendix B on page 103. The 2004 *DSS Audit Guide* is available on the DSS Web site at [redacted].

In addition to the monthly auditing cycle, facilities are encouraged during fiscal year conversion to do a department review as a means of improving the quality of DSS data. These annual reviews look at cost, volume, and RVU reports as well as DSS structural changes.

Conversion guidelines are issued on an annual basis and address all DSS changes, revisions, and additions to be made before beginning the processing of the new year's fiscal data. These conversion guides can be accessed on the DSS Web site at [redacted].

To ensure accurate data for the NDE, *DCR/CCM102: Validating the Data Used for the NDE,*[10] was developed by the VHA Office of Finance in FY2003. This manual, directed at DSS team members, addresses reconciliation of DSS data with source data and with VERA.

Missing data may become evident if sites are not using a specific VistA package, if data capture is inconsistent, or if there is no VistA package designed to collect specific data. Many sites use the Event Capture software (Feeder System ECS) to supplement data collection. In addition, timeliness of site processing is a determinant of the dependability of data.

The *Data Verification Report for the DSS Data Warehouse*[9] (November 2003) published by the DSO Database Development Section indicates that DSS variables with significant

missing values are in the provider fields: **PCP_DSS** and **A_PCP**, which represent primary care provider and associate primary care provider. These variables are included in LAB, LAR, PHA, and RAD datasets. This report is available at [redacted].

Data Standardization

Standardization in DSS is focused on bringing DSS structure into conformity with the DSS Basic Model across all VHA facilities. Standardization procedures are designed to provide the rigor necessary to allow data from facilities with diverse populations, a diverse range of care, and multiple practice patterns for providing care to be compiled in the same national database. This does not mean that every VA facility has to have the same number and/or type of DSS departments or products. Intermediate product costs and RVUs may also differ across facilities.

The major components of DSS standardization are use of the DSS National Department-ALBCC List for cost centers and DSS production units (departments) and use of the DSS National Product List for intermediate products. Intermediate product numbers must match the national product lists for the DSS feeder systems. There are some exceptions to this rule in the clinic (CLI), event capture (ECS), ROOM, and surgery (SUR) feeder systems. The unique combination of feeder system, feeder key, and feeder location determines the intermediate product number and DCM department number from the national template. Note that ROOM is a feeder system created for each patient for each day by a special DSS process at AAC, not a direct extract from VistA.

Standardized naming conventions are used for direct departments with matches to clinical services responsible for products produced. The three-digit ALBCC prefixes must be consistent with the first character of the DSS department. For example, Pharmacy departments starting with the letter D have an ALBCC prefix of 224.

DSS standardization audits are done annually, variance reports are collated at the VISN level, and these reports are reviewed by the DSS Standardization Subcommittee. Non-compliance with the basic DSS model is reported for follow-up and corrective action.

Detailed descriptions of the standardization procedures can be found in VHA Directive 2001-014, which can be accessed at [redacted].

DSS Cost Data

DSS cost data are dependent on the accuracy of labor mapping and the RVU structure at each local site. Although all sites make every effort to keep information current, it is possible that mapping and RVU changes may not be entered into the DSS system on a timely basis.

It should be noted that as part of the final processing for each fiscal year, a re-costing is done for all DSS products. If sites find errors that result in unrealistic costs for specific products, they can be corrected and appropriate costs assigned in the re-costing process. However, if costs are corrected at the site level after an NDE is created, the costing errors will still exist in the NDE data for that time period. Depending on data needs for research projects, investigators may want to use cost data from the final NDE of each fiscal year. This extract is done in January of the following year.

Data Storage and Security

Local data are processed by DSS site teams, and then facility level data are migrated into a VISN DSS database. These databases are managed by the DSS facility or VISN teams. DSS site managers are responsible for insuring that each user of DSS data is given the appropriate level of access within the each of the DSS subsystems for use of data at a local or VISN level. A list of individual facility DSS managers or VISN DSS managers is available from the DSS Web site at [redacted].
Local DSS data are sent from each VA Medical Center to the AAC for storage. Access to data at the national level requires a Time Sharing Options (TSO) user account on the Austin mainframe computer and permission to use the datasets are needed.
More information about data access and request forms is available on the VIReC Web site at http://www.virec.research.va.gov/DataSourcesName/DSS/DSSaccess.htm.

Technical Documentation

The *FY2004 DSS Medical Records Technical Documentation* contains information on the DSS Medical Encounter Record and the descriptive elements of DSS Encounter Records. This manual explains in detail how the DSS medical records are built for both inpatient and outpatient encounters and is designed to assist both local and national DSS users in the identification of populations of interest. It also specifies the syntax for statements used to search for encounter records with particular characteristics. Such queries may be based on demographic, diagnostic, or interventional data. This manual lists the changes made annually in the DSS system by the year of change and also includes such features as information on:

- Overlap Posting of Fields and the Impact
- Surgery Operation Information and Surgery Fields
- Multiple Occurring Fields

This manual is available at the following Intranet address:
[redacted].

Additional Technical Guides to DSS are available on the DSS Intranet Web site at [redacted] under "Program Documents".

Document	Revision Date	File Size
2004 Extract Formats	October 1, 2003	2.1 MB
2004 DSS Extracts User Manual	October 1, 2003	909 KB
CTABLE Fast Load	June 11, 2003	1.38 MB
2003 Financial SAS Specifications	February 18, 2003	16 KB
2003 DSS Extract User Manual	February 4, 2003	686 KB
2003 Extract Formats	February 4, 2003	1.16MB
2003 Extract Enhancements	February 4, 2003	644 KB
ECS GUI User Manual	June 1, 2001	1 MB
2002 DSS Extracts User Manual	December 1, 2001	685 KB
2002 Extract Formats and Definitions	December 1, 2001	1.38 MB
FY1999 Medical Record Book	June 7, 2000	884 KB
2001 SAS Specifications - Financial	July 3, 2001	64 KB
ECS Cookbook	November 23, 1999	909 KB

A technical guide to the NDEs for Outpatient, Inpatient, and Discharge extracts that are considered "core" extracts is available on the DSS Intranet Web site at [redacted]. This guide was revised in FY2004.

Additional Information Sources

New types and sources of information are being developed on a continuing basis. The information sources suggested here are organized according to the kinds of information users may be seeking. Each Web site noted offers a broad range of information and should be explored in some depth.

VHA Decision Support System Program Office Home Page

This site provides the DSS mission, goals, and values. Services, committees, minutes, announcements of training, database developments, documentation, and technical guides can be accessed from this Web site. Also included are presentations made at conferences and case studies used for Grand Rounds. This Intranet site can be reached at [redacted].

Local DSS teams are the best source of information about their respective production databases.

Health Economics Resource Center Home Page

HERC is the HSR&D national resource center that assists VA researchers in assessing the cost-effectiveness of medical care, evaluating the efficiency of VA programs and

providers, and conducting high-quality health economics research. Of special interest are the HERC *Research Guide to Decision Support National Cost Extracts*[2] and the HERC Report #9 on *Reconciliation of DSS Encounter-level National Data Extracts with the VA National Patient Care Database, FY2001-FY 2002*.[4] HERC Report #10 on *A Comparison for Inpatient Costs from the HERC and DSS National Data Extract Datasets*[5] was published in January 2004. The HERC Web site can be reached at http://www.herc.research.med.va.gov/.

Potential Research Applications

Researchers whose studies have been approved by appropriate VHA Research and Development Committees and Institutional Review Boards (IRB) have several avenues for utilizing DSS data. Data use will depend on the scope of the research, the levels of data needed (local, VISN, national), and the research question.

Clinical decision makers can correlate processes of care with outcomes to refine best practices and determine if treatment/monitoring standards are met. Management applications of DSS data include performance measurement, quality improvement, and the study of practice patterns to compare and contrast actual with best practices and to increase efficiency as well as effectiveness. Examination of the care process as "the sum of its parts" is possible. This means tests, procedures, and clinician time used in patient care can be analyzed and clinical leaders can use this information in planning for improvement in clinical, financial and patient-satisfaction outcomes. Information on areas such as product costs, care patterns, and staff productivity is available. Because DSS is a longitudinal database, it is possible to analyze health care outcomes over an extended time period for patients with chronic diseases.

Reporting options in DSS are numerous and may be standardized or may be customized. Data can be made available by a variety of groupings including the following:

- Patient cohort by VISN
- Patient cohort by facility
- By encounter
- By day for inpatients
- Utilization
- Results (laboratory tests only)

Modeling Functions in the DSS system can be used to analyze proposals for alternative scenarios regarding such issues as:

- Changes in case mix
- Resource utilization
- Reimbursement methodologies
- Proposed changes in budgets, staffing, utilization

DSS also allows for productivity measures. Time spent in direct patient care activities to produce intermediate products is called specified time. Specified time indicates the amount of staff time spent performing measurable patient care activities based on the

minutes needed per product. Specified time is calculated by multiplying the IP volumes with RVU minutes. Specified time divided by the actual work or paid time gives the specified percent. A specified percent in the range from 70% to 110% is considered reasonable. Productivity analysis can be done by case or department.

Researchers interested in healthcare utilization will find that DSS data are very useful. Patterns of utilization are available for the patient cohorts defined by researchers. Cost and outcome data such as length of stay (LOS) are linked to the utilization data. DSS data are also valuable for efforts to improve the quality of health care services and the health care delivery process. Care patterns can be analyzed for defined patient populations and treatments can be reviewed by each patient day or by patient encounters and across the care continuum. Variations in care delivery within a facility, a VISN, or across the national VHA system may be examined and monitored. DSS information can be used to measure outcomes-based performance that documents the effectiveness of health care delivery. Analysis of the processes of health care and linkage to outcomes is a critical component of performance improvement. Data collection from a variety of delivery options such as case management or disease management is possible.

IV. VHA DSS National Data Extracts: Variables & Their Dataset Locations

Variable Name	Definition	LAB	LAR	RAD	PHA	Page
A_PCP	Associate primary care provider	X	X	X	X	32
ACT_COST	Actual total cost	X		X	X	33
ADMITDAY	Date of admission	X	X	X	X	34
BORNDAY	Date of birth	X	X	X	X	35
CLSNUM	Clinic stop code (Numeric)	X	X	X	X	36
CLSTOP	Clinic stop code (Character)	X	X	X	X	37
CMOP	Indicator of whether Consolidated Mail Outpatient Pharmacy (CMOP) filled the prescription				X	38
COLLTIME	Time of the day the test specimen was collected	X	X			39
DAY_SUPPLY	Number of days of dosing the fill will satisfy				X	40
DCM_DEPT	Department Cost Manager department	X		X	X	41
DISDAY	Date of discharge	X	X	X	X	42
DISPCOST	Labor cost to process the fill				X	43
DIVPERF	Division where service was performed	X		X	X	44
DRUGDESC	Drug description				X	45
DSSLARNO	Test number in the laboratory results dataset		X			46
DXCODE	Diagnosis code	X	X	X	X	46
ENC_NUM	Encounter number	X	X	X	X	48
ENRLPRTY	Enrollment priority	X	X	X	X	49
FEED_KEY	DSS feeder key	X		X	X	50
FEED_LOC	Feeder location	X		X	X	51
FP	Fiscal period	X	X	X	X	52
FY	Fiscal year	X	X	X	X	53
HILO_IND	Indicator of whether test results were abnormally high or low		X			54
IN_OUT	Inpatient/outpatient indicator	X	X	X	X	55
INVEST	Investigational drug indicator				X	56
IPNUM	Intermediate Product Number	X		X	X	57
LAB_FD	Laboratory fixed direct costs	X				58
LAB_FI	Laboratory fixed indirect costs	X				59

Variable Name	Definition	LAB	LAR	RAD	PHA	Page
LAB_VD	Laboratory variable direct costs	X				60
LABPERF	Indicates whether a specific test or procedure was performed as ordered	X				61
MEANS	Means Test Indicator Code	X	X	X	X	62
ORD_DATE	Date on which the lab test was ordered		X			63
ORD_PROV	Ordering provider's IEN	X		X	X	64
ORD_TIME	Time of day at which the laboratory test was ordered		X			65
PCP_DSS	Primary care provider	X	X	X	X	66
PCTEAM	Primary care team	X	X	X	X	67
PROCNAME	Associated radiology procedure			X		68
QUANTITY	Quantity of drug dispensed or number of procedures or tests performed	X		X	X	69
RAD_CPT	Current Procedural Terminology (CPT) code for the radiology procedure performed			X		70
RAD_FD	Fixed direct costs associated with the radiology procedure			X		71
RAD_FI	Fixed indirect costs associated with the radiology procedure			X		72
RAD_VD	Variable direct costs associated with the radiology procedure			X		73
RES_CODE	Test result code		X			74
RES_DATE	Date on which laboratory test result was ready for reporting		X			75
RES_TIME	Time of day the laboratory rest result was ready for reporting		X			76
RESULT	Result of the laboratory test		X			77
SCRSSN	Scrambled Social Security Number	X	X	X	X	78
SEX	Sex of patient	X	X	X	X	79
STA3N	Parent station identifier	X	X	X	X	80
STA6A	Substation identifier	X	X	X	X	81
SUFFIX	Suffix	X	X	X	X	82
SVC_DATE	Date of service	X	X	X	X	83
TESTNAME	Name of the laboratory test	X				84
TESTUNIT	Units in which the test results are reported		X			85
TRTSP	Treating specialty	X	X	X	X	86
TRTSP_C	Treatment specialty	X	X	X	X	87
VA_CLASS	VA Drug Classification of the drug, supply, or diagnostic dispensed				X	88
VA_LMIP	Laboratory Management Index Program Code	X				89

Variable Name	Definition	LAB	LAR	RAD	PHA	Page
VISN	Veterans Integrated Service Network (VISN) where the care was received	X	X	X	X	90
VIZDAY	Date of the visit during which the service was provided	X	X	X		91
VS_COST	Variable supply cost	X		X	X	92
WARD	Inpatient ward	X	X	X	X	93
ZIP	ZIP Code	X	X	X	X	94
ZIP_4	ZIP Code plus 4	X	X	X	X	95

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V. Variable One-Page Descriptions

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

Variable 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 (#200) File. 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 called to obtain the IEN.

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 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
Print Format	
Label	ASSOC. PCP
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	NEW PERSON (#200) File

Variable Name: **ACT_COST**

Definition: Actual total cost

Remarks: For laboratory tests, the total cost is the total of the laboratory fixed direct costs, variable direct costs including the direct labor costs of the tests, variable supply costs, and indirect costs.

For pharmacy costs, the total cost is the total of the pharmacy fixed direct costs, variable directs costs including the direct labor costs of dispensing, and indirect costs. It includes the cost of the drug product, supply, or diagnostic dispensed. Direct labor costs for dispensing are found in the variable DSIPCOST. The sum of the DISPCOST and ACT_Cost represents the total cost of filling the prescription.

For radiology exams, the total cost is the total of the radiology fixed direct costs, variable direct costs including the direct labor costs of the exam and reading of the exam, and indirect costs.

Data Type	Numeric
Print Format	
Label	ACTUAL TOTAL COST
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable 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 **SVC_DTE** (date of service). Even though this variable is populated, it should not be used for outpatients. Only **SVC_DTE** should be used for outpatients.

Data Type	Numeric
Print Format	MMDDYY10.
Label	ADMIT DAY
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	PATIENT MOVEMENT File (#405), DATE/TIME (#.01) Field

Variable Name: **BORNDAY**

Definition: Date of birth

Remarks: It indicates 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 January 1, 1942.

Data Type	Numeric
Print Format	MMDDYY10.
Label	DATE OF BIRTH
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	PATIENT (#2) File, DATE OF BIRTH (#.03) Field

Variable Name: **CLSNUM**

Definition: Clinic stop code (Numeric)

Remarks: It indicates the clinic where treatment was given. Stop codes are also called DSS Identifiers. This variable is null for inpatients. For outpatients, it is the value contained in the VistA field specified below. Use of the standard SAS format "YCLINIC." will provide stop code descriptions. For a full list of DSS Identifiers, visit the VA Intranet Web site [redacted]

Data Type	Numeric
Print Format	(YCLINIC.)
Label	CLINIC NUMBER
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	INSTITUTION (#44) File, STOP CODE (#8) Field

Variable 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	
Label	CLINIC STOP
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	INSTITUTION (#44) File, STOP CODE (#8) Field

Variable 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, cannot be mailed.

Data Type	Character
Print Format	
Label	CMOP FLAG
Datasets / Fiscal Years	Pharmacy / 2003 – To Date
VistA Data Source	Not Applicable

CMOP can assume the following values:

Value	Description
(Blank)	Dispensed by VA Pharmacy
Y	Dispensed by CMOP

Variable Name: **COLLTIME**

Definition: Time of the day the test specimen was collected

Remarks: This is a 6-character string. The format is generally HHMMSS where HH indicates hour in 24-hour format, MM minutes, and SS seconds.

Data Type	Character
Print Format	
Label	TIME COLLECTED
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date
VistA Data Source	WKLD LOG (#64.03) File, DATE/TIME COLLECTED (#12) Field. The value in Field #12 originates from routine LRCAPDSS and is derived from sub-file ACCESSION WKLD CODE TIME (#654.1111) from WKLD DATA file (#64.1).

Variable 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). Any value above 180 should be handled as an error. 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
Print Format	
Label	DAYS SUPPLY
Datasets / Fiscal Years	Pharmacy / 2003 – To Date
VistA Data Source	If this is a New Prescription the source is: PRESCRIPTION (#52) File, DAYS SUPPLY (#8) Field. If this is a Refill the source is: REFILL Sub-file (#52.1) DAYS SUPPLY (#1.1) Field. If this is a Partial Fill the source is: PARTIAL Sub-file (#52.2), DAYS SUPPLY (#.041).

Variable 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 ([redacted]). At the home page: 1) Click on "Program Documents" in the left column; 2) Click on "VHA Product Departments and Production Units" in the menu that appears; and 3) Select the appropriate "ALBCC Master List." This list gives both ALBCC and DCM department codes.

Data Type	Character
Print Format	
Label	DCM DEPT
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable 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 **SVC_DTE** (Date of service). Even though populated for outpatients, only the **SVC_DTE** should be used for outpatients.

Data Type	Numeric
Print Format	MMDDYY10.
Label	DISCHARGE DAY
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	PATIENT MOVEMENT (#405) File, DATE/TIME (#.01) Field

Variable 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 labor 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.

The sum of **DISPCOST** and **ACT_COST** (Actual total 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
Print Format	
Label	AVG DISPENSING COST
Datasets / Fiscal Years	Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable 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. In VISNs with an integrated laboratory database, the division actually indicates the medical facility where the lab test is run.

Data Type	Character
Print Format	
Label	DIVISION PERFORMED
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	MEDICAL CENTER DIVISION (#40.8) File, FACILITY NUMBER (#1) Field. If a related division is not found, the source is: INSTITUTION (#4) File, STATION NUMBER (#99) Field

Variable Name: **DRUGDESC**

Definition: Drug description

Remarks: The drug description is obtained from a DSS Product Table, which originates from the National Drug File (NDF), accessible from the VA Intranet site [redacted]. The **IPNUM** (Intermediate product number) 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 on 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 Intranet Web site ([redacted]). At the home page: 1) click on "Program Documents" in the left column; 2) Click on "Products" in the menu that appears; and 3) Select the Products document.

Data Type	Character
Print Format	
Label	DRUG DESCRIPTION
Datasets / Fiscal Years	Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **DSSLARNO**

Definition: Test number in the laboratory results dataset

Remarks: This is the four-digit number of the lab test on the DSS Laboratory Results Dataset. Currently, there are 59 tests on the results list numbered from 0001 to 0059. See Appendix A on page 99.

It should be noted that there are some discrepancies in the LAR frequencies in FY2000 through 2003. Data appears under LAR test numbers that were not yet available in those years.

Data Type	Numeric
Print Format	
Label	DSS LAR TEST NO.
Datasets / Fiscal Years	Lab Results / 2000 – To Date
VistA Data Source	Not Applicable

Variable Name: **DXCODE**

Definition: Primary Diagnosis code

Remarks: This variable contains *International Classification of Diseases, Version 9, Clinical Modification*[12] (ICD-9-CM) codes for patient diagnosis.

For outpatients, this variable contains the primary diagnosis for the encounter. For inpatients, this variable contains the same value as **DXLSB** (ICD-9-CM diagnostic code responsible for the length of stay within the bedsection) on the VHA Medical SAS Inpatient Bed Section Dataset record for the corresponding service date (**SCV_DTE**).

Data Type	Character
Print Format	
Label	DIAGNOSIS CODE
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	For laboratory tests and results: ICD DIAGNOSIS (#80) File, DIAGNOSIS (#.01) Field. For radiology procedures: RADIOLOGY PATIENT (#70) File, PRIMARY DIAGNOSTIC CODE (#13) Field.

Variable Name: **ENC_NUM**

Definition: Encounter number

Remarks: 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).

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

Data Type	Character
Print Format	
Label	ENCOUNTER NUMBER
Datasets / Fiscal Years	Laboratory / 2003 – To Date Lab Results / 2000– To Date Radiology / 2003 – To Date Pharmacy / 2003 – To Date
VistA Data Source	Not Applicable

Variable Name: **ENRLPRTY**

Definition: 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 1-8 with 1 being the highest priority for enrollment.

ENRLPRTY can assume the values shown in Appendix C on page 108.

Data Type	Character
Print Format	
Label	ENROLL PRIORITY
Datasets / Fiscal Years	Laboratory / 2003 – To Date Lab Results / 2000– To Date Radiology / 2003 – To Date Pharmacy / 2003 – To Date
VistA Data Source	PATIENT ENROLLMENT (#27.11) File, ENROLLMENT PRIORITY (#.07) Field

Variable Name: **FEED_KEY**

Definition: DSS feeder key

Remarks: This contains the code used at a specific facility for a particular test, procedure, or medication. Feeder keys for laboratory products are in five digit numbers and are most frequently a Laboratory Management Index Program (LMIP) code. The radiology feeder keys are Current Procedure Terminology (CPT)[13] codes which are usually five digits. Radiology codes may have two digit modifers. Pharmacy feeder keys are 17 digit numbers. The first five digits contain the internal entry number (IEN) of the VistA VA Product File. The last 12 digits contain the 12-digit version of the National Drug Code (NDC). A complete list of all DSS intermediate products including feeder keys and product descriptions is available through the DSS Intranet Home Page at [redacted].

Data Type	Character
Print Format	
Label	FEEDER KEY
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	WKLD (#64) File

Variable Name: **FEED_LOC**

Definition: Feeder location

Remarks: This variable indicates the site-specific location where the lab test or the radiology procedure was performed or 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 specific lab within the laboratory department or a specific radiology or pharmacy site. For example, a laboratory feeder location may be a CHEM (chemistry lab) or HEM (hematology lab). The contents of this variable will vary depending on the location and type of services. This variable field holds up to 10 characters.

Data Type	Character
Print Format	
Label	FEEDER LOCATION
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	For lab tests: ASSESSION (#68) File, ABBREVIATION (#.09) Field. For radiology procedures: RADIOLOGY LOCATIONS (79.1).

Variable Name: **FP**

Definition: Fiscal period

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

Data Type	Numeric
Print Format	
Label	
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

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

Variable Name: **FY**

Definition: Fiscal year

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

Data Type	Numeric
Print Format	
Label	
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **HILO_IND**

Definition: Indicator of whether test results were abnormally high or low

Remarks:

Data Type	Character
Print Format	
Label	HI/LOW IND
Datasets / Fiscal Years	Lab Results / 2000– To Date
VistA Data Source	LAB DATA (#63) File

HILO_IND can assume the following values:

Value	Description
H	Abnormally high
L	Abnormally low
(Blank)	Within normal limits

Variable 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) and if this call indicates an inpatient status, the field is set to "I".

Data Type	Character
Print Format	
Label	INPAT/OPAT CODE
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

IN_OUT can assume the following values:

Value	Description
I	Inpatient
O	Outpatient

Variable 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
Print Format	
Label	
Datasets / Fiscal Years	Pharmacy / 2003 – To Date
VistA Data Source	DRUG (#50) File, DEA, SPECIAL HDLG (#3) Field

INVEST can assume the following values:

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

Variable Name: **IPNUM**

Definition: Intermediate Product Number

Remarks: This number is a pointer to the DSS Product Table that 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. In RAD, the IPNUM is the CPT for the procedure. IPNUM may also be a Healthcare Common Procedure Coding System (HCPCS) number in some cases. The DSS Product Table can be accessed at the DSS Intranet Home Page [redacted].

Data Type	Numeric
Print Format	
Label	IP NUMBER
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **LAB_FD**

Definition: Laboratory fixed direct costs

Remarks: This includes the fixed direct costs assigned to the laboratory service. Costs are then distributed across the tests that make up the laboratory workload based on Relative Value Units (RVUs) and labor mapping.

Data Type	Numeric
Print Format	
Label	LAB FIXED DIRECT $
Datasets / Fiscal Years	Laboratory / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **LAB_FI**

Definition: Laboratory fixed indirect costs

Remarks: This includes the "share" of facility indirect costs "allocated" to the Laboratory in the DSS "step-down" allocation methodology. Costs are then distributed across the tests that make up the laboratory workload.

Data Type	Numeric
Print Format	
Label	LAB FIXED INDIRECT $
Datasets / Fiscal Years	Laboratory / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **LAB_VD**

Definition: Laboratory variable direct costs

Remarks: This represents the laboratory variable direct costs. Costs are then distributed across the tests that make up the laboratory workload based on Relative Value Units (RVUs) and labor mapping.

Data Type	Numeric
Print Format	
Label	LAB FIXED VARIABLE $
Datasets / Fiscal Years	Laboratory / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **LABPERF**

Definition: Indicator of whether a specific laboratory test/procedure was performed as ordered

Remarks:

Data Type	Character
Print Format	
Label	LAB PERFORMED
Datasets / Fiscal Years	Laboratory / 2002 – To Date
VistA Data Source	For tests with LMIP codes: LABORATORY TEST (#60) File, NAME (#.01) Field. For tests without LMIP codes: NAME field (#.01) in the LABORATORY TEST FILD (#60) as pointed to by TEST/PROCEDURE field (#.01) of the TEST multiple (6) within the SPECIMEN # multiple (1) of the LAB ORDER ENTRY file (#69).

LABPERF can assume the following values:

Value	Description
Y	Performed by Lab Personnel
N	Not Performed by Lab Personnel (i.e., done on a ward by nursing staff)
S	A Send-out Test (sent to a lab outside of the facility)

Variable Name: **MEANS**

Definition: Means Test Indicator Code

Remarks: Certain nonservice-connected and 0% noncompensable 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 financial information by which the VA determines a veteran's priority group for enrollment in 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 above or below 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-payment charges for hospital and outpatient medical services. Above the Means Test 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 hospital care and outpatient medical services. The Means Test Thresholds are established on January 1st of each year. There are four different co-payments: prescription, inpatient, outpatient, and long-term care.

This variable contains the current means test status 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 C on page 110.

Data Type	Character
Print Format	
Label	MEANS TEST
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	MEANS TEST STATUS (#408.32) File, CODE (#.02) Field

Variable Name: **ORD_DATE**

Definition: Date on which the laboratory test was ordered

Remarks: If the date cannot be determined, a default is used. The default date is the value of the YEAR MONTH field (#1) concatenated with "01" for the day (DD) portion.

Data Type	Numeric
Print Format	MMDDYY10.
Label	ORDER DATE
Datasets / Fiscal Years	Lab Results / 2000 – To Date
VistA Data Source	LAB DSS LAR EXTRACT (#64.036) File, DATE ORDERED (#3) Field

Variable 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
Print Format	
Label	ORDERING PROVIDER
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	NEW PERSON (#200) File

Variable Name: **ORD_TIME**

Definition: Time of day at which the laboratory test was ordered

Remarks: This field is always exactly 6 numeric characters in length; if time cannot be determined "000300" is used as a default. The format is generally HHMMSS where HH indicates hour in 24-hour format, MM minutes, and SS seconds.

Data Type	Character
Print Format	
Label	
Datasets / Fiscal Years	Lab Results / 2000 – To Date
VistA Data Source	LAB DSS LAR EXTRACT (#64.036) File, TIME ORDERED (#4) Field

Variable Name: **PCP_DSS**

Definition: Primary care provider

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). 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, he/she will have a different provider number at each station.

The value of this variable is obtained by a call to the Scheduling API, which returns the IEN of the primary care provider for the patient on **SVC_DTE** (Date of service). If no primary care provider was identified, the field will contain blanks.

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
Print Format	
Label	PCP
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	NEW PERSON (#200) File

Variable 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 TEAM (#404.51) File.

The value of this variable is obtained by a call to the Scheduling API, which returns the IEN of the primary care team for the patient on **SVC_DTE** (Date of service). If no primary care team was identified, the field will contain blanks.

Data Type	Character
Print Format	
Label	PRIM. CARE TEAM
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	TEAM (#404.51) File

Variable Name: **PROCNAME**

Definition: Name of radiology procedure

Remarks: This is a 25-character string.

Data Type	Character
Print Format	
Label	RAD PROC NAME
Datasets / Fiscal Years	Radiology / 2002 – To Date
VistA Data Source	RADIOLOGY PROCEDURES (#71) File, RADIOLOGY PROCEDURE (#2) Field

Variable Name: **QUANTITY**

Definition: Quantity of drug dispensed or number of procedures or tests performed

Remarks: This indicates the number of times the feeder key for a specific laboratory test or a radiology procedure occurs in the record of a particular patient. Operationally, it is the count of the unique procedure codes appearing in the patient's record.

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
Print Format	
Label	
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **RAD_CPT**

Definition: Current Procedural Terminology (CPT) code for the radiology procedure performed

Remarks: CPT is a coding product copyrighted by the American Medical Association. Additional information about VA Coding can be found in the *VHA Coding Handbook,* which is available on the VIReC Web site. Radiology CPT codes are 5 digits and may be followed by 2-digit modifiers.

Data Type	Character
Print Format	
Label	RAD CPT CODE
Datasets / Fiscal Years	Radiology / 2002 – To Date
VistA Data Source	RADIOLOGY PROCEDURES (#71) File, RADIOLOGY PROCEDURES (#2) Field CPT CODE (#9) Field

Variable Name: **RAD_FD**

Definition: Fixed direct costs associated with the radiology procedure

Remarks: This includes the fixed direct costs assigned with the Radiology Service. Costs are then distributed across the exams that make up the Radiology workload based on Relative Value Units (RVUs) and labor mapping.

Data Type	Numeric
Print Format	
Label	RAD FIXED DIRECT $
Datasets / Fiscal Years	Radiology / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **RAD_FI**

Definition: Fixed indirect costs associated with the radiology procedure

Remarks: This includes the "share" of facility indirect costs "allocated" to the Radiology Service in the DSS "step-down" allocation methodology. Costs are then distributed across the exams that make up the Radiology workload.

Data Type	Numeric
Print Format	
Label	RAD FIXED INDIRECT $
Datasets / Fiscal Years	Radiology / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **RAD_VD**

Definition: Variable direct costs associated with the radiology procedure

Remarks: Variable direct costs include personnel costs within the radiology department that are distributed to various radiology procedures based on the average number of minutes needed to perform each exam.

Data Type	Numeric
Print Format	
Label	RAD VARIABLE DIRECT $
Datasets / Fiscal Years	Radiology / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **RES_CODE**

Definition: Test result code

Remarks: This variable is currently not populated. Do not use.

Variable Name: **RES_DATE**

Definition: Date on which the laboratory test result was ready for reporting

Remarks: If a date cannot be determined, a default date value of the YEAR MONTH field (#1) is concatenated with "01" for the day (DD) portion.

Data Type	Numeric
Print Format	MMDDYY10.
Label	RESULTS DATE
Datasets / Fiscal Years	Lab Results / 2000 – To Date
VistA Data Source	LAB DSS LAR EXTRACT (#64.036) File, DATE RESULTS AVAIL (#5) Field

Variable Name: **RES_TIME**

Definition: Time of day the laboratory test result was ready for reporting

Remarks: This field is always 6 characters in length; if the time cannot be determined "000300" is used as the default. The format is generally HHMMSS where HH indicates hour in 24-hour format, MM minutes, and SS seconds.

Data Type	Character
Print Format	
Label	TIME RESULTS REPORTED
Datasets / Fiscal Years	Lab Results / 2000 – To Date
VistA Data Source	LAB DSS LAR EXTRACT (#64.036) File, TIME RESULTS AVAIL (#6) Field

Variable Name: **RESULT**

Definition: Result of the laboratory test

Remarks: Valid values for results of the test range from -10000 to 10000, usually with up to 4 decimal digits. The units for these values are reported in **TESTUNIT** (Units in which the results are reported).

Even though test results are usually reported as numeric values with decimal digits, there are a number of laboratory results that are originally reported in a non-numeric format. They have been translated into single-digit values as shown in the table below.

Data Type	Character
Print Format	
Label	TEST RESULT
Datasets / Fiscal Years	Lab Results / 2000 – To Date
VistA Data Source	LAB DATA (#63) File

RESULT can *additionally* assume the following values:

Value	Description
0	Negative – Non-reactive
1	Positive – Reactive
2	Borderline – Indeterminate
3	Test not performed – Quantity not sufficient or other reason
5	Result cannot be translated

Variable 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.

If a researcher needs the real SSN, a cross-reference file is available on the AAC mainframe to convert the scrambled SSN to the real SSN. For the access to the real SSNs, refer to the information on the VIReC Web site: http://www.virec.research.va.gov/Support/Training-NewUsersToolkit/ACRSrequest.htm.

Data Type	Numeric
Print Format	
Label	
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	PATIENT (#2) File, SOCIAL SECURITY NUMBER (#.09) Field

Variable Name: **SEX**

Definition: Sex of patient

Remarks: The variable indicates the gender of the patient.

Data Type	Character
Print Format	
Label	GENDER
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	PATIENT (#2) File, SEX (#.02) Field

SEX can assume the following values:

Value	Description
F	Female
M	Male

Variable 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 C on page 111.

Data Type	Numeric
Print Format	(STA3NL.)
Label	STATION
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	INSTITUTION (#4) File, STATION NUMBER (#99) Field; MEDICAL CENTER DIVISION (#40.8) File, FACILITY NUMBER (#1) Field

Variable Name: **STA6A**

Definition: Substation identifier

Remarks: The first three characters of this variable contain the parent station identifier (**STA3N**). The last three characters identify either the substation 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.

Since there are over one thousand substations, they are not listed in this guide. Instead, users are referred to the VA Site Tracking (VAST) database, maintained by the Planning Systems Support Group (PSSG). After linking to the PSSG Intranet Web site at [redacted], 1) click on "VAST" in the left column; 2) click on "Site Data" under the VAST Downloads heading; 3) under "Select VISNs," click on the "All VISNs" box; 4) under "Select Services," click on the "All Services" box and on the "or" circle; and 5) click on the "Submit Query" box. A spreadsheet of substation information will be generated and displayed that includes the substation identifier, name, and location.

Data Type	Character
Print Format	($STA6AL. or $STA52AL.)
Label	DIVISION
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000– To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	INSTITUTION FILE (#4) File, STATION FILE (#99) Field; MEDICAL CENTER DIVISION FILE (#40.8) File, FACILITY NUMBER (#1) Field

Variable Name: **SUFFIX**

Definition: Suffix

Remarks: This field is a temporary work field. Do not use.
In 2004 the SUFFIX variable was dropped from LAB and RAD.

Variable Name: **SVC_DTE**

Definition: Date of service

Remarks: This variable represents the date the service was performed.

Data Type	Numeric
Print Format	MMDDYY10.
Label	LAB/RAD SVC. DATE
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	For radiology procedures: RAD/NUC MED PATIENT (#70) File, EXAM DATE (#.01) Field

Variable Name: **TESTNAME**

Definition: Name of the laboratory test

Remarks: This is a 25-character string.

Data Type	Character
Print Format	
Label	LAB TEST NAME
Datasets / Fiscal Years	Laboratory / 2002 – To Date
VistA Data Source	LABORATORY TEST (#60) File, NAME (#.01) Field

Variable Name: **TESTUNIT**

Definition: Units in which the test results are reported

Remarks: The format of reported test unit values is partially determined by the manufacturer of the laboratory instrumentation and agents used in the test. Values can be site configurable, i.e., negative/positive, positive/negative, reactive/non-reactive, and non-reactive/reactive.

Data Type	Character
Print Format	
Label	TEST UNITS
Datasets / Fiscal Years	Lab Results / 2000 – To Date
VistA Data Source	File (#60)

TESTUNIT can assume the following values:

Value	Description
%	Percentage
COPIES/ML	Copies (of virus)/Milliliter
DET/NONDET	Detected/Not Detected
DETECTED/N	Detected/Not Detected
G/DL	Grams/Deciliter
GM/DL	Grams/Deciliter
IU/L	International Units/Liter
K/CMM	1000/Cubic Millimeter
K/MM3	1000/Cubic Millimeter
MCG/DL	Microgram/Deciliter
MCG/ML	Microgram/Deciliter
MCU/ML	Microunits/Millimeter
MEQ/L	Millequivalent/Liter
MG/DL	Microgram/Deciliter
MG/L	Microgram/Liter
ML/MIN	Milliliter/Minute
MMO/L	Millimole/Liter
NEG-POS	Negative/Positive
NEG-POSE	Negative/Positive
NIG/POS	Negative/Positive
NG/DL	Nanogram/Deciliter
NG/ML	Nanogram/Milliliter
PG/ML	Picogram/Milliliter
POSITIVE/N	Positive/Negative
SEC	Seconds
U/L	Units/Liter
UG/ML	Microgram/Milliliter
UU/ML	Microunits/Milliliter

Variable Name: **TRTSP**

Definition: Treating specialty

Remarks: This variable contains the internal entry number (IEN) of 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 admitted for observation. The standard SAS format "BEDSECN." may be used with this variable to obtain a description of the treating specialty.

TRTSP can assume the values shown in Appendix C on page 115.

Lab Extracts without LMIP codes have this field initialized as a null indicating an outpatient status. Using the patient's IEN and event date, if a call sent to IN5 VADPT returns a patient movement number, the field will indicate inpatient status.

Data Type	Numeric
Print Format	(BEDSECN.)
Label	TREAT. SPECIALTY
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	SPECIALTY (#42.4) File, NAME (#.01) Field

Variable Name: **TRTSP_C**

Definition: Treatment specialty

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

Data Type	Character
Print Format	
Label	TREAT. SPEC. (CHAR)
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable 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 the Pharmacy Benefits Management (PBM). A more detailed description of this classification system may be found in the *VistA National Drug File Technical Manual*.

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 DSS Product Table which has the VA Drug Classification added from the National Drug File (available at [redacted]). The **IPNUM** 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 ([redacted]). If 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
Print Format	
Label	
Datasets / Fiscal Years	Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **VA_LMIP**

Definition: Laboratory Management Index Program Code

Remarks: This contains the codes used to gather data for the Laboratory Management Index Program (LMIP). Although all codes come from the national WKLD CODE file, their usage is not standardized nationally. Lab tests without LMIP codes have this field set to null.

Additional information about VA Coding can be found in the *VHA Coding Handbook,* which is available on the VIReC Web site at http://www.virec.research.va.gov/References/Library.htm.

Data Type	Character
Print Format	
Label	VA LMIP CODE
Datasets / Fiscal Years	Laboratory / 2002 – To Date
VistA Data Source	WKLD CODE (#64) File, WKLD CODE (#1) Field

Variable 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
Print Format	
Label	
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

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

Variable Name: **VIZDAY**

Definition: Date of the visit during which the service was provided

Remarks: If the date cannot be determined, a default is used with the value of the YEAR MONTH field concatenated with "01" for the DD portion.

Data Type	Numeric
Print Format	YYMMDD9.
Label	OPAT. VISIT DATE
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date
VistA Data Source	For laboratory tests: WKLD LOG (#64.03) File, DATE/TIME COLLECTED (#12) Field. For radiology procedures: RAD/NUC MED PATIENT (#70) File, EXAM DATE (#.10) Field

Variable Name: **VS_COST**

Definition: Variable supply cost

Remarks: The category of **VS_COST** is included in computing the **ACT_COST** (actual total cost) variable.

Data Type	Numeric
Print Format	
Label	VARIABLE SUPPLY COST
Datasets / Fiscal Years	Laboratory / 2002 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	Not Applicable

Variable Name: **WARD**

Definition: Inpatient ward

Remarks: The ward on which the patient was located when the service was provided. This field is normally blank for outpatients but may contain a value for outpatients held for observation.

Data Type	Character
Print Format	
Label	
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	HOSPITAL LOCATION File (#44) File, IEN (#.001) Field

Variable Name: **ZIP**

Definition: Zip code

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

Data Type	Numeric
Print Format	
Label	
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	PATIENT (#2) File, ZIP CODE (#.1112) Field

Variable 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
Print Format	
Label	ZIP + 4
Datasets / Fiscal Years	Laboratory / 2002 – To Date Lab Results / 2000 – To Date Radiology / 2002 – To Date Pharmacy / 2002 – To Date
VistA Data Source	PATIENT (#2) File, ZIP+4 (#.1112) Field

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Appendix A: Test Results Available in LAR by Fiscal Year

Test Results Available in FY2000

Test Number	Test Name	Units
0001	Hemoglobin	G/DL
0002	Potassium	MEQ/L
0003	Sodium	MEQ/L
0004	Lithium	MEQ/L
0005	BUN (Blood Urea Nitrogen)	MG/DL
0006	WBC (Total WBC Count)	K/CMM
0007	Digoxin	NG/ML
0008	Theophylline	UG/ML
0009	AST (Aspartate Transaminase)	U/L
0010	Glucose	MG/DL
0011	Creatinine Clearance	ML/MIN
0012	Lithium Urine	MMOL/L
0013	GGTP (Gamma GT)	IU/L
0014	Dilantin (Phenytoin)	MCG/ML
0015	Valproic Acid	MCG/ML
0016	Carbamazepine (Tegretol)	MCG/ML
0017	Hemoglobin A 1C (Glycohemoglobin)	%
0018	Alpha1 Antitrypsin	MG/DL
0019	Prostatic Specific AG	NG/ML
0020	CD-4 (T Cell Count)	K/MM3
0021	Protime	SEC
0022	Total Thyroxine (T-4)	MCG/DL
0023	Total Triiodothyronine (T-3)	NG/DL
0024	Thyroid Stimulating Hormone (TSH)	MCU/ML
0025	Folate	NG/ML
0026	Vitamin B-12 Level	PG/ML
0027	LDLC	MG/DL
0028	HDLC	MG/DL
0029	Total Cholesterol	MG/DL
0030	Triglycerides	MG/DL
0031	Serum Creatinine	MG/DL
0032	Microalbumin 2001	MG/DL
0033	Hepatitis B Surface Antibody	NEG-POS
0034	Hepatitis C Antibody	NEG-POS
0035	HIV Antibody	NEG-POS
0036	CD-4 Ratio (T Cell Screen)	%
0037	HCV-Quantitative by PCR	COPIES/ML
0038	HIV Viral Load	COPIES/ML
0039	HCV-Qualitative by PCR	DET/NONDET

Test Number	Test Name	Units
0040	HIV 1 by EIA	NEG-POS

Test Results Added in FY 2001

Test Number	Test Name	Units
0041	Hepatitis A Ab	NEG-POS
0042	Hepatitis A IgM Ab	NEG-POS
0043	Hepatitis A IgG Ab	NEG-POS
0044	Bilirubin, Total	MG/DL
0045	ALT (Transferase Alanine Amino)	IU/L
0046	Hepatitis B Core AB	NEG-POS
0047	Hepatitis B e Ag	NEG-POS
0048	Phosphatase Alkaline	IU/L
0049	Albumin	GM/DL

Test Results Added in FY2002

Test Number	Test Name	Units
0050	Hematocrit	%

Test Results Added in FY2003

Test Number	Test Name	Units
0051	Partial Thromboplastin Time (PTT)	SEC
0052	INR (International Normalized Ratio)	RATIO
0053	Vitamin B6	NG/ML
0054	Homocysteine	UMOL/L
0055	Occult Blood (Fecal)	NEG-POS
0056	Microalbumin/Creatinine Ratio	MG/G

Test Results Added in FY2004

Test Number	Test Name	Units
0057	Glucose POC (finger stick)	MG/DL
0058	Troponin T	NG/ML
0059	Troponin I	NG/ML

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Appendix B: DSS Data Audit Guide

AUDIT NAME	AUDIT NAME	**R**EQUIRED or **O**PTIONAL or **D**ELETE	IN DSS 2001 DATA AUDIT GUIDEBOOK*	COVERED ON DSS AUDIT TRAINING CALLS**	FY2004 AUDIT GUIDE BOOK***	FY2004 AUDIT NAME
VCNV AUDIT 1	Tie DSSMAIN to source Documents	R	YES	YES	Y	VCNV AUDIT 1 - Tie DSSMAIN to Source Documents
VCNV AUDIT 2	Tie VCNV Conversion to Source System Financials	R	YES	YES	Y	VCNV Audit 2 - Tie VCNV Conversion to Source System Financials
ALB AUDIT 1	Tie ALBFDR to VCNV Conversion	R	YES	YES	Y	ALB AUDIT 1 - Tie ALBFDR to VCNV Conversion
ALB AUDIT 2	Tie Posted Data from ALBFDR to ALBDATA to ALBPAY	R	YES	YES	Y	ALB AUDIT 2 - Tie Posted Data from ALBFDR to ALBDATA to ALBPAY
ALB AUDIT 3	Audit the Push of Job Codes to Accounts	R	YES	YES	Y	ALB AUDIT 3 - Audit the Push of Job Codes to Accounts
ALB AUDIT 4	Audit the Push of Job Codes to Accounts after Reconciling	R	YES	YES	Y	ALB AUDIT 4 - Audit the Push of Job Codes to Accounts after Reconciling
ALB AUDIT 5	Audit Summarized ALB Data	R	YES	YES	Y	ALB DCRR.VA.AUDIT Option 5 - Audit summarized ALB data
ALB AUDIT 6	Tie out Costs summed from ALB to DCM	R	YES	YES	Y	ALB AUDIT 6 - Tie out Costs summed from ALB to DCM
DCM TEAM AUDIT 1	Perform Bedday Audit	R	YES	YES	Y	MR Audit 1 - Audit Output of MRPOST MR Audit 1A & MR Audit 1B
DCM TEAM AUDIT 2	Audit Utilization Loaded into FDRDATA	R	YES	YES	Y	MR Audit 2 - Audit Utilization Loaded into FDRDATA
DCM TEAM AUDIT 2A	Duplicate Feeder Keys & Charge Allocation Factor Audit	R	NO	YES	N	MR Audit 2B Included with MR Audit 2
DCM TEAM AUDIT 3	Audit Utilization Posted to DCM	R	YES	YES	Y	MR AUDIT 3 - Audit Utilizarion posted to DCM
DCM TEAM AUDIT 4	Audit Product Volume Trends	O	YES	NO	N	

AUDIT NAME	AUDIT NAME	**R**EQUIRED or **O**PTIONAL or **D**ELETE	IN DSS 2001 DATA AUDIT GUIDEBOOK*	COVERED ON DSS AUDIT TRAINING CALLS**	FY2004 AUDIT GUIDE BOOK***	FY2004 AUDIT NAME
DCM TEAM AUDIT 5	Audit the Allocation of Indirect Costs	R	YES	YES	Y	MR Audit 4 - Audit Indirect Costs Posted to DCM
DCM TEAM AUDIT 5A	Audit Actual Workload Volumes vs. Actual Costs	R	NO	YES	N	
DCM TEAM AUDIT 6	Audit the Split of Fixed and Variable Costs by Product	O	YES	NO	N	
DCM TEAM AUDIT 7	Audit Department Specified Time and RVU's	O	YES	NO	N	
DCM TEAM AUDIT 8	Verify ALL Monthly Processing is Complete	R	YES	YES	N	
DCM TEAM AUDIT 9	Tie DCM Costs Back to ALB and Source Systems	R	YES	YES	Y	MR Audit 5 - Reconcile DCM to ALB
DCM SERVICE AUDIT 1	Verify Product Volumes with Services	O	YES	NO	N	
DCM SERVICE AUDIT 2	Verify Product Mix with Services	O	YES	NO	N	
DCM SERVICE AUDIT 3	Verify Product Unit Costs with Services	O	YES	NO	N	
DCM SERVICE AUDIT 4	Review the Budget Variance Reports	O	YES	NO	N	
PROCESSING AUDIT 1	Patient Data Processing - Error Messages	R	YES	NO	N	
PROCESSING AUDIT 2	Medical Records Posting Messages - Standard	R	YES	NO	N	
MEDICAL RECORD AUDIT 1	Audit Records from DSSMAIN to MRPOST	R	YES	NO	N	
DCR/CCM AUDIT 1	Audit Inpatient Admissions and Discharges	R	YES	YES	N	
DCR/CCM AUDIT 2	Audit Inpatient and Outpatient Database Fields	D	YES	NO	N	
RECONCILIATION AUDIT	FMS to ALB to DCM Reconciliation	R	NO	YES	Y	MR Audit 5 - Reconcile DCM to ALB
DCR/CCM AUDIT 3	Audit the Output from UTILPROC	R	YES	YES	Y	MR Audit 6 - Audit Output of UTLPROC's to DCR.POST
DCR/CCM AUDIT 4	Audit RPM Workload Enhancement Report	O	YES	YES	N	

AUDIT NAME	AUDIT NAME	**R**EQUIRED or **O**PTIONAL or **D**ELETE	IN DSS 2001 DATA AUDIT GUIDEBOOK*	COVERED ON DSS AUDIT TRAINING CALLS**	FY2004 AUDIT GUIDE BOOK***	FY2004 AUDIT NAME
DCR/CCM AUDIT 4A	Audit Utilization, Products with High Actual Costs, Products with no Actual Costs	R	NO	YES	N	
DCR/CCM AUDIT 5	VA Volume/Cost Audit	R	NO	YES	Y	MR Audit 7 - Reconcile Output of DCRR.VA.AUDIT
DCR/CCM AUDIT 6	Audit Net Revenue	O	YES	NO	Y	MR AUDIT 8- Audit Net Revenue
DCR/CCM AUDIT 7	Tie Actual Costs from the ACTSUM to DCM	O	YES	YES	N	
DCR/CCM AUDIT 8	Review Output from RE.ACTSUM.AUDIT	O	YES	NO	N	
DCR/CCM AUDIT 9	Verify Encounter Records	R	NO	YES	N	

* DSS Data Audit Guidebook, Version 2001.02, dated February 13, 2001. Located at [redacted]

** DSS Audit Training Calls held Fall 2002. Located at [redacted]

*** FY2004 DSS Data Audit Guide

Appendix C: 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 rehabilitatio."
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 Noverber 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	Illiani 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
676	Tomah
678	S. Arizona Health Care System (HCS)
679	Tuscaloosa

STA3N can assume the following values (continued):

Value	Description
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
2	Cardiology
3	Pulmonary Tuberculosis (TB)
4	Pulmonary Non-TB
5	Gerontology
6	Dermatology
7	Endocrinology
8	Gastroenterology
9	Hematology/Oncology
10	Neurology
11	Epilepsy Center
12	Medical Intensive Care Unit
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
31	Geriatric Evaluation and Management (GEM) Acute Medicine
32	GEM Intermediate
33	GEM Psychiatry
34	GEM Neurology
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
50	Surgery (General)
51	Gynecology
52	Neurosurgery
53	Ophthalmology
54	Orthopedic
55	Ear, Nose, & Throat

TRTSP can assume the following values (continued):

Value	Description
56	Plastic Surgery
57	Proctology
58	Thoracic Surgery
59	Urology
60	Oral Surgery
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
79	Special Inpatient PTSD Unit
80	Nursing Home Care
81	GEM Nursing Home Care Unit (NHCU)
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
96	NHCU – Hospice Long-Term Care
98	Non-Department of Defense (DOD) Beds
99	DOD Beds

Appendix D: Austin Automation Center Information

Requesting Access to the Datasets

To gain access to the Medical SAS Datasets an approved ACRS (Automated Customer Registration System) TIME SHARING REQUEST FORM (Form 9957) must be submitted specifying the appropriate Functional Task Code(s) for the dataset(s) requested to the AAC. This is typically done through the Information Resources Management (IRM) department at your site. The AAC can provide you with the IRM contact person at your site. A copy of this form can be obtained through the VIReC Web site at http://www.virec.research.va.gov/Toolkit/form9957.pdf.

Batch Job Service Level Categories

When submitting programs (jobs) in the IBM OS/390 mainframe environment at the AAC, an appropriate service level code is required to allocate the system resources required to complete the job. The AAC currently defines four categories of batch job service and strives to provide corresponding job turnaround, from submission to completion, as shown. An "S322" error occurs when a job exceeds the Central Processing Unit (CPU) time for the service level coded. The number of tape drives and CPU time expected can be determined from step statistics messages. The table below describes the four service level categories and their associated system resource capacity levels. Specific instruction on how to code the batch service level in a job is described in the Job Control Language (JCL) example below.

Service Level Code	CPU Seconds	Tape Drives	Turnaround Time Goal
6	0-10	0	15 minutes
7	10-50	0	30 minutes
8	0-600	1-2	2 hours
9	over 600	over 2	6 hours

JCL Example

```
(1)   //yourIDx  JOB XXXUNKAn,yourID,MSGCLASS=I,NOTIFY=&SYSUID
(2)   //step1    EXEC SAS,WORK='100,100'
(3)   //libref  DD DSN=SAS-dataset-name,DISP=SHR
(3)   //LIBRARY DD DSN=MDPPRD.MDP.FMTLIB6,DISP=SHR
(3)   //SYSIN   DD *
```

(1) Job card:

- ***yourIDx*** – Time Sharing Option (TSO) account user ID plus a one-character job identifier (***x*** (A–Z)) (maximum 8 characters)
- **XXXUNKA*n*** – Batch job service level category (***n***, (6–9) (described in section above))
- ***MSGCLASS=x*** – supplies the SYSOUT class for the job's system messages ("I"=24 hour retention period, "R"=5 day retention period)
- ***NOTIFY=&SYSUID*** – notifies user ID when job has completed

(2) Execution statement:

- ***step1*** – job step name (maximum 8 characters)
- ***EXEC SAS*** – executes SAS software
- ***WORK='p,s'*** – primary and secondary work space to be allocated during step execution

(3) Data Definition (DD) statements

- ***Libref*** – library reference defining a file to be read (maximum 8 characters)
- ***DSN= SAS-dataset-name*** – defines a SAS dataset
- ***DISP=SHR*** – allocates dataset as "shared" or read-only
- ***LIBRARY DD DSN=MDPPRD.MDP.FMTLIB6*** – allocates dataset containing library of permanent SAS formats for variables whose print formats are shown in parentheses.
- ***SYSIN DD **** – indicates that SAS program statements follow

Additional Information Sources

Guide For First Time Users of VA Austin Automation Center (AAC). Available at: http://www.virec.research.va.gov/References/VirecInsights/Insights-v02n1.pdf. (Suggested Citation: Cowper DC. Guide for First Time Users of VA Austin Automation Center (AAC). Hines, IL: VA Information Resource Center; 2001. *VIReC Insights*, Vol. 2, No. 1. [PDF])

The Austin Operations Information Intranet site provides tutorials on dataset management, Time Sharing Option/Interactive System Productivity Facility (TSO/ISPF), Job Control Language (JCL), Job Entry System ((E)JES), and File Transfer Protocol (FTP) utilities. Available at: [redacted].

AAC Contact Information

AAC Help Desk: l–512–326–6780
Internet Web site: http://www.aac.va.gov/
Intranet Web site: [redacted]

Appendix E: Selected Bibliography

This bibliography contains references to articles about studies that utilized VA DSS data. To construct this bibliography, a PubMed search was conducted on May 19, 2004, using the following search criteria in all text fields:

> [((VA) OR (VHA) OR (veteran) OR (veterans)) AND ((dss) OR (decision support system))]

The search yielded 65 articles, and the full text of each article was read to determine if the VA DSS database was used. Eight articles were found relevant and are included in this bibliography. The references are listed alphabetically by year.

Year 2005

Reker, D., Reid, K., Duncan, P., Marshall, C., Cowper, D., Stansbury, J., Warr-Wing, K. Development of an integrated stroke outcomes database within Veterans Health Administration. *Journal of Rehabilitation Research & Development, 2005 42(1), 77-92.*

Year 2004

Hynes, D., Perrin, R., Rappaport, S., Stevens, J., Demakis, J. Informatics Resources to support health care quality improvement in the Veterans Health Administration. 2004 *Journal of the Medical Informatics Association*. 11, 344-350.

Maynard C, Chapko MK. Data resources in the Department of Veterans Affairs. *Diabetes Care*; 2004 May;27 Suppl 2:B22-6. (Abstract)

Year 2003

Hendricks AM, Lotchin TR, Hutterer J, Swanson J, Kenneally K. Decision Support System Cost Evaluation Work Group. Evaluating VA patient-level expenditures: decision support system estimates and Medicare rates. *Med Care*; 2003 Jun;41(6 Suppl):II111-7. (Abstract)

Nugent G, Grippen G, Parris YC, Mitchell M. Using the cost distribution report in estimating private sector payments: what adjustments should researchers make? *Med Care* 2003;41(6 Suppl):II80-II90. (Abstract)

Smith GW, Joseph GJ. Pharmacy Data in the VA health care system. *Med Care Res Rev*. 2003 Sep;60(3 Suppl):92S-123S. (Abstract)

Year 1999

Barnett PG, Rodgers JH. Use of the Decision Support System for VA cost-effectiveness research. *Med Care*; 1999 Apr;37(4 Suppl VA):AS63-70. (Abstract)

Swindle R, Lukas CV, Meyer DA, Barnett PG, Hendricks AM. Cost analysis in the Department of Veterans Affairs: Consensus and future directions. *Med Care* 1999 Apr; 37(4 Suppl VA):AS3-8. (Abstract)