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VIReC



# VIReC RESEARCH USER GUIDE: FY2002 VHA MEDICAL SAS® OUTPATIENT DATASETS

**VA INFORMATION RESOURCE CENTER** 

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## I. Introduction

*VIReC Research User Guide: FY2002 VHA Medical SAS<sup>®</sup> \* Outpatient Datasets* was produced by the Veterans Affairs Information Resource Center (VIReC), a national resource center of the Health Services Research and Development Service (HSR&D), U.S. Department of Veterans Affairs (VA). This edition of the guide describes the Fiscal Year (FY) 2002 Medical SAS Datasets for outpatient care in the Veterans Health Administration (VHA). VIReC issues this guide to assist health services researchers and other users of these data in understanding the availability and definitions of the stored variables within the datasets. The guide also addresses special topics, such as dataset closeouts, quality of selected variables, and issues that may affect researchers' use of VA data.

The first edition by VIReC of a research user guide to VHA outpatient care data was issued in March 2000 and described the FY1999 Medical SAS Datasets.<sup>1</sup> A companion guide to VHA inpatient care data was issued,<sup>2</sup> and updated guides and select variable frequencies have been produced.<sup>3-8</sup> The VIReC research user guides grew from the work by Martha Beattie, Ph.D., Ralph W. Swindle, Ph.D., Lynn A. Tomko, B.A., and other authors of the five-volume *Department of Veterans Affairs Database Resources Guide*,<sup>9</sup> an effort that was supported by the VA Health Services Research and Development Service through the Service Directed Research project #91-009 awarded to Ralph Swindle.

### Using the Guide

This guide is divided into the four main sections listed below. Additional documents are included as appendices.

- <u>Overview of the FY2002 Medical SAS Outpatient Datasets</u>. Chapter II provides a brief description of each of the current datasets including naming conventions, sort order, and observation (record) and variable counts.
- **FY2002 VHA Medical SAS Outpatient Datasets: Variables & Their Dataset Locations.** Chapter III is a table of all variables in the FY2002 Outpatient Datasets indicating in which datasets each variable occurs. A comprehensive listing of all historic outpatient variables is in <u>Appendix A</u>.

<sup>\*</sup> SAS<sup>®</sup> is a registered trademark of the SAS Institute, Inc.

- <u>Special Data Topics</u>. Chapter IV provides information regarding special topics (e.g., dataset closeouts) and use of selected, specific variables (e.g., Scrambled Social Security Number).
- <u>Variable One-Page Descriptions</u>. Chapter V presents a one-page description for each variable in the datasets for this fiscal year. 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. The print format name is from the Format Library for the file. Date variables have SAS-defined print formats.
Label:	This is the label for the variable as it appears in the Medical SAS dataset.
Datasets / Fiscal Years:	This indicates the Medical SAS Datasets and Fiscal Years where the variable occurs.
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). In VISTA, files are identified by both a number and a name (e.g., "PTF [45] file"), while fields are identified by name (e.g., "Type of disposition field"). VISTA comprises many software applications which utilize more than 1,940 files that include more than 44,960 data fields. Detailed information about the VISTA applications is available at the VISTA Document Library (http://www.va.gov/vdl). An issue of <i>VIReC Insights</i> (Vol. 3, No. 1) on VISTA is available at the VIReC Web site (http://www.virec.research.va.gov/insights.htm).

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

• <u>Works Cited</u>. Chapter VI lists publications referred to earlier in the guide. This is in contrast to <u>Appendix E</u>, "Selected Bibliography," which provides references for published reports of research that utilized the Medical SAS Outpatient Datasets.

## **Methods for Updating**

VIReC uses numerous sources of information to update this guide. Official records of changes to the Medical SAS Datasets are maintained by the Austin Automation Center (AAC) in a section of its National Patient Care Database (NPCD) Customer Web site. This audit trail, which tracks changes to the inpatient and outpatient databases and to the SAS datasets, is on the VA Intranet. (Users can request the site address from VIReC via e-mail to <u>virec@research.hines.med.va.gov</u>.) Notices of changes are often announced by AAC and NPCD staff on the HSRData listserv, an e-mail group that includes researchers, policy makers, and information managers. Information about HSRData is available on the VIReC Web site, <u>http://www.virec.research.va.gov/support/HSRDATA\_listserv.HTM</u>.

In preparing the guide for FY2002 data, VIReC was able to check the VISTA data source for many variables against tables being developed by the National Data Systems (NDS) division of the VHA Office of Information's Information Assurance Service. We will continue to check this information as the NDS proceeds with its work, and any changes to the information in this guide will be reflected in future editions.

Editorial changes to the guide were made by VIReC staff in response to specific user requests and in a general effort to improve the readability and usefulness of the guide. In this respect, questions submitted to the VIReC Help Desk were reviewed to identify issues that need clarification or expansion. Issues discussed on HSRData were considered as well. Finally, our own experience as users of the Medical SAS datasets also prompted us to modify content and style of the information included here.

An early draft of the guide was reviewed for accuracy and clarity by an *ad hoc* group of individuals who are data stewards, data managers, and end users. The invaluable contribution of the reviewers this year is acknowledged in the following section.

#### Acknowledgements

The Veterans Affairs Information Resource Center (VIReC) is supported by Health Services Research and Development (HSR&D) Service Grant SDR 98-004.

This guide is the product of many people's efforts, experiences, and insights. The contributing authors at VIReC included Phil Colin, Denise M. Hynes, George Joseph, Linda Kok, Patricia A. Murphy, Ruth Perrin, Chris Schneiderman, and Min-Woong Sohn. April Kopp helped in editing and putting final touches to the guide, and Cody Tilson designed the cover.

Reviewers for the guide this year included the following data stewards and users whose affiliations are listed for identification purposes:

Mazen Abdellatif, M.S.	Hines VA Cooperative Studies Program Coordinating Center
Paul Barnett, Ph.D.	Health Economics Resource Center
Magdalena Berger, M.P.H.	Health Economics Resource Center
Diane Cowper, M.A.	Rehabilitation Outcomes Research Center
Elizabeth Franchi, R.H.I.A.	Office of Information Assurance
Jenie Perry, B.S.	Austin Automation Center
Ciaran Phibbs, Ph.D.	Health Economics Resource Center
John Quinn, B.S.	Office of Information Assurance, National Data Systems
Todd Wagner, Ph.D.	Health Economics Resource Center

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

#### **Suggested Citation**

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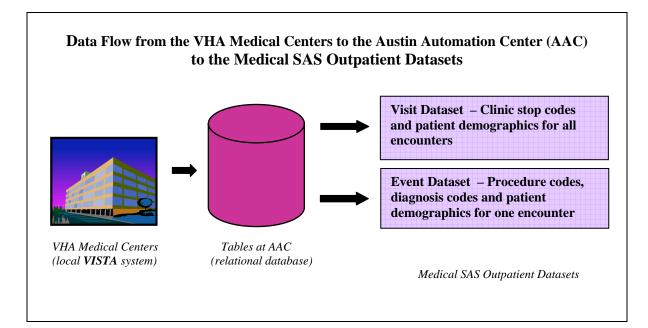
## II. Overview of the FY2002 VHA Medical SAS Outpatient Datasets

#### Background

The health care utilization information for outpatient care is recorded by staff members in VA treatment facilities across the United States and Puerto Rico through use of a uniform set of coding instructions, software, and data files. The treatment facility databases that initially hold these data are known as the local VISTA (Veterans Health Information Systems and Technologies Architecture) systems. The data are electronically transferred to the Austin Automation Center (AAC) in Austin, Texas, which is the central repository for VHA national databases. The AAC staff formats and outputs these data in SAS datasets that are available to users who have appropriate access clearance. Further information about the VHA Medical SAS Datasets has been published electronically.<sup>10</sup>

The Medical SAS Outpatient Datasets is the collective term for the datasets that contain the VA's ambulatory care data. Encounter information is transmitted to the AAC nightly where it is held in a queue. Twice a month the public SAS datasets are updated using these queued data. For reimbursement purposes sites are instructed to closeout and transmit encounters for the previous month no later than the first full week of the current month. However, Austin will accept re-transmitted encounter data until the datasets are frozen. Twice a year the datasets are frozen, in April and October. The April update freezes the dataset for records between October and March. The October update freezes the dataset for records between April and October. The AAC, at its own discretion, has allowed the field to re-transmit all of the fiscal year data at the end of the fiscal year in order to maintain accurate information.

As illustrated in the following figure, there are currently two Medical SAS Outpatient Datasets produced for FY2002 that are referred to as the "Visit" and "Event" datasets.



### Visit Dataset

The Visit dataset provides information about a day's outpatient care encounters. The name of the FY2002 Medical SAS Outpatient Visit dataset is **MDPPRD.MDP.SAS.SF02**, and it contains 43,683,885 observations with 49 variables. The sort order is by the variables <u>SCRSSN</u> (Scrambled Social Security Number) and <u>VIZDAY</u> (Date of Visit). The dataset originated in FY1980. A record contains up to 15 clinic stops for the day's care. For a listing of variables contained in the dataset, see the Visit dataset directory table in this guide. For a comprehensive listing of all historic Visit dataset variable names, see <u>Appendix A</u>.

### **Event Dataset**

The Event dataset provides information about each encounter (clinic stop) during a day's outpatient care, identifying the specific location of encounters with the VA station suffix as well as the parent station 3-digit code. The name of the FY2002 Medical SAS Outpatient Event dataset is **MDPPRD.MDP.SAS.SE02**, and it contains 64,477,062 observations with 82 variables. The sort order is by the variables <u>SCRSSN</u> (Scrambled Social Security Number), <u>VIZDAY</u> (Date of visit), and <u>CL</u> (Primary clinic stop code). The dataset originated in FY1997. There is one observation (record) per outpatient encounter, with no limit on the number of clinic stops reported. *Note: The Visit and Event datasets will not agree on clinic stop volumes.* For a listing of variables contained in this dataset, see <u>Section III, FY2002 VHA Medical SAS</u> Outpatient Datasets: Variables and Their Dataset Locations. For a comprehensive listing of the names of all historic Event variables and datasets, see <u>Appendix A</u> and <u>Appendix B</u>.

### **Other Outpatient Datasets**

**Procedure Dataset.** This dataset, which contains CPT-4<sup>11</sup> outpatient procedure information, has not been generated since FY2001. All of the variables contained in this dataset can be found in

the Event dataset. For a detailed description on this dataset, refer to previous fiscal years' resource guides.

**Diagnosis Dataset.** This dataset, which contains outpatient ICD-9-CM<sup>12</sup> diagnosis information, has not been generated since FY2001. All of the variables contained in this dataset can be found in the Event dataset. For a detailed description on this dataset, please refer to previous fiscal years' resource guides.

### **Dataset Closeouts**

Most research users of the Medical SAS Datasets utilize the datasets of fiscal year data. The annual datasets are accumulated or constructed over time, as noted below. Throughout a given fiscal year, the data in the Medical SAS Datasets change as edits, updates, and additional record entries are performed at the transmitting medical center. The policy for transmission of data states that the previous month's encounters will be completely forwarded to the AAC by the 19<sup>th</sup> of the current month. This policy, sometimes called the reimbursement closeout because of its association with cost recovery deadlines, does not mean that data are not transmitted after this period. The AAC will accept inpatient information until its fiscal year closeout on October 19. The AAC, at their own discretion in order to maintain accurate records, has allowed the field to re-submit all of the fiscal year data at the end of the fiscal year. For the research user, when to extract data will depend on the specific use of the data, but in general, researchers are advised to use the annual datasets.

## **Datasets Produced Quarterly**

Each of the datasets is produced in smaller subsets that are stored on a quarterly fiscal years basis during the current fiscal year. These datasets are in turn rolled-up into a fiscal year dataset at years end. The naming convention for these datasets is the dataset name followed by QTRn (where *n* is the number of the fiscal quarter). For a complete listing of the Quarterly SAS dataset names, refer to <u>Appendix B</u>.

### **Datasets Kept Open for Revision**

In FY2001, it was determined that a new set of "revised" Medical SAS datasets be created that would allow for continued updates after the traditional closeout period ends. These datasets can receive updates for approximately two years after the regular closeout period. A major factor behind this decision was to allow for complete workload capture that was traditionally lost due to late submission after closeout. The names of the "revised" set of datasets are essentially the same as the traditional ones, with the word "REVISED" added to it (i.e. MDPPRD.MDP.SAS.REVISED.PM01). For a complete listing of the "revised" SAS dataset names and the fiscal years that they cover, refer to <u>Appendix B</u>.

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# III. FY2002 VHA Medical SAS Outpatient Datasets: Variables and Their Dataset Locations

Name	Definition	Visit	Event	Page
AGE	Patient age in years at the time of visit	Х	Х	22
AGOIND	Indicates whether the healthcare encounter was related to exposure to Agent Orange	Х	X	23
AGOLOC	Indicates where the Agent Orange exposure occurred	Х	Χ	24
AG8R	Categorical recoding of AGE (Patient age in years at the time of visit) into 8 groupings	Х	X	25
APPTYP	Codes for VA appointment types for scheduling outpatient encounters		X	26
CL	Primary clinic stop code		Х	27
<u>CL1–CL15</u>	$1^{st} - 15^{th}$ primary clinic stop codes	Х		28
CLC	Secondary clinic stop code		Х	29
CPT1-CPT15	Services and procedures performed by a provider recorded in Current Procedural Terminology (CPT–4) ambulatory procedure codes		X	30
DOB	Date of patient's birth	Х	Х	31
DXF2-DXF10	Secondary ICD-9-CM diagnostic codes for the visit		Х	32
DXLSF	Primary ICD-9-CM diagnosis code for this encounter		Χ	33
ELIG	Indicates veteran and non-veteran eligibility codes	Х	Х	34
ENV	Indicates whether care received was due to exposure to some type of environmental hazard		X	35
HOMECNTY	County of patient's residence	Х	Х	36
HOMEPSA	VHA medical center that identifies the patient's home residence	Х	X	37
HOMEVISN	Veterans Integrated Service Network (VISN) associated with the veteran's primary service area	Х	X	38
HOMLESS	Indicates the homeless status of the veteran		Х	39
HOMSTATE	State associated with the patient's residence	Х	Х	40
INCOME	Calculation of the patient's reported income	Х		41
INS	Indicates the type of insurance coverage	Х		42
LOCVIZ	Indicates the type of setting where the health encounter occurred		X	43

Name	Definition	Visit	Event	Page
MARITAL	Marital status of the patient	Х	Х	44
MEANS	Means Test Indicator Code	Х	Х	45
MULTI	Indicator that the patient had an encounter at the parent station or another community-based outpatient clinic assigned to the parent station with the same stop code as this encounter		Х	46
NCODES	Number of CPT-4 procedure codes (CPT1–CPT15) populated within the record		X	47
<u>NDIAG</u>	Number of ICD-9-CM diagnosis codes (DXLSF, DXF2– DXF10) populated within the record		Х	48
NODEPS	Number of dependents for eligible veterans	Х		49
<u>NPROV</u>	Number of provider type variables (PROV1–PROV10) populated within the record		Х	50
<u>NPROVID</u>	Number of provider identification code variables (PROVID1–PROVID10) populated within the record		Х	51
NSTOPS	Number of clinic stop variables (CL1–CL15) populated within the record	Х		52
<u>NTRENC</u>	Indicates whether there was treatment given for nasopharyngeal radium irradiation treatment exposure		X	53
<u>NTRIND</u>	Indicates whether the patient claimed nasopharyngeal radium irradiation treatment during active military service	Х		54
POS	Military period in which the veteran served in	Х		55
POV	Code for the purpose of the healthcare visit	Х	Х	56
POW	Indicator of whether the patient was a prisoner of war	Х		57
POWLOC	Indicator of the period of service and/or location in which the veteran was a prisoner of war	X		58
PROV1– PROV10	$1^{st} - 10^{th}$ codes for the category of provider		X	59
PROVID1– PROVID10	$1^{st} - 10^{th}$ healthcare provider identification codes associated with this event		X	60
<u>PS</u>	Recategorization of the POS (Military period in which the veteran served in) variable	Х		61
<u>PSEUDO</u>	Pseudo-SSN indicator	Х	Χ	62
RACE	Race or national origin	Х	Х	63
RAD	Exposure to Ionizing Radiation through nuclear testing or in Japan	X	X	64
RELIG	Religious preference	Х		65
<u>SCCI</u>	Indicator of whether the condition being treated is service-connected		X	66

Name	Definition	Visit	Event	Page
<u>SCRSSN</u>	Scrambled Social Security Number	Х	Х	67
<u>SEX</u>	Sex of patient	Х	Х	68
STA3N	Parent station identifier	Х	Х	69
<u>STA5A</u>	Five-digit numeric identifier of the VA facility where care was provided	X	X	70
<u>SVCPCT</u>	Patient's percentage (from 0 to 100) of service- connected disability	X	X	71
VISN	Veterans Integrated Service Network	Х	Х	72
VIZDAY	Date of the outpatient health care encounter	Х	Х	73
ZIP	Zip code	Х	Х	74

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# **IV. Special Data Topics**

### Scrambled vs. Real Social Security Number

Beginning with FY1986, the patient identifier in the Medical SAS Datasets became an encrypted or scrambled Social Security Number (variable <u>SCRSSN</u>). (Prior to FY1986, the actual or real SSN was used.) <u>SCRSSN</u> is not a random assignment; rather, it is a consistent formula manipulation of a real SSN. That is, a given real SSN is always assigned the same <u>SCRSSN</u>, and a patient's records can be linked across years and across the Medical SAS Datasets for various types of care.

Special "cross reference" SAS datasets for a given fiscal year are available that contain real SSNs for all activity, including acute (non-extended care), extended care, observation care, non-VA care, and census data. These files can be merged with the Medical SAS Datasets to link data to real SSNs. Descriptions of the cross-reference datasets are on the NPCD VA Intranet Web site at: . VA users can make requests for access to the cross-reference datasets to the Information Security Officer (ISO) at their facility. VA does not release scrambled SSNs to non-VA researchers in response to Freedom of Information Act (FOIA) requests, in accordance with the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule.

### **Procedure and Surgery Coding**

Outpatient procedures coding utilizes the Current Procedural Terminology (CPT-4) schema developed by the American Medical Association (AMA).<sup>11</sup> This is different from inpatient diagnoses and procedures, which, since FY1980, are coded using the International Classification of Diseases Ninth Clinical Modification (ICD-9-CM). (Prior to FY1980, the ICD-8-CM coding schema was used.)<sup>12</sup>

Surgical procedures coded with CPT-4 are also collected for a national database by the National Surgical Quality Improvement Program (NSQIP). Staff nurses enter the NSQIP data using a VISTA software application that operates independently of the VISTA Surgery software package. Information about the NSQIP is available at the Web site, <u>http://nsqip.org/</u>.

#### **Veteran's Income**

The VHA Medical SAS Datasets are not a definitive source of data on patients' incomes. This issue is a good reminder that the information in the VHA Medical SAS Datasets is collected for

administrative, and not research, purposes. Administratively, the issue of patients' income is relevant to establishing eligibility for care for some veterans.

The variable <u>MEANS</u> (Means Test Indicator) might be seen as a categorical classification of incomes, but it should be examined carefully in light of the researcher's needs. For example, some veterans are eligible for mandatory care regardless of their income and, therefore, do not complete a Means Test. This group includes veterans classified as having 10% or more service-connected disability, former POWs, WWI veterans, and veterans without service-connected disability who are receiving a VA pension. When a Means Test is necessary to establish eligibility for VHA care, household income is used to classify the veteran. The income limits for eligibility categories are set each January 1, so the dollar value associated with a category ("less than ..." or "more than ...") varies by year. Information about eligibility for care is summarized at the Web site, <u>http://www.va.gov/elig</u>.

The VHA Medical SAS Datasets include a variable named <u>INCOME</u>, which is an adjusted individual annual income. Adjustments include deductions for payments by the veteran for a wide range of medical expenses. (See the one-page description of the variable <u>INCOME</u>.)

### **Longitudinal Studies**

Significant expansion of variables and file structure changes over the years in the Medical SAS Datasets for outpatient care present special challenges for longitudinal studies. When instituted, the Visit dataset contained only very basic utilization data and almost no patient demographic variables. As noted above, outpatient data were provided in four datasets until creation of the Event dataset in 1997 that combined procedure and surgery information for outpatients.

As noted above, prior to FY1986, there was no variable for Scrambled Social Security Number; the only patient identifiers were real Social Security Numbers. Prior to FY1997, outpatient datasets included no diagnostic information and only minimal procedural information (a small list of special procedures). Beginning with FY1997 data, all ICD-9-CM diagnoses and all CPT-4 procedures for 100% of the ambulatory encounters were mandated for capture (see <u>VHA</u> <u>Directive 96-057</u>, "Ambulatory Care Data Capture"). Once captured, these data elements were added or updated in the national datasets.

Some specific file structure changes are worth noting here. First, Visit datasets between FY1980–1990 contain about one record for every 5 visits. Therefore, programmers need to use the variable BLOWUP to get the true count of visits in FY1980-1990. Beginning with FY1997 data, the Procedure dataset was expanded allowing for the storage of 15 procedural codes per encounter. When the Diagnosis dataset was created, it contained 10 diagnostic variables per encounter, one primary and nine secondary diagnoses codes. Again, the Procedure and Diagnosis datasets were discontinued after FY2001 when all of the variables contained in them began appearing in the associated Event dataset.

Intranet addresses have been removed from this document. Intranet links are available on the Intranet version of this publication. For more information, please go to VIReC's Redaction Information web page: http://www.virec.research.va.gov/References/Redactions.htm

#### **Data Quality Issues**

The quality of the data in the VHA Medical SAS Datasets is a concern of researchers as well as VHA administrators. Organizationally, the VHA Information Assurance Service plays a central role in ensuring the quality of VA health care utilization data. On the VA Intranet, the service describes its mission as follows:

The Information Assurance Service fosters a collaborative environment to assure the integrity of patient data as well as data management for the National Data Systems, and the Meta Data Repository. (Construction), accessed January 8, 2003)

Components of the service are responsible for Health Information Management (coding), National Data Systems (including the VHA Medical SAS Datasets), the National Patient Care Database (from which the VHA Medical SAS Datasets are generated), and Data Quality. Researchers interested in the policies, roles, and activities of the Information Assurance Service may want to review the Service's VA Intranet Web site regularly.

Assessments of the quality of VHA data in general have been performed by the Office of Inspector General, the Medical Care Cost Recovery program, and workgroups and committees convened for this purpose. There have been few published studies of data quality by researchers focused on ambulatory care information. Kang and colleagues compared the VHA variables for Agent Orange exposure and for Period of Service with military service records at the National Personnel Records Center and reported a 45% false negative rate for the VHA data.<sup>13</sup> That report was published more than 10 years ago. In 1998, Kashner and colleagues reported that the reliability of patient demographics, use of care, and diagnoses in the VHA inpatient data was adequate for demographics, length of stay, and selected diagnoses, but less reliable for the treating bed section.<sup>14</sup> Szeto and colleagues reported results of a study at one VA clinic in 2002 in which they found comparison of computerized administrative and clinical data with medical chart information showed good agreement for the diagnoses of interest (e.g., related to hypertension).<sup>15</sup>

Changes in the VHA environment can be expected to complement efforts by the Information Assurance Service to provide impetus for data quality in the systems that are the basis for the Medical SAS Outpatient Datasets. For example, the Balanced Budget Act passed by Congress in 1997 gave authority to the Veterans Integrated Service Networks (VISNs) to retain the reimbursement funds that may be collected by local Medical Care Cost Recovery (MCCR). Prior to this legislation, reimbursement funds were directed into a central VHA repository. The ability to retain collected amounts provides incentive for the VISNs to ensure accurate documentation of care. A second environmental support for data quality is the processing of inpatient data in an electronic medical record (EMR). VA policy, consistent with the Joint Commission of the Accreditation of Healthcare Organizations (JCAHO), permits the use of electronic media for recording the legal medical record (see <u>VA Manuals of Policy M-1, Part 1,</u> <u>Chapter 5</u>). The provider interface tool that allows for the use of EMR in VHA is the Computerized Patient Record System (CPRS). CPRS represents an integrated, comprehensive suite of clinical applications that creates an electronic medical record. CPRS site implementation, which began in 1997, was completed in January 2000 with 172 sites in production. Studies have reported<sup>14</sup> and professional assessments are consistent<sup>16,17</sup> that a CPRS improves data quality.

Individual researchers will need to assess the quality of key variables in a given study. For VIReC, studies of data validity, reliability, and positive predictive value are integral to the center's core functions and are an important component of the center's strategic plan for FY2003-2007.

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# V. Variable One-Page Descriptions

(Variable description pages begin on the next page.)

Variable Name:	AGE
Definition:	Patient age in years at the time of visit
Remarks:	This variable is calculated from <b>DOB</b> (Date of patient's birth) and <b>VIZDAY</b> (Date of the outpatient health care encounter). Note that prior to FY1996, year of birth rather than date of birth was used for <b>AGE</b> calculation.

Data Type	Numeric
Print Format	None
Label	AGE
Datasets / Fiscal Years	Visit / 1980 – To Date
	Event / 1997 – To Date
VISTA Data Source	Patient (2) file, DATE OF BIRTH field
	Outpatient (409.68) Encounter file, ADMIT DATE field

Variable Name:	AGOIND
Definition:	Indicates whether the healthcare encounter was related to exposure to Agent Orange
Remarks:	For frequency counts of the values for this variable, see the accompanying VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets.

Data Type	Character
Print Format	\$XXYN.
Label	AGENT ORANGE INDICATOR
Datasets / Fiscal Years	Visit / 2002 – To Date
	Event / 2002 – To Date
VISTA Data Source	Patient (2) file, EXPOSED TO AGENT ORANGE field

**AGOIND** can assume the following values:

Value	Description
0	Not exposed to Agent Orange
1	Exposed to Agent Orange

Variable Name:	AGOLOC
Definition:	Indicates where the Agent Orange exposure occurred
Remarks:	For frequency counts of the values for this variable, see the accompanying VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets.

Data Type	Character
Print Format	\$AGOLOC.
Label	AGENT ORANGE LOCATION
Datasets / Fiscal Years	Visit / 2002 – To Date
	Event / 2002 – To Date
VISTA Data Source	Patient (2) file, AGENT ORANGE EXPOSURE
	LOCATION field

**AGOLOC** can assume the following values:

Value	Description
K	Korean Demilitarized Zone
U	Unknown
V	Vietnam Era

Variable Name:	AG8R
Definition:	Categorical recoding of <u>AGE</u> (Patient age in years at the time of visit) into 8 groupings
Remarks:	Despite what the name implies, there are actually nine categories due to the "95+" category which was added in FY1997. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	AG9RL.
Label	None
Datasets / Fiscal Years	Visit / 1980 – To Date
	Event / 1997 – To Date
VISTA Data Source	Patient (2) file, DATE OF BIRTH field
	Outpatient (409.68) Encounter file, ADMIT DATE field

**AG8R** can assume the following values:

Value	Description
1	Less than 25 years old
2	25 – 34 years old
3	35 – 44 years old
4	45 – 54 years old
5	55 – 64 years old
6	65 – 74 years old
7	75 – 84 years old
8	85 – 94 years old
9	95+ years old

Variable Name:	APPTYP
Definition:	Codes for VA appointment types for scheduling outpatient encounters
Remarks:	Appointment type relates to the eligibility under which the patient is seen.

Data Type	Character
Print Format	\$XXAPPT.
Label	APPOINTMENT TYPE CODE
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Outpatient (409.68) file, ADMISSION TYPE field

**APPTYP** can assume the following values:

Value	Description
01	Compensation & Pension
02	Class II dental
03	Organ donors
04	Employee
05	Prima facia
06	Research
07	Collateral of Veteran
08	Sharing agreement
09	Regular

Variable Name:	CL
Definition:	Primary clinic stop code
Remarks:	This represents the first three characters of the 6-character Decision Support System (DSS) Identifier VHA uses to characterize ambulatory care clinics. The last three characters of the DSS Identifier are captured in the <u>CLC</u> (Secondary clinic stop code) variable in the Event dataset. The DSS Identifiers are used to identify the production units or the revenue centers for outpatient care. For more information, see the <u>VHA Directive</u> <u>2002-041</u> . CL can assume the values shown in <u>Appendix C</u> on page 92. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The</i> <i>FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	YCLINIC.
Label	PRIMARY CLINIC STOP
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Outpatient Encounter (409.68) file, CLINIC STOP
	CODE field (reference file is CLINIC STOP (40.7))

Variable Name:	CL1 – CL15
Definition:	$1^{st} - 15^{th}$ primary clinic stop codes
Remarks:	These variables in the Visit dataset contain the same values captured in the <u>CL</u> (Primary clinic stop code) variable in the Event dataset. Up to 15 clinic stops are recorded per visit. Note that the Visit dataset does not contain secondary stop codes. <u>CL1 – CL15</u> can assume the values of <u>CL</u> shown in <u>Appendix C</u> on page 92. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	YCLINIC.
Label	CLINIC STOP NUMBER 1–15
Datasets / Fiscal Years	Visit / 1980 – To Date
VISTA Data Source	Outpatient Encounter (409.68) file, STOP CODE field
	(reference file is CLINIC STOP (40.7))

Variable Name:	CLC
Definition:	Secondary clinic stop code
Remarks:	This represents the last three characters of the Decision Support System (DSS) Identifier VHA uses to characterize ambulatory care clinics. The first three characters of the DSS Identifier are captured in the <u>CL</u> (Primary clinic stop code) variable found in the Event dataset. The secondary stop code serves as a modifier to further define the primary work group, and can represent (1) the type of services provided, (2) the type of provider or team, and (3) a specially funded program. For more information, users are referred to the <u>VHA Directive 2002-041</u> . <b>CLC</b> can assume the values shown in <u>Appendix C</u> on page 92.

Data Type	Numeric
Print Format	YCLINIC.
Label	CREDIT CLINIC STOP
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Outpatient Encounter (409.68) file, last 3 digits of STOP CODE field (reference file is CLINIC STOP (40.7))

Variable Name:	CPT1 – CPT15
Definition:	Services and procedures performed by a provider recorded in Current Procedural Terminology (CPT-4) ambulatory procedure codes
Remarks:	These codes refer to descriptive terms for reporting medical services and procedures performed by a provider for medical, surgical, and diagnostic procedures. Until FY1997, only five codes (CPT1–CPT5) were collected.

Data Type	Character
Print Format	None
Label	CPT CODES 1–15
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	File 90000010.18, PROCEDURE CODE field

Variable Name:	DOB
Definition:	Date of patient's birth
Remarks:	This variable was added in FY1997, even though it has always been a required field in VISTA.

Data Type	Numeric (SAS Date)
Print Format	DATE9. (DDMMMYYYY)
Label	DATE OF BIRTH
Datasets / Fiscal Years	Visit / 1997 – To Date
	Event / 1998 – To Date
VISTA Data Source	Patient (2) file, DATE OF BIRTH field

Variable Name:	DXF2–DXF10
Definition:	Secondary ICD-9-CM diagnostic codes for the visit
Remarks:	Most providers are documenting only the primary reason for the clinic encounter. Despite what the variable label suggests, the values for these variables are 5 characters wide and do not have an embedded dot after the first three digits.

Data Type	Character
Print Format	None
Label	$2^{\text{ND}-10^{\text{TH}}}$ DX – FULL STAY (ICD9) (6-DIGIT)
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Outpatient Encounter (409.43), fields DIAGNOSIS CODE and DIAGNOSIS PRIORITY RANKING, reference file ICD DIAGNOSIS (80)

Variable Name:	DXLSF
Definition:	Primary ICD-9-CM diagnosis code for this encounter
Remarks:	Diagnoses were not collected for encounters until FY1997. Despite what the variable label suggests, the values for these variables are 5-characters wide and do not have an embedded decimal after the first three digits.

Data Type	Character
Print Format	None
Label	PRIMARY DX – FULL STAY (ICD9) (6-DIGIT)
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Outpatient Encounter (409.43), fields DIAGNOSIS CODE and DIAGNOSIS PRIORITY RANKING, reference file ICD DIAGNOSIS (80)

Variable Name:	ELIG
Definition:	Indicates veteran and non-veteran eligibility codes
Remarks:	Veteran eligibility categories are based on the degree of service-connected disability and degree of impairment. Non-veteran eligibility codes give the non-veteran service category. For more information on the eligibility categories, see <u>http://www.va.gov/elig/Eligibility.htm</u> . For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets.</i>

Data Type	Numeric
Print Format	YELIG.
Label	ELIGIBILITY CODE
Datasets / Fiscal Years	Visit / 1980 – To Date,
	Event / 1997 – To Date
VISTA Data Source	Outpatient Encounter (409.68) file, ELIGIBILITY
	CODE field, reference file ELIGIBILITY (8) CODE

ELIG can assume the following values:

Value	Description
-1	Purple Heart
0	Service-connected 0%
1	Service-connected 50% +
2	Aid and attendance - housebound
3	Service connected 40%
4	Not service-connected, pension
5	Not service connected
6	Domiciliary patient
7	Service-connected 30%
8	Service-connected 20%
9	Service-connected 10%
10	Catastrophically disabled
11	CHAMPVA
12	Collateral (pt. associated with veteran)
13	Employee
14	Other federal
15	Allied veteran
16	Humanitarian (non-vet emergency)
17	Sharing
18	Reimbursable Insurance
19	TRICARE / CHAMPUS

Variable Name: **ENV** 

Definition: Indicates whether care received was due to exposure to some type of environmental hazard

Remarks:

Data Type	Character
Print Format	None
Label	ENVIRONMENTAL INDICATOR
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Derived from Outpatient Classification, (409.42) file,
	OUTPATIENT CLASSIFICATION TYPE field

**ENV** can assume the following values:

Value	Description
1	Yes
2	No

Variable Name:	HOMECNTY
Definition:	County of patient's residence
Remarks:	This variable is based on the Federal Information Processing Standards (FIPS) code. It contains state code in the first two columns and county code, within the state, in the last three columns. State and county codes are available from the Census Bureau. This is the state county (or equivalent) for the patient's home residence. If the patient resides in a domiciliary, that is considered the permanent residence for coding.

Data Type	Numeric
Print Format	COUNTYL.
Label	COUNTY OF RESIDENCE
Datasets / Fiscal Years	Visit / 1980 – To Date
	Event / 1997 – To Date
VISTA Data Source	Reference file: STATE (5)

Intranet addresses have been removed from this document. Intranet links are available on the Intranet version of this publication. For more information, please go to VIReC's Redaction Information web page: http://www.virec.research.va.gov/References/Redactions.htm

Variable Name:	HOMEPSA
Definition:	VHA medical center that identifies the patient's home residence
Remarks:	This variable is considered antiquated, and it should not be used. Rather, it has been recommended that primary service area be identified with the preferred facility indicator in the Enrollment Database (see VISN Support Service Center Web site on the VHA Intranet, <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Web site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intranet</b> , <b>Service Center Veb site on the VHA Intr</b>

Data Type	Numeric
Print Format	STA3NL.
Label	HOME PRIM. SVC AREA
Datasets / Fiscal Years	Visit / 1985 – To Date
	Event / 1997 – To Date
VISTA Data Source	Station Number (389.9) file, STATION NUMBER field

Variable Name:	HOMEVISN
Definition:	Veterans Integrated Service Network (VISN) associated with the veteran's primary service area
Remarks:	<b>HOMEVISN</b> assumes the values of <u>VISN</u> . For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	None
Label	VISN OF RESIDENCE
Datasets / Fiscal Years	Visit / 1995 – To Date
	Event / 1997 – To Date
VISTA Data Source	Not applicable

Variable Name:	HOMLESS
Definition:	Indicates the homeless status of the veteran
Remarks:	This variable is assigned through social work service.

Data Type	Character
Print Format	\$XXYN.
Label	HOMELESS CODE
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Social Work Case (650) file, HOMELESS INDICATOR
	field

# **HOMLESS** can assume the following values:

Value	Description
1	Yes
2	No

# Variable Name:HOMSTATEDefinition:State associated with the patient's residenceRemarks:HOMSTATE can assume the values shown in Appendix C on page 99.<br/>For frequency counts of the values for this variable, see the accompanying<br/>VIReC Research User Guide: Select Variable Frequencies From The<br/>FY2002 VHA Medical SAS Datasets.

Data Type	Numeric
Print Format	STATEL.
Label	STATE OF RESIDENCE
Datasets / Fiscal Years	Visit / 1980 – To Date
	Event / 1997 – To Date
VISTA Data Source	Patient (2) file, STATE field

Variable Name:	INCOME
Definition:	Calculation of the patient's reported income
Remarks:	<b>INCOME</b> is a calculation of all reported income minus any deductions for medical expenses. Medical expenses are those actually paid for by the eligible veteran and include fees of physicians, dentists, and other providers of health services; hospital and nursing home fees; medical insurance premiums (including the Medicare premium); drugs and medicines; eyeglasses; any other expenses that are reasonable related to medical care. <u>Current Policy</u> states that admission data will not be transmitted for patients without a Means Test on record.
	Individual income is part of the household income on which the means test is based and includes Social Security (except disability), U.S. Civil Service, U.S. Railroad Retirement, Military Retirement, Other Retirement monies, Unemployment Compensation, Employment Income, Interest, Dividends & Annuities, Workers Comp, or Black Lung. These values may differ from the annual means test that includes income from other family members.

Data Type	Numeric
Print Format	COMMA6.
Label	INCOME
Datasets / Fiscal Years	Visit / 1992 – To Date
VISTA Data Source	Individual Annual Income (408.21)

Variable Name:	INS
Definition:	Indicates the type of insurance coverage
Remarks:	This can also be used to identify veterans without insurance coverage. The VISTA database holds more than one active record for insurance coverage. At Austin, the presentation of a single value is not in agreement with this and should be considered neither complete nor accurate. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The</i> <i>FY2002 VHA Medical SAS Datasets.</i>

Data Type	Character
Print Format	\$INSUR.
Label	INSURANCE COVERAGE
Datasets / Fiscal Years	Visit / 1997 – To Date
VISTA Data Source	File 355.1, TYPE OF INSURANCE field

**INS** can assume the following values:

Value	Description
0	No insurance
1	Major medical
2	Dental
3	НМО
4	PPO
5	Medicare
6	Medicaid
7	CHAMPUS
8	Workman's comp
9	Indemnity
10	Prescription
11	Medicare supplemental
12	All other

### Variable Name: LOCVIZ

Definition: Indicates the type of setting where the health encounter occurred

Remarks:

Data Type	Numeric
Print Format	\$XLOCVIZ.
Label	LOCATION OF VISIT
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	HOSPITAL LOCATION field of the Visit (9010110)
	file)

## **LOCVIZ** can assume the following values:

Value	Description
1	Staff (Regular clinic visit)
2	Fee (Care by non-VA staff)
3	VA + Fee (Both provide care during the visit)
4	Ward (When exam was performed in an area not designated as a clinic)
5	Home-Based Health Care
6	Away from facility, other than patient residence

Variable Name:	MARITAL
Definition:	Marital status of the patient
Remarks:	Marital status is elicited from each patient when he or she first applies for medical care. Outpatient encounters that are recorded by hand may update this information. We found that ambulatory care staffs do make changes to the patient record regarding this variable. In a small comparison between the AAC data and a patient survey, we found an 82.7% agreement. <sup>18</sup> For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Character
Print Format	\$MARITAL.
Label	MARITAL STATUS
Datasets / Fiscal Years	Visit / 1997 – To Date
	Event / 1998 – To Date
VISTA Data Source	Patient (2) file, MARITAL STATUS field

**MARITAL** can assume the following values:

Value	Description
D	Divorced
М	Married
Ν	Never Married
S	Separated
U	Unknown
W	Widowed

Variable Name:	MEANS
Definition:	Means Test Indicator Code
Remarks:	The Means Test Indicator is used in determining a patient's eligibility to receive care. Based on veteran status and percent service-connected eligibility, the assigned value indicates the necessity of a means test. Veterans classified as having 10 percent or more service-connected disability, former POWs, WWI veterans, and veterans without service-connected disability who are receiving a VA pension is classified for mandatory care. They do not have to complete a Means Test. All other veteran patients (namely, the non-service-connected veterans) are required to complete an annual financial Means Test to determine a financial status against the VA thresholds that are established January 1 <sup>st</sup> of each year. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Character
Print Format	\$MEANSL.
Label	MEANS TEST INDICATOR
Datasets / Fiscal Years	Visit / 1987 – To Date
	Event / 1997 – To Date
VISTA Data Source	File 408.31, MEANS TEST INDICATOR field

**MEANS** can assume the following values:

Value	Description
AN	Category A Veteran is below the Means Test Threshold and is exempt from co-payments.
AS	Category A – Service Connected. Veteran is exempt from co- payments.
С	Category C. Veteran is above the Means Test Threshold and co- payment is required.
N	Indicates outpatient or non-veteran inpatient where Means Test not required.
X	Indicates patient where Means Test not required for care being provided.

Variable Name:	MULTI
Definition:	Indicator that the patient visited a parent station and a substation on the same day
Remarks:	The parent station identifier ( <u>STA3N</u> ) and the substation identifier ( <u>STA5A</u> ) must be different in order for this variable to have an "M" value. For example, a visit to Parent Station 589 (Kansas City) and Substation 589A7 (Wichita) on the same day would turn the <b>MULTI</b> indicator value to "M".

Data Type	Character
Print Format	\$MULTI.
Label	MULTIPLE / SINGLE STATION INDICATOR
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Not applicable

MULTI can assume the following values:

Value	Description
М	Multiple station
S	Single station

Variable Name:	NCODES
Definition:	Number of CPT-4 procedure codes ( <u>CPT1–CPT15</u> ) populated within the record
Remarks:	Up to 15 CPT-4 procedure codes can be populated per record (SAS observation).

Data Type	Numeric
Print Format	None
Label	NUMBER OF CPTS THIS SEGMENT
Datasets / Fiscal Years	Event / 1998 – To Date
VISTA Data Source	Not applicable

Variable Name:	NDIAG
Definition:	Number of ICD-9-CM diagnosis codes (DXLSF, DXF2–DXF10) populated within the record
Remarks:	Up to ten ICD-9-CM diagnoses codes can be populated per record (SAS observation).

Data Type	Numeric
Print Format	None
Label	NUMBER OF DIAG CODES
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Not applicable

Variable Name:	NODEPS
Definition:	Number of dependents for eligible veterans
Remarks:	One of the reasons for capturing this data element is that it is a factor in determining the Means Test threshold.

Data Type	Character
Print Format	None
Label	NO. OF DEPENDENTS
Datasets / Fiscal Years	Visit / 1988 – To Date
VISTA Data Source	ANNUAL MEANS (408.31) TEST file, NUMBER OF
	DEPENDENTS field

### Variable Name: NPROV

Definition: Number of provider type variables (<u>**PROV1–PROV10**</u>) populated within the record

Remarks:

Data Type	Numeric
Print Format	None
Label	NUMBER OF PROV THIS SEGMENT
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Not applicable

### Variable Name: NPROVID

Definition:Number of provider identification code variables (<a href="PROVID1">PROVID1</a>PROVID10populated within the record

Remarks:

Data Type	Numeric
Print Format	None
Label	NUMBER OF PROV IDS THIS SEGMENT
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Not applicable

Variable Name:	NSTOPS
Definition:	Number of clinic stop variables ( <u>CL1–CL15</u> ) populated within the record
Remarks:	Data are transmitted as encounters from the VISTA Outpatient Encounter (409.68) file. This variable is calculated at the AAC receiving end based on clinic stop, date and station. A problem has been noted for Community-Based Outpatient Clinics (CBOCs) where patients with encounters at the parent station and at the CBOC with the same stop code are losing records. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	None
Label	NUMBER CLINIC STOPS
Datasets / Fiscal Years	Visit / 1980 – To Date
VISTA Data Source	Not applicable

Variable Name:	NTRENC
Definition:	Indicates whether there was treatment given for nasopharyngeal radium irradiation treatment exposure
Remarks:	This variable was added to record eligibility for treatment of cancer of the head or neck associated with a veteran's receipt of nasopharyngeal radium irradiation treatments during active military, naval, or air service. (See <u>VHA Directive 1301</u> , "Ionizing Radiation Registry Program."

Data Type	Character
Print Format	\$NTRENC.
Label	NOSE THROAT RADIUM TRMT IND
Datasets / Fiscal Years	Event / 2002 – To Date
VISTA Data Source	Derived from Outpatient (409.42) file, OUTPATIENT
	CLASSIFICATION TYPE and VALUE fields.

NTRENC can assume the following values:

Value	Description
0	This health encounter not related to nose throat radium treatments
1	This health encounter related to nose throat radium treatments
(Other)	Does not claim nose throat radium treatments

Variable Name:	NTRIND
Definition:	Indicates whether the patient claimed nasopharyngeal radium irradiation treatment during active military service
Remarks:	This variable was added to record eligibility for treatment of cancer of the head or neck associated with a veteran's receipt of nasopharyngeal radium irradiation treatments during active military, naval, or air service. (See <u>VHA Directive 1301</u> , "Ionizing Radiation Registry Program.") For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Character
Print Format	\$XXYN.
Label	CLAIMED NOSE THROAT RADIUM EXP
Datasets / Fiscal Years	Visit / 2002 – To Date
VISTA Data Source	Derived from Outpatient (409.42) file, OUTPATIENT
	CLASSIFICATION TYPE and VALUE fields.

**NTRIND** can assume the following values:

Value	Description
0	No claim of nasopharyngeal radium irradiation treatment
1	Claim of nasopharyngeal radium irradiation treatment

Variable Name:	POS
Definition:	Military period in which the veteran served in
Remarks:	This variable is related to the authority under which a patient is eligible for care. This variable is a mixture of type of service (Army, Navy, etc.) if active currently, period of service (Spanish-American War to Desert Storm) if a veteran, and other codes such as workers comp, emergency, CHAMPUS, etc., which are largely for non-veterans. The latest wartime period of service is coded if more than one applies, unless patient is service connected for a condition incurred in a prior war. <b>POS</b> can assume the values found in <u>Appendix C</u> on page 102. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets.</i>

Data Type	Character
Print Format	\$XXPDSEV
Label	PERIOD OF SERVICE
Datasets / Fiscal Years	Visit / 1992 – To Date
VISTA Data Source	Patient (2) file, PERIOD OF SERVICE field

Variable Name:	POV
Definition:	Code for the purpose of the healthcare visit
Remarks:	The code with the lowest applicable number is used. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	\$XXPOV.
Label	PURPOSE OF VISIT
Datasets / Fiscal Years	Visit / 1985 – To Date
	Event / 1997 – To Date
VISTA Data Source	File 2.98, PURPOSE OF VISIT field

**POV** can assume the following values:

Value	Description
1	Physical examination for compensation and pension eligibility
2	Physical examination for establishing eligibility for VA health benefits (VA Form 10-10EZ)
3	Scheduled appointment
4	Unscheduled appointment

Variable Name:	POW
Definition:	Indicator of whether the patient was a prisoner of war
Remarks:	This field is initially entered through patient self-report, which may later be verified through the patient's military service record. The Medical SAS Inpatient Main dataset also contains POW (Prisoner of War status with name of war and location), but it is coded to indicate the name of the war and location. For frequency counts of the values for this variable, see the accompanying VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets.

Data Type	Character
Print Format	\$XXPOW
Label	PRISONER OF WAR STATUS
Datasets / Fiscal Years	Visit / 1985 – To Date
VISTA Data Source	Patient (2) file, POW STATUS INDICATED field

**POW** can assume the following values:

Value	Description
U	Unknown
0	Prisoner of war
1	Not a prisoner of war

Variable Name:	POWLOC
Definition:	Indicator of the period of service and/or location in which the veteran was a prisoner of war
Remarks:	For frequency counts of the values for this variable, see the accompanying VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets.

Data Type	Character
Print Format	\$POWLOC.
Label	PRISONER OF WAR LOCATION
Datasets / Fiscal Years	Visit / 2001 – To Date
VISTA Data Source	Patient (2) file, PRISONER OF WAR LOCATION field

**POWLOC** can assume the following values:

Value	Description
А	Persian Gulf War
В	Yugoslavia
4	World War I
5	World War II, Europe
6	World War II, Pacific
7	Korean War
8	Vietnam Era
9	Other

Variable Name:	PROV1 – PROV10
Definition:	$1^{st} - 10^{th}$ codes for the category of provider
Remarks:	The categories are defined by the Center for Medicare and Medicaid Services (CMS) and are used to categorize the area of care associated with this visit. <b>PROV1 – PROV10</b> can assume the values shown in <u>Appendix</u> <u>C</u> on page 103.

Data Type	Numeric
Print Format	XXPROV.
Label	PROVIDER TYPE 1 – 10
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Outpatient Provider (409.44) file, PROVIDER TYPE
	CODE field, reference file, PERSON (8932.1) CLASS

Variable Name:	PROVID1 – PROVID10
Definition:	$1^{\text{st}} - 10^{\text{th}}$ healthcare provider identification codes associated with this event
Remarks:	This is a concatenation of the 3-digit $\underline{STA3N}$ (Parent station identifier) variable and the provider ID code ( $\underline{PROV1 - PROV10}$ ).

Data Type	Character
Print Format	None
Label	PROVIDER ID 1 – 10
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	New Person (200) File, ROLE INSTANCE ID field

Variable Name:	PS
Definition:	Recategorization of the <b>POS</b> (Military period in which the veteran served in) variable
Remarks:	The value is related to the authority under which a patient is eligible for care. This variable is irrespective of type of service (Army, Navy, etc.) and strictly related to date values. The latest wartime period of service is coded if more than one applies, unless patient is service connected for a condition incurred in a prior war. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	PSRCDL.
Label	PERIOD OF SVC RECODE
Datasets / Fiscal Years	Visit / 1985 – To Date
VISTA Data Source	Patient (2) file, PERIOD OF SERVICE field

**PS** can assume the following values:

Value	Description
0	Spanish-American War
1	World War I
2	World War II
3	Pre-Korean War
4	Korean War
5	Post-Korean War
6	Vietnam Era
7	Post-Vietnam Era
8	Other
9	Desert Storm (active)
10	Desert Storm (veteran)

Variable Name:	PSEUDO
Definition:	Pseudo-SSN indicator
Remarks:	This variable indicates if the patient's Social Security Number (SSN) is recorded as a pseudo-Social Security Number created using numeric equivalents of the patient's initials and birth date. A pseudo-SSN is a temporary identification when the patient has no SSN or the patient's true SSN cannot be determined. The pseudo-SSN will be retained as a permanent identification number when a patient refuses to apply for a Social Security Number or death occurs before an SSN application can be made.

Data Type	Character
Print Format	None
Label	PSEUDO SSN
Datasets / Fiscal Years	Visit / 1995 – To Date
	Event / 1997 – To Date
VISTA Data Source	Patient (2) file, SOCIAL SECURITY NUMBER field

**PSEUDO** can assume the following values:

Value	Description
Р	Social Security Number recorded is a pseudo-SSN
Blank	Social Security Number recorded is not a pseudo-SSN

Variable Name:	RACE
Definition:	Race or national origin
Remarks:	Reporting of race or ethnicity is most frequently extracted from clinical documentation (e.g., discharge summary) and/or observation of administrative staff. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	RACEL.
Label	RACE CODE
Datasets / Fiscal Years	Visit / 1997 – To Date
	Event / 1998 – To Date
VISTA Data Source	Patient (2) file, RACE field and ETHNIC GROUP field

**RACE** can assume the following values:

Value	Description
1	Hispanic, white
2	Hispanic, black
3	American Indian
4	Black
5	Asian
6	White
7	Unknown value
(Other)	Missing value

Variable Name:	RAD
Definition:	Exposure to Ionizing Radiation through nuclear testing or in Japan
Remarks:	This variable was added to the dataset in July of FY1982. It is self-reported and is not recorded for non-veterans or for those veterans in service prior to WWII. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	RADL.
Label	CLAIMED RADIATION EXPOSURE
Datasets / Fiscal Years	Visit / 1983 – To Date
	Event / 1997 – To Date
VISTA Data Source	Patient (2) file, RADIATION EXPOSURE METHOD
	field

**RAD** can assume the following values:

Value	Description
1	No radiation exposure claim
2	Claim of radiation exposure in Japan
3	Claim of radiation exposure in the U.S.
4	Claim of radiation exposure in both Japan and the U.S.

Variable Name: **RELIG** 

Definition: Religious preference

Remarks:

Data Type	Character
Print Format	\$RELIG.
Label	RELIGION CODE
Datasets / Fiscal Years	Visit / 1997 – To Date
VISTA Data Source	Patient (2) file, RELIGOUS PREFERENCE field
	(reference file is RELIGION (13))

**RELIG** can assume the following values:

Value	Description
0	Catholic
1	Jewish
2	Eastern Orthodox
3	Baptist
4	Methodist
5	Lutheran
6	Presbyterian
7	United Church of Christ
8	Episcopalian
9	Adventist
10	Assembly of God
11	Brethren
12	Christian Science
13	Church of Christ
14	Church of God
15	Disciples of Christ

Value	Description
16	Evangelical Covenant
17	Friends
18	Jehovah Witness
19	Latter Day Saints
20	Islamic
21	Nazarene
22	Other
23	Pentecostal
24	Protestant, other
25	Protestant, no preference
26	Reformed
27	Salvation Army
28	Unitarian Universalist
29	Unknown, no preference
30	Native American
31	Buddhist

Variable Name: SCCI

Definition: Indicator of whether the condition being treated is service-connected

Remarks:

Data Type	Character
Print Format	\$SCCI.
Label	SVC-CON CONDITION INDICATOR
Datasets / Fiscal Years	Event / 1997 – To Date
VISTA Data Source	Derived from Outpatient (409.42) file, OUTPATIENT
	CLASSIFICATION TYPE field

**SCCI** can assume the following values:

Value	Description
Blank	Not applicable
0	Treatment not related to service-connected condition
1	Treatment related to service-connected condition

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, <b>SCRSSN</b> may be used to identify a patient across fiscal years and datasets.

Data Type	Numeric
Print Format	SSN11. (NNN-NN-NNNN)
Label	SCRAMBLED SOCIAL SECURITY NUMBER
Datasets / Fiscal Years	Visit / 1996 – To Date
	Event / 1997 – To Date
	(Note: Real SSN was listed 1980–85)
VISTA Data Source	None (formula manipulation of Patient (2) file real SSN)

Variable Name:	SEX
Definition:	Sex of patient
Remarks:	For frequency counts of the values for this variable, see the accompanying VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets.

Data Type	Character
Print Format	\$SEXL.
Label	GENDER OF PATIENT
Datasets / Fiscal Years	Visit / 1985 – To Date
	Event / 1997 – To Date
VISTA Data Source	Patient (2) file, SEX field

**SEX** can assume the following values:

Value	Description
F	Female
М	Male

Variable Name:	STA3N
Definition:	Parent station identifier
Remarks:	This is the 3-digit numeric identification of VAMC facilities. This variable indicates the parent station (VA hospital) or the parent station of a branch at which the patient was treated. Use <u>STA5A</u> to identify the actual facility at which the patient was treated. If a patient was treated at a VAMC facility, this variable and <u>STA5A</u> will have the same values. <b>STA3N</b> can assume the values shown in <u>Appendix C</u> on page 120. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Numeric
Print Format	STA3NL.
Label	PARENT STATION
Datasets / Fiscal Years	Visit / 1991 – To Date
	Event / 1997 – To Date
VISTA Data Source	Station Number (389.9) file, STATION NUMBER field

Intranet addresses have been removed from this document. Intranet links are available on the Intranet version of this publication. For more information, please go to VIReC's Redaction Information web page: http://www.virec.research.va.gov/References/Redactions.htm

Variable Name: **STA5A** 

Definition: Five-digit numeric identifier of the VA facility where care was provided

Remarks: This variable identifies the VA substation where the outpatient health encounter occurred. Since this variable can takes as many as 1,100 distinct values, they are not listed in this document. Instead, users are referred to the VA Site Tracking (VAST) database, maintained by the Planning Systems Support Group (PSSG) of the Office of Policy and Planning, at State Tracking (VAST) of the Office of Policy and Planning, at State Tracking (Vast). For frequency counts of the values for this variable, see the accompanying *VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets*.

Data Type	Character
Print Format	\$STA52AL.
Label	STATION WITH SUFFIX
Datasets / Fiscal Years	Visit / 1991 – To Date
	Event / 1997 – To Date
VISTA Data Source	Station Number (389.9) file, SERVICING FACILITY
	field

Variable Name:	SVCPCT
Definition:	Patient's percentage (from 0 to 100) of service-connected disability
Remarks:	The value recorded in this variable is the percentage of service-connected disability determined as part of establishing a veteran's eligibility for VA health care benefits. This variable does not indicate whether or not a veteran has any service-connected disability, because a veteran may have a service-connected disability and be recorded as 0% service-connected in this variable. For frequency counts of the values for this variable, see the accompanying <i>VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets</i> .

Data Type	Number
Print Format	None
Label	PERCENT OF SERVICE CONNECTED
Datasets / Fiscal Years	Visit / 1997 – To Date
	Event / 2000 – To Date
VISTA Data Source	Patient (2) file, SERVICE CONNECTED
	PERCENTAGE field

Variable Name:	VISN
Definition:	Veterans Integrated Service Network (VISN) where the outpatient visit or event occurred
Remarks:	VISNs are VHA organizational business units comprised of multiple medical centers and clinics within a geographic region. For frequency counts of the values for this variable, see the accompanying resource guide, VIReC Research User Guide: Select Variable Frequencies From The FY2002 VHA Medical SAS Datasets.

Data Type	Numeric
Print Format	None
Label	VETS INTEGRATED SERVICE NETWORK
Datasets / Fiscal Years	Visit / 1995 – To Date
	Event / 1997 – To Date
VISTA Data Source	Derived from 389.9 File, SERVICING FACILITY field

**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 outpatient health care encounter

Remarks:

Data Type	Numeric (SAS Date)
Print Format	DATE9. (DDMMMYYYY)
Label	DATE OF VISIT
Datasets / Fiscal Years	Visit / 1991 – To Date
	Event / 1997 – To Date
VISTA Data Source	Outpatient Encounter (409.68), Date/Time of event field

Variable Name:	ZIP
Definition:	Zip code
Remarks:	This variable is the 5-digit postal code for the patient's home residence.

Data Type	Numeric
Print Format	Z5.
Label	ZIP CODE
Datasets / Fiscal Years	Visit / 1980 – To Date
	Event / 1997 – To Date
VISTA Data Source	Patient (2) file, ZIP CODE field

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# **Appendix A: Comprehensive Listing of the Variables in the Medical SAS Outpatient Datasets**

(The listing begins on the next page.)

Variable	Label	Fiscal Years	Bytes	Type*	Format
AGE	AGE	1980–	2	N	
AGE15R	AGE GROUP (15 GROUPS)	1981-82	2	N	AGE15R
ACE 16D		1983–84	2	N	XAGE16R
AGE 16R	AGE GROUP (16 GROUPS)	1980-82	8	N	AGE11GR
AGOIND	AGENT ORANGE INDICATOR	2002 -	1	C	\$XXYN
AGOLOC	AGENT ORANGE LOCATION	2002 -	1	С	\$AGOLOC
		1997–	2	N	AG9RL
AG8R	AGE GROUP (8 GROUPS)	1991–96	2	N	AG8RL
	-	1980–90	2	N	AG8RL5
AMBSURG	AMBULATORY SURGURY	1985–88	1	С	\$XXSPSVC
AOR	CLAIMED AGENT ORANGE	1983–84	2	N	AORL
AUSBLO	AUSTIN INFLATION	1985–85	8	N	
AUSBLOW	AUSTIN BLOWUP FACTOR	1983–84	8	N	
BLOWUP	INFLATION FACTOR	1981–91	8	N	
CATSCAN	CAT SCAN	1985–88	8	N	\$XXSPSVC
CATVIZ	CATEGORY OF VISIT	1980–84	2	N	XCATVIZ
CHEMO	CANCER CHEMO	1985–88	1	C	\$XXSPSVC
		1988–	3	N	YCLINIC
	CUNIC STOD NUMBER 1 15	1986–87	3	N	XXCLINIC
CL1 – CL15	CLINIC STOP NUMBER 1-15	1980-84	3	N	XCLINIC
		1980–84	2	N	XCLINIC
DOB	DATE OF BIRTH	1997–	4	N	DATE9
DIP	DISPOSITION AT	1980–84	2	N	XDIP
DISTRICT	MEDICAL DISTRICT	1980–90	2	Ν	

## VISIT (SF) variables from FY1980 – FY2002

Variable	Label	Fiscal Years	Bytes	Type*	Format
		1990–	2	N	YELIG
ELIG	ELIGIBILITY CODE	1985–89	2	N	XXELIG
		1980–84	2	N	XELIG
ELIGR	ELIGIBILITY RECORD	1980–84	2	N	XELIGR
HOMECNTY	HOME COUNTY	1980–	4	N	COUNTYL
HOMEDIST	HOME DISTRICT	1985	2	N	
HOMEDIST	HOME DISTRICT	1987–91	2	N	
		1994–	3	N	STA3NL
HOMEPSA	HOME PRIM. SVC. AREA	1992–93	4	N	STA3NL15
		1987–91	8	N	STA3NL
HOMEVISN	VISN OF HOME RESIDENCE	1995–	2	N	
HOMREGDV	HOME REGIONAL DIVISION	1992–95	2	N	REGIONL
		1994–	2	N	STATEL
HOMSTATE	HOME STATE	1980–93	2	N	STATEL16
INCOME	ANNUAL INCOME	1992–	8	N	COMMA6
INS	INSURANCE COVERAGE	1997–	2	С	\$INSUR
LOCVIZ	LOCATION OF VISIT	1989–95	2	N	XLOCVIZ
MARITAL	MARITAL STATUS	1997–	1	С	\$MARITAL
MEANS	MEANS TEST INDICATOR	1987–	2	С	\$MEANSL
MV	MONTH OF VISIT	1980–84	2	N	MONTHL
NMRSCAN	NMR SCAN	1985–88	1	С	\$XXSPSVC
NCPT	NATIONAL CPT INDICATOR	1993–96	1	С	
NODEPS	NO. OF DEPENDENTS	1988–	2	С	
NPROC	NO. OF PROCEDURE SEGMENTS	1990–96	2	N	
NSTOPS	NUMBER CLINIC STOPS	1980–	3	N	

Variable	Label	Fiscal Years	Bytes	Type*	Format
NTRIND	CLAIMED NOSE THROAT RADIUM EXP	2002-	1	С	\$XXYN
OD	OLD DISTRICT	1985–90	2	N	
OR	OLD REGION	1985–90	2	N	
ODNC	AGENT ORANGE EXPOSURE	1998–01	1	С	ORNGL.
ORNG	(CLAIMED)	1985–97	1	С	\$\$XXYN
POS	PERIOD OF SERVICE	1997–	1	С	\$XXPDSEV
PUS	PERIOD OF SERVICE	1992–96	1	С	\$ZPS
POV	PURPOSE OF VISIT	1985–	1	C	\$XXPOV
POW	PRISONER OF WAR	1985–	1	С	\$XXPOW
POWLOC	PRISONER OF WAR LOCATION	2001-	1	С	\$POWLOC
DC		1997–	1	Ν	PSRCDL
PS	PERIOD OF SERVICE RECODE	1980–96	1	Ν	XPS
PSEUDO	PSEUDO SSN	1995–	1	С	\$YESNO
PSYCH	PSYCH CLINIC	1980–84	2	Ν	XPSYCH
RACE	RACE CODE	1997–	2	Ν	RACEL
RAD	CLAIMED RADIATION EXPOSURE	1983–	2	Ν	RADL
RADTHER	RADIATION THERAPY	1985–88	1	С	\$XXSPSVC
RAOADMIT	ADMIT. FOR AG. ORANGE OR RADIATION	1984–96	2	N	XRAOAMIT.
RAOTREAT	TREAT. FOR AG. ORANGE OR RADIATION	1984–96	2	N	XRAOTRET
REGDIV	REGIONAL DIVISION	1991–94	2	Ν	REGIONL
REGION	MEDICAL REGION	1980–95	2	N	REGIONL
RELIG	RELIGION CODE	1997–	3	С	\$RELIG
SCRSSN	SCRAMBLED SSN	1986–	5	N	SSN11
SC1	SC STATUS (WITHOUT TRAUMA)	1980–84	2	N	XSC
SC2	SC STATUS (WITH TRAUMA)	1980–84	2	N	XSC

Variable	Label	Fiscal Years	Bytes	Type*	Format
SEX	SEX	1985–	1	C	\$SEXL
SSN	SOCIAL SECURITY NUMBER	1980–85	5	N	SSN
STABLOUP	STATION INFLATION	1985–85	8	N	
STA3N	PARENT STATION	1980–	3	N	STA3NL
STA4A	STATION (PRE FY 1991)	1980–91	4	С	\$STA4AL
STA5A	STATION	1991–	5	С	\$STA52AL
SVCPCT	PERCENT OF SERVICE CONNECTED	1997–	2	Ν	
TRANSFUL	BLOOD TRANSFUSION	1985–88	1	С	\$XXSPXVC
TREAT	TREATMENT VISIT	1980–84	2	Ν	XTREAT
VIET	VIETNAM SERVICE	1985–96	1	С	\$XXYN
UPDMON	DATE RECORD LAST UPDATED	1995–96	8	N	
VISN	VETS INTEGRATED SERVICE NETWORK	1995–	8	N	
VIZDAY	DATE OF VISIT	1997–	4	N	DATE9
VIZDAT	DATE OF VISIT	1980–96	4	N	DATE7
YOB	YEAR OF BIRTH	1980–96	3	N	
YV	YEAR OF VISIT	1980–84	2	N	
ZIP	ZIP CODE	1986–	5	С	
LIT		1980–85	4	N	

\* N = Numeric; C = Character

Variable	Label	Fiscal Years	Bytes	Гуре*	Format
AGE	AGE IN YEARS	1997–	8	Ν	
AGOIND	AGENT ORANGE INDICATOR	2002 -	1	С	\$XXYN
AGOLOC	AGENT ORANGE LOCATION	2002 -	1	С	\$AGOLOC
AG8R	AGE GROUP (9 GROUPS)	1997–	8	Ν	AG9RL
APPTYP	APPOINTMENT TYPE CODE	1997–	2	С	\$XXAPPT
CL	PRIMARY CLINIC STOP	1997–	3	Ν	YCLINIC
CLC	CREDIT CLINIC STOP	1997–	3	Ν	YCLINIC
CPT1–CPT15	CPT-4 CODE 1-15	1997–	5	С	
DOB	DATE OF BIRTH (SASDATE)	1997–	4	N	DATE9
DXF2–DXF10	2 <sup>ND</sup> – 10 <sup>TH</sup> DX-FULL STAY (ICD9) (6- DIGIT)	1997–	6	С	
DXLSF	PRIMARY DX STAY (ICD9) (6-DIGIT)	1997–	6	С	
ELIG	ELIGIBILITY CODE	1997–	2	Ν	YELIG
ENV	ENVIRONMENTAL INDICATOR	1997–	1	С	
HOMECNTY	STATE/COUNTY OF RESIDENCE	1997–	4	N	COUNTYL
HOMEPSA	PRIMARY SERVICE AREA	1997–	3	Ν	STA3NL
HOMEVISN	VISN OF RESIDENCE	1997–	2	Ν	
HOMLESS	HOMELESS CODE	1997–	1	С	\$XXYN
HOMSTATE	STATE OF RESIDENCE	1997–	8	Ν	STATEL
LOCVIZ	LOCATION OF VISIT	1997–	2	Ν	XLOCVIZ
MARITAL	MARITAL STATUS	1997–	1	С	\$MARITA L
MEANS	MEANS TEST INDICATOR	1997–	2	С	\$MEANSL
MULTI	MULTIPLE/SINGLE STATION INDICATOR	1997–	1	С	\$MULTI
NCODES	NUMBER OF CPT CODES THIS SEGMENT	1997–	2	N	
NDIAG	NUMBER OF DIAG CODES	1997–	8	N	
NPROV	NUMBER OF PROV THIS SEGMENT	1997–	2	N	
NPROVID	NUMBER OF PROV IDS THIS SEGMENT	1997–	8	N	

## **EVENT (SE)** variables from FY1997 – FY2002

Variable	Label	Fiscal Years	Bytes	Гуре*	Format
NTRENC	NOSE THROAT RADIUM TRMT IND	2002-	1	С	\$NTRENC
ORNG	AGENT ORANGE EXPOSURE (CLAIMED)	1997–	1	С	\$ORNGL
POV	PURPOSE OF VISIT	1997–	1	С	\$XXPOV
PROV1– PROV10	PROVIDER TYPE 1 – PROVIDER TYPE 10	1997–	4	Ν	XXPROV.
PROVID1– PROVID10	PROVIDER ID 1 – PROVIDER 10	1997–	18	С	
PSEUDO	PSEUDO SSN	1997–	1	С	\$YESNO
RACE	RACE CODE	1997–	2	N	RACEL
RAD	CLAIMED RADIATION EXPOSURE	1997–	2	Ν	RADL
SCCI	SVC-CON CONDITION INDICATOR	1997–	1	С	\$SCCI
SCRSSN	SCRAMBLED SSN	1997–	5	N	SSN11
SEX	SEX	1997–	1	С	
STA3N	PARENT STATION	1997–	3	N	STA3NL
STA5A	STATION NUMBER	1997–	5	С	STA52AL
VISN	VETS INTEGRATED SERVICE NETWORK	1997–	2	N	
VIZDAY	DATE OF VISIT	1997–	4	Ν	DATE9
ZIP	ZIP CODE	1997–	4	N	

\* N = Numeric; C = Character

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## Appendix B: Comprehensive Listing of All Historic Datasets

(The listing begins on the next page.)

## VISIT (SF) DATASETS from FY1980 – FY2002

Dataset Name	Fiscal Years	Effective Area	Comment
MDPPRD.MDP.SAS.SFyy	1991–To Date	National	Enter (0) behind yy signifies a request for the most current version when requesting the current fiscal year
MDPPRD.MDP.SAS.SFyy.QTRn	Current Year	National	These datasets store information on a fiscal year quarterly basis (n=1– 4).
MDPPRRD.MDP.SAS.REVISED.SFyy	1997–To Date	National	Revised dataset
MDPPRD.MDP.STAFF.Syy	1980–1985	National	20% sample
MDPPRD.MDP.SAS.OPC.FYyy.F	1986–1990	National	
MDPPRD.MDP.SAS.OPC.FYyyRxF	1986–1990	Regional	Enter region number in x. There were 4 regions between FY 1986 –90
MDPPRD.MDP.SAS.SFyyRn	1991–1995	Regional	There were 7 regions between FY 1991–95
MEDPRD.MDP.SAS.SfyyRnd	1991–1995	Regional Division	There were up to 4 divisions per region between FY 1991–95

## EVENT (SE) DATASETS from FY1997 – FY2002

Dataset Name	Fiscal Years	Effective Area	Comment
MDPPRD.MDP.SAS.SEyy	1997–To Date	National	This file was stored on tape but is now on DASD (disk) starting in FY 2000.
MDPPRD.MDP.SAS.SEyy.QTRn	Current Year	National	These datasets store information on a fiscal year quarterly basis (n=1-4).
MDPPRRD.MDP.SAS.REVISED.SEyy	1997–To Date	National	Revised dataset

Dataset Name	Fiscal Years	Effective Area	Comment
MDPPRD.MDP.SAS.SCyy	1990–2001	National	Enter (0) behind yy signifies a request for the most current version when requesting the current fiscal year
MDPPRD.MDP.SAS.OPC.SCyyRr	1991–2001	Regional	There were 7 regions between FY91-FY95
MEDPRD.MDP.SAS.SCyyRnd	1991–1995	Regional Division	There were up to 4 divisions per region between FY91-FY95
MDPPRD.MDP.SAS.OPC.CP90F	1990	National	

## PROCEDURE (SC) DATASETS from FY1990 – FY 2002

## **DIAGNOSIS (SG) DATASETS** from FY1997 – FY 2002

Dataset Name	Fiscal Year(s)	Effective Area	Comment
MDPPRD.MDP.SAS.SGyy	1997–2001	National	Enter (0) behind yy to signify a request for the most current version when requesting the current fiscal year

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# **Appendix C: Values for Selected Variables**

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

Value	Description
101†	Emergency unit
102	Admit/screening
103	Telephone triage
104	Pulmonary function
105	X-ray
106	Electroencephalogram or electroencephalograph (EEG)
107	Electrocardiogram or electrocardiograph (EKG)
107	107473 – Echocardiogram
108	Laboratory
109	Nuclear medicine
115	Ultrasound
116	Respiratory therapy
110	116329 – respiratory therapy procedures
	Nursing
117	117473 – Purified Protein Derivative (PPD) (Tuberculosis) clinic
	117710 – Flu shot
118	Home treatment services
119	Community nursing home follow-up
120	Health screening
121	Residential care – non mental health
122	Public health nursing
123	Nutrition/dietetics – individual
124	Nutrition/dietetics – group
125	Social work service
126	Evoked potential
127	Topographical brain mapping
128	Prolonged video-EEG monitoring
144	Radionuclide therapy
145	Pharmacology/physiologic nuclear myocardial perfusion studies
146	Positron emission tomography (PET)
147	Telephone/ancillary
	147209 – Telephone visual impairment services team (VIST)
148	Telephone/diagnostic
149	Radiation therapy treatment
150	Computerized tomography (CT)
151	Magnetic resonance imaging (MRI)
152	Angiogram catheterization
153	Interventional radiography
160	Clinical pharmacy
165	Bereavement Counseling
166	Chaplain service – individual
167	Chaplain service – group

 ${\rm CL}$  can assume the following values:

Value	Description
168	Chaplain service – collateral
169	Telephone/chaplain
170	Home based primary care (HBPC) – physician
171	HBPC – RN/RNP/PA
172	HBPC – nurse extender
173	HBPC – social worker
174	HBPC – therapist 174202 – HBPC – Recreation therapy 174205 – HBPC – Physical therapy 174206 – HBPC – Occupational therapy
175	HBPC – dietician
176	HBPC – clinical pharmacist
177	HBPC – other 177201 – HBPC – Physical Medicine & rehabilitation service (PM&RS) 177210 – HBPC – Spinal cord injury
178	HBPC – Telephone
179	Tele-home care technology unit
180	Dental
181	Telephone/dental
190	Adult day health care
201	Physical Medicine & rehabilitation service (PM&RS)
202	Recreation therapy service
203	Audiology
204	Speech pathology
205	Physical therapy
206	Occupational therapy
207	PM&RS incentive therapy
208	PM&RS compensated work therapy (CWT) 208466 – Domiciliary (DOM) CWT
209	VIST coordinator 209125 – VIST coordinator by social worker
210	Spinal cord injury (SCI) 210414 – SCI – cystouro 210468 – SCI – RN procedure
211	Amputation follow-up clinic
212	EMG – Electromyogram
213	PM&RS vocational assistance 213466 – Veterans education/training DOM
214	Kinesiotherapy
215	SCI home care program
216	Telephone rehabilitation (REHAB) and support 216203 – Telephone audiology REHAB support service 216204 – Telephone speech REHAB support service 216210 – Spinal cord injury telephone support

Value	Description
217	Blind REHAB outpatient specialist (BROS)
290	Observation medicine
291	Observation surgery
292	Observation psychiatry
293	Observation neurology
294	Observation blind REHAB
295	Observation spinal cord
296	Observation rehabilitation
301	General internal medicine
302	Allergy immunology
303	Cardiology 303201 – Cardiac REHAB
304	Dermatology 304416 – Dermatology photo therapy
305	Endocrinology/metabolism (except diabetes)
306	Diabetes 306117 – Diabetes education
307	Gastroenterology 307117 – Enterostomal clinic 307454 – Liver
308	Hematology
309	Hypertension
310	Infectious disease
311	Pacemaker
312	Pulmonary/chest
313	Renal/nephrology 313457 – Transplant
314	Rheumatology/arthritis
315	Neurology 315456 – Epilepsy 315469 – Movement disorder 315470 – Sleep disorder
316	Oncology/tumor 316419 – Radiology prescription (with oncology medicine service) 316329 – Oncology/tumor procedures
317	Coumadin clinic
318	Geriatric clinic
319	Geriatric evaluation and management (GEM) clinic
320	Alzheimer's and dementia clinic
321	Gastrointestinal endoscopy
322	Women's clinic
323	Primary care/medicine
324	Telephone/medicine
325	Telephone/neurology

Value	Description
326	Telephone/geriatrics
327	Physician (MD) perform invasive operating room procedure (Medical service)
328	Medical surgical day unit (MSDU)
329	Medical procedure unit
330	Chemotherapy procedures unit medicine
331	Pre-bed care – physician (MD) (Medical service)
332	Pre-bed care – RN (Medical service)
333	Cardiac catheterization
334	Cardiac stress test/exercise tolerance test (ETT)
350	Geriatric primary care
401	General surgery
402	Cardiac surgery
403	Ear, nose, and throat (ENT)
404	Gynecology
405	Hand surgery
406	Neurosurgery
407	Ophthalmology
408	Optometry
409	Orthopedics
410	Plastic surgery
	410210 – SCI plastic
411	Podiatry
412	Proctology
413	Thoracic surgery
	Urology
414	414451 – Impotency
	414473 - Urodynamics
415	Vascular surgery
41.6	415461 – Aneurysm detection and management (ADAM) clinic
416	Ambulatory surgery evaluation by non-MD
	Prosthetic, orthotics: evaluation, fitting, and/or measuring
	417201 – Major med 417451 – Wheel chair
417	417451 - wheel chair 417452 - Cushion
417	417452 – Cushion 417455 – Shoe/brace
	417473 – Orthotic lab
	417474 – Prosthetics lab
418	Amputation clinic
419	Anesthesia pre-operation and/or post-operation consultation
420	Pain clinic
421	Vascular laboratory
422	Cast clinic
423	Prosthetic supply ordering services
424	Telephone/surgery
<b></b> - <b>---</b>	receptions of Surgery

Value	Description
425	Telephone/prosthetics/orthotics
426	Women's surgery
428	Telephone/optometry
429	Outpatient care in the operating room
430	Cysto room unit for outpatient
431	Chemotherapy procedures unit – surgery
432	Pre-bed care MD (surgical service)
433	Pre-bed care RN (surgical service)
435	Surgical procedure unit
450†	Compensation and pension exam
451†	Special DSS credit pair – locally defined
452†	Special DSS credit pair – locally defined
453 <sup>+</sup>	Special DSS credit pair – locally defined
454†	Special registry 5
455 <sup>†</sup>	Special DSS credit pair – locally defined
456†	Special registry 6
457†	Transplant
458†	Special registry 7
459 <sup>+</sup>	Special registry 8
460†	Special DSS credit pair – locally defined
461†	Special registry 1
462†	Special DSS credit pair – locally defined
463†	Special DSS credit pair – locally defined
464†	Special DSS credit pair – locally defined
465†	Special DSS credit pair – locally defined
466†	Special DSS credit pair – locally defined
467†	Special DSS credit pair – locally defined
468†	Special DSS credit pair – locally defined
469†	Special registry 2
470†	Special registry 3
471†	Special DSS credit pair – locally defined
472†	Special DSS credit pair – locally defined
473†	Special DSS credit pair – locally defined
474†	Research
475†	Special DSS credit pair – locally defined
476†	Special DSS credit pair – locally defined
477†	Special DSS credit pair – locally defined
478†	Special DSS credit pair – locally defined
479†	Special DSS credit pair – locally defined
480†	Comprehensive fundoscopy examination. Primarily to be used with 301, 305,
	306, 323, 350, 407, and 408 (i.e., for patients with diabetes or hypertension).

Value	Description
481†	Bronchoscopy
	429481 – Outpatient bronchoscopy done by Surgery in the operating room
	312481 – Outpatient bronchoscopy done in the Pulmonary area
	327481 – Outpatient bronchoscopy done by Medicine in the operating room
	329481 – Outpatient bronchoscopy done in the Medical Procedure Unit
	435481 – Outpatient bronchoscopy done in "Lumps and Bumps" Surgery
	Procedure unit
482†	Special DSS credit pair – locally defined
483†	Special DSS credit pair – locally defined
484†	Special DSS credit pair – locally defined
485†	Special DSS credit pair – locally defined
502	Mental health clinic – individual
503	Mental health residential care – individual
505	Day treatment – individual
506	Day hospital – individual
509	Psychiatry MD – individual
	Psychology – individual
510	510473 – Neuro psychology lab
	510474 – Psychology research
510	510509 – Psychology – psychiatry
512	Psychiatry consultation
512	Substance abuse – individual
513	513461 – Individual substance abuse: alcohol dependence
514	513469 – Individual substance abuse: drug dependence Substance abuse – home visit
514	Post-Traumatic stress disorder (PTSD) – group
516	516726 – PTSD DOM – aftercare group
519	Substance use disorder/PTSD teams
520	Long-term enhancement – individual
520	Long-term enhancement – group
	Department of Housing and Urban Development (HUD)-VA shared housing
522	(VASH)
523	Opioid substitution
524	Active duty sex trauma
525	Women's stress disorder treatment teams
	Telephone/general psychiatry
527	527564 – Telephone mental health team case management
528	Telephone/homeless mentally ill (HMI)
529	Health Care for Homeless Veterans (HCHV)/HMI
530	Telephone/HUD-VASH
531	Mental health primary care team – individual
532	Psychosocial rehabilitation – individual
533	Mental health biomedical care – individual
535	Mental health vocational assistance – individual

Value	Description
536	Telephone/mental health vocational assistance
537	Telephone/psychosocial rehabilitation
538	Psychological testing
540	Post-Traumatic Stress Disorder (PTSD) clinical team (PCT)
542	Telephone/Post-Traumatic Stress Disorder (PTSD)
	Telephone/substance abuse
545	545461 – Telephone/substance abuse – alcohol dependance
	545469 – Telephone/substance abuse – drug dependance
546	Telephone/Mental Health Intensive Case Management (MHICM)
	Intensive substance abuse treatment
547	547461 – Intensive substance abuse treatment – alcohol dependance
	547469 – Intensive substance abuse treatment – drug dependance
550	Mental health clinic – group
552	Mental Health Intensive Case Management (MHICM)
553	Day treatment – group
554	Day hospital – group
557	Psychiatry – group
558	Psychology – group
559	Psychosocial rehabilitation – group
	Substance abuse – group
560	560461 – Group Substance abuse – alcohol dependance
	560469 – Group Substance abuse – drug dependance
561	Post-Traumatic Stress Disorder Clinical Team (PCT) – group
562	Post-Traumatic Stress Disorder (PTSD) – individual
563	Mental health primary care team – group
564	Mental health team case management
565	Mental Health Medical Care Only – group
566	Mental Health Risk Factor Reduction Education Group
573	Mental health incentive therapy – group
574	Mental health compensated work therapy – group
575	Mental health vocational assistance – group
576	Psychogeriatric clinic, individual
577	Psychogeriatric clinic, group
578	Psychogeriatric day program
579	Telephone / psychogeriatrics
580	Post-Traumatic Stress Disorder (PTSD) day hospital
581	Post-Traumatic Stress Disorder (PTSD) day treatment
589	Non-active duty sex trauma
590	Community outreach homeless veterans by staff
602	Chronic assisted hemodialysis treatment
603	Limited self-care hemodialysis treatment
604	Home/self hemodialysis training treatment
606	Chronic assisted peritoneal dialysis
607	Limited self-care peritoneal dialysis

Value	Description
608	Home/self peritoneal dialysis training
610	Contract dialysis
611	Telephone/dialysis
650	Contract nursing home days
656	Department of Defense Non-VA care
670	Assisted living Veterans Health Administration – Paid staff
680	Home/community healthcare assessment
681	VA-paid home/community healthcare providers
682	VA referrals to home/community healthcare providers
690 <sup>+</sup>	Telemedicine
701 <sup>+</sup>	Hypertension screening
702†	Cholesterol screening
703†	Mammogram
702†	Pap test
705 <sup>+</sup>	FOBT-guaiac screening
706 <sup>+</sup>	Alcohol screening
707†	Smoking cessation
708†	Nutrition
709†	Physical fitness/exercise counseling
710 <sup>+</sup>	Influenza immunization
711†	Injury counsel/seat belt usage
712†	Hepatitis C registry patient
725	Domiciliary outreach services
726	Domiciliary aftercare – community
727	Domiciliary aftercare – VA
728	Domiciliary admission screening services
729	Telephone/domiciliary
730	Domiciliary – general care (Event Capture System [ECS] use only)
731	Prrtp general care
801	In-VISN other VAMC 2-103
902	CAT scan
903	Radiation therapy
904	Chemotherapy
905	Ambulatory surgery services
906	Blood/blood products trans
999	Employee health

<sup>\*</sup> Most codes in the table can be used for both primary and secondary clinic stops. However, some (marked with a <sup>†</sup>) are to be used only for the secondary clinic stops and some are to be used only in pairs. All primary and secondary clinic stop code pairs are listed under the description of the appropriate code (e.g., 107473 under 107).

Value	Description
1	Alabama
2	Alaska
4	Arizona
5	Arkansas
6	California
8	Colorado
9	Connecticut
10	Delaware
11	Washington, DC
12	Florida
13	Georgia
15	Hawaii
16	Idaho
17	Illinois
18	Indiana
19	Iowa
20	Kansas
21	Kentucky
22	Louisiana
23	Maine
24	Maryland
25	Massachusetts
26	Michigan
27	Minnesota
28	Mississippi
29	Missouri
30	Montana
31	Nebraska
32	Nevada
33	New Hampshire
34	New Jersey
35	New Mexico
36	New York
37	North Carolina
38	North Dakota
39	Ohio
40	Oklahoma
41	Oregon
42	Pennsylvania
44	Rhode Island
45	South Carolina

**HOMSTATE** can assume the following values:

Value	Description
46	South Dakota
47	Tennessee
48	Texas
49	Utah
50	Vermont
51	Virginia
53	Washington
54	West Virginia
55	Wisconsin
56	Wyoming
58	Alberta
59	British Columbia
60	US Samoa
61	Manitoba
62	New Brunswick
63	Newfoundland
65	Nova Scotia
66	Guam
71	Midway Islands
72	Puerto Rico
73	Northwest Territories
74	US Minor Outlying Islands
75	Ontario
76	US Caribbean
77	Prince Edward Is
78	Virgin Islands
80	Quebec
82	Saskatchewan
83	Yukon Territory
85	AF Amer-Exc CAN
87	AF, EUR, ME, CAN
88	AF Pacific
90	Foreign Country
91	Canada & Mexico
93	Europe
96	Philippines
99	Unknown

Value	Description
А	Army, active duty
В	Navy or Marine, active duty
С	Air Force, active duty
D	Coast Guard, active duty
E	Retired from uniformed forces
F	Medical remedial enlistee
G	Merchant seamen, U.S. Public Health Service
Н	Other U.S. Public Health Service Beneficiaries
Ι	Observation examination
J	Office of workers compensation
K	Job Corps or Peace Corps
L	Railroad retirement
М	Foreign government beneficiaries
Ν	Humanitarian (non-veteran)
0	CHAMPUS restore
Р	Other reimbursement (non-veteran)
Q	Other federal dependant
R	Donors (non-veteran)
S	Special studies (non-veteran)
Т	Other (non-veteran)
U	CHAMPVA, spouse or child
V	CHAMPUS
W	Czechoslovakia or Poland
Х	Persian Gulf War
Y	CAV / NPS
Z	Merchant Marine
0	Korean War
1	World War I
2	World War II
3	Spanish-American War
4	Pre-Korean War
5	Post-Korean War
6	Operation Desert Shield
7	Vietnam Era
8	Post-Vietnam Era
9	Other or none

**POS** can assume the following values:

Value	Description
010000	Behavioral health and social services
010100	Behavioral health and social services; social worker; clinical
010200	Behavioral health and social services; counselor
010201	Behavioral health and social services; counselor; addiction (substance use
	disorder)
010202	Behavioral health and social services; marriage & family therapist
010203	Behavioral health and social services; counselor; mental health
010204	Behavioral health and social services; counselor; pastoral
010205	Behavioral health and social services; counselor; professional
010206	Behavioral health and social services; counselor; school
010300	Behavioral health and social services; psychoanalyst
010301	Behavioral health and social services; psychoanalyst; affiliate
010302	Behavioral health and social services; psychoanalyst; associate
010400	Behavioral health and social services; psychologist
010401	Behavioral health and social services; psychologist; behavioral
010402	Behavioral health and social services; neuropsychologist; clinical
010403	Behavioral health and social services; psychologist; clinical
010404	Behavioral health and social services; psychologist; counseling
010405	Behavioral health and social services; psychologist; family
010406	Behavioral health and social services; psychologist; forensic
010407	Behavioral health and social services; psychologist; health
010408	Behavioral health and social services; psychologist; school
010409	Behavioral health and social services; psychologist; addiction (substance use
	disorder)
010410	Behavioral health and social services; psychologist; adult development &
	aging
010411	Behavioral health and social services; psychologist; child, youth & family
010412	Behavioral health and social services; psychologist; educational
010413	Behavioral health and social services; psychologist; exercise & sports
010415	Behavioral health and social services; psychologist; mental retardation &
	developmental disability
010416	Behavioral health and social services; psychologist; psychotherapy
010418	Behavioral health and social services; psychologist; rehabilitation
010419	Behavioral health and social services; psychologist; women
010500	Behavioral health and social services; social worker; school
010600	Behavioral health and social services; social worker
020200	Chiropractor; chiropractor; neurology
030000	Dental services
030100	Dental services; dental assistant
030200	Dental services; dental hygienist
030300	Dental services; dental resident
030400	Dental services; dental laboratory technician

**PROV1 – PROV10** can assume the following values:

Value	Description
030500	Dental services; dentist
030501	Dental services; dentist; endodontics
030502	Dental services; dentist
030503	Dental services; dentist; surgery, oral & maxillofacial
030504	Dental services; dentist; surgery, oral & maxillofacial
030505	Dental services; dentist; orthodontics
030506	Dental services; dentist; pediatrics dentistry (pedodontics)
030507	Dental services; dentist; periodontics
030508	Dental services; dentist; prosthodontics
030509	Dental services; dentist; dental public health
040000	Dietary and nutritional services
040100	Dietary and nutritional services; dietary manager; dietary management
040200	Dietary and nutritional services; dietary and nutritional services; dietetic,
	technician
040300	Dietary and nutritional services; nutritionist
040301	Dietary and nutritional services; nutritionist; nutrition education
040400	Dietary and nutritional services; dietary and nutritional services; dietician,
	registered
040401	Dietary and nutritional services; dietitian, registered; nutrition, metabolic
040402	Dietary and nutritional services; dietitian, registered; nutrition, pediatric
040403	Dietary and nutritional services; dietitian, registered; nutrition, renal
050100	Emergency medical services; emergency medical technician, basic
050200	Emergency medical services; emergency medical technician, intermediate
060000	Eye and vision services
060100	Eye and vision services; technician/technologist; contact lens fitter
060200	Eye and vision services; technician/technologist; contact lens
060300	Eye and vision services; technician/technologist; ocularist
060400	Eye and vision services; technician/technologist; ophthalmic medical
0.60 7.00	assistant
060500	Eye and vision services; technician/technologist; ophthalmic
060600	Eye and vision services; technician/technologist; optician
060700	Eye and vision services; optometric assistant/technician
060701	Eye and vision services; technician/technologist; optometric assistant
060702	Eye and vision services; technician/technologist; optometric technician
060800	Eye and vision services; optometrist
060802	Eye and vision services; optometrist; low vision
060803	Eye and vision services; optometrist; occupational vision
060804	Eye and vision services; optometrist; pediatric
060806	Eye and vision services; optometrist; vision therapy
060900	Eye and vision services; technician/technologist; orthoptist
070000	Nursing services
070101	Nursing services; registered nurse; psychiatric/mental health, adult
070105	Nursing services; clinical specialist; medical
070200	Nursing services; nurse anesthetist (CRNA)

Value	Description
070300	Nursing services; nurse massage therapist (NMT)
070500	Nursing services; nurse practitioner
070501	Nursing services; nurse practitioner; adult nurse practitioner
070502	Nursing services; nurse practitioner; family nurse practitioner
070503	Nursing services; nurse practitioner; gerontological nurse practitioner
070600	Nursing services; registered nurse; administrator
070800	Nursing services; other nursing services (non-RN's)
070802	Nursing services; other nursing services (non-RN's); graduate nurse
070804	Nursing services; licensed practical nurse
070805	Nursing services; licensed vocational nurse
070806	Nursing services; other nursing services (non-RN's); nurses aide
070900	Nursing services; registered nurse
070901	Nursing services; registered nurse; addiction (substance use disorder)
070902	Nursing services; registered nurse; post
070903	Nursing services; registered nurse; women health care, ambulatory
070904	Nursing services; registered nurse; cardiac rehabilitation
070905	Nursing services; registered nurse; case management
070906	Nursing services; registered nurse; college health
070907	Nursing services; registered nurse; community health
070908	Nursing services; registered nurse; continence care
070909	Nursing services; registered nurse; critical care medicine
070910	Nursing services; registered nurse; diabetes educator
070911	Nursing services; registered nurse; emergency
070912	Nursing services; registered nurse; enterstomal therapy
070914	Nursing services; registered nurse; gastroenterology
070915	Nursing services; registered nurse; general practice
070916	Nursing services; registered nurse; gerontology
070917	Nursing services; registered nurse; hemodialysis
070919	Nursing services; registered nurse; home health
070920	Nursing services; registered nurse; hospice
070921	Nursing services; registered nurse; infection control
070923	Nursing services; registered nurse; intravenous therapy
070924	Nursing services; registered nurse; lactation consultant
070926	Nursing services; registered nurse; maternal newborn
070927	Nursing services; registered nurse; medical
070928	Nursing services; registered nurse; neonatal intensive care
070929	Nursing services; registered nurse; nephrology
070930	Nursing services; registered nurse; neuroscience
070931	Nursing services; registered nurse; continuing education/staff development
070932	Nursing services; registered nurse; nutrition support
070933	Nursing services; registered nurse; occupational health
070934	Nursing services; registered nurse; oncology
070935	Nursing services; registered nurse; operating room
070936	Nursing services; registered nurse; ophthalmic

Value	Description
070937	Nursing services; registered nurse; orthopaedic
070938	Nursing services; registered nurse; ostimopaedie
070939	Nursing services; registered nurse; otorhinolaryngology & head
070939	Nursing services; registered nurse; pain management
070944	Nursing services; registered nurse; dialysis, peritoneal
070945	Nursing services; registered nurse; surgery, plastic
070946	Nursing services; registered nurse; post
070947	Nursing services; registered nurse; psychiatric/mental health
070948	Nursing services; registered nurse; rehabilitation
070949	Nursing services; registered nurse; reproductive endocrinology/infertility
070950	Nursing services; registered nurse; school
070951	Nursing services; registered nurse; urology
070952	Nursing services; registered nurse; wound care
080000	Other services
080100	Other services; acupuncturist
080200	Other services; driver
080201	Other services; driver; paid driver
080500	Other services; contractor; home modifications
080700	Other services; homeopath
081000	Other services; midwife, lay (non-nurse)
081100	Other services; naturopath
081300	Other services; other (as specified)
081800	Other services; legal medicine
081900	Other services; specialist
081903	Other services; specialist; research data abstracter/coder
081904	Other services; specialist; research study
081905	Other services; specialist; prosthetics case management
082001	Other services; veterinarian; medical research
090000	Pharmacy services
090100	Pharmacy services; pharmacist
090101	Pharmacy services; pharmacist; general practice
090102	Pharmacy services; pharmacist; nuclear pharmacy
090103	Pharmacy services; pharmacist; nutrition support
090104	Pharmacy services; pharmacist; phamacotherapy
090105	Pharmacy services; pharmacist; psychopharmacy
090200	Pharmacy services; technician; pharmacy
100000	Physician assistants & advanced practice nursing; physician assistant
100100	Physician assistants & advanced practice nursing; physician assistant;
	medical
100200	Physician assistants & advanced practice nursing; physician assistant; surgical
100300	Physician assistants & advanced practice nursing; clinical nurse specialist
100301	Physician assistants & advanced practice nursing; clinical nurse specialist;
	adult care

Value 100302	Description
	Physician assistants & advanced practice nursing; clinical nurse specialist; adult health
	Physician assistants & advanced practice nursing; clinical nurse specialist; chronic care
	Physician assistants & advanced practice nursing; clinical nurse specialist; community health/public health
	Physician assistants & advanced practice nursing; clinical nurse specialist; critical care medicine
	Physician assistants & advanced practice nursing; clinical nurse specialist; emergency
	Physician assistants & advanced practice nursing; clinical nurse specialist; family health
	Physician assistants & advanced practice nursing; clinical nurse specialist; gerontology
	Physician assistants & advanced practice nursing; clinical nurse specialist; home health
	Physician assistants & advanced practice nursing; clinical nurse specialist; informatics
	Physician assistants & advanced practice nursing; clinical nurse specialist; long-term care
	Physician assistants & advanced practice nursing; clinical nurse specialist; medical
	Physician assistants & advanced practice nursing; clinical nurse specialist; neuroscience
	Physician assistants & advanced practice nursing; clinical nurse specialist; oncology
	Physician assistants & advanced practice nursing; clinical nurse specialist; pediatrics
	Physician assistants & advanced practice nursing; clinical nurse specialist; perioperative
	Physician assistants & advanced practice nursing; clinical nurse specialist; psychiatric/mental health
100325	Physician assistants & advanced practice nursing; clinical nurse specialist; psychiatric/mental health, adult
	Physician assistants & advanced practice nursing; clinical nurse specialist; psychiatric/mental health child & adult
	Physician assistants & advanced practice nursing; clinical nurse specialist; psychiatric/mental health, child & adult
100328	Physician assistants & advanced practice nursing; clinical nurse specialist; psychiatric/mental health, chronic illness
100329	Physician assistants & advanced practice nursing; clinical nurse specialist; psychiatric/mental health, communi
100330	Physician assistants & advanced practice nursing; clinical nurse specialist; psychiatric/mental health, geropsy

Value	Description
100331	Physician assistants & advanced practice nursing; clinical nurse specialist;
	rehabilitation
100333	Physician assistants & advanced practice nursing; clinical nurse specialist;
	school
100335	Physician assistants & advanced practice nursing; clinical nurse specialist;
	women's health
100400	Physician assistants & advanced practice nursing; midwife, certified
100500	Physician assistants & advanced practice nursing; nurse anesthetist, certified
100 600	registered
100600	Physician assistants & advanced practice nursing; nurse practitioner
100601	Physician assistants & advanced practice nursing; nurse practitioner; acute
100600	
100602	Physician assistants & advanced practice nursing; nurse practitioner; adult health
100603	Physician assistants & advanced practice nursing; nurse practitioner;
100005	community health
100604	Physician assistants & advanced practice nursing; nurse practitioner; critical
100001	care medicine
100605	Physician assistants & advanced practice nursing; nurse practitioner; family
100606	Physician assistants & advanced practice nursing; nurse practitioner;
	gerontology
100607	Physician assistants & advanced practice nursing; nurse practitioner; neonatal
100608	Physician assistants & advanced practice nursing; nurse practitioner;
	neonatal; critical care
100609	Physician assistants & advanced practice nursing; nurse practitioner;
	obstetrics & gynecology
100610	Physician assistants & advanced practice nursing; nurse practitioner;
100 (10	occupational health
100612	Physician assistants & advanced practice nursing; nurse practitioner;
100612	pediatrics: acute care
100613	Physician assistants & advanced practice nursing; nurse practitioner; pediatrics: critical care
100614	Physician assistants & advanced practice nursing; nurse practitioner;
100014	perinatal
100615	Physician assistants & advanced practice nursing; nurse practitioner; primary
100015	care
100616	Physician assistants & advanced practice nursing; nurse practitioner;
100010	psychiatric/mental health
100617	Physician assistants & advanced practice nursing; nurse practitioner; school
100618	Physician assistants & advanced practice nursing; nurse practitioner;
	women's health
110000	Physicians (MD and DO); physician/osteopath
110100	Physicians (MD and DO); physician/osteopath; addiction medicine
110200	Physicians (MD and DO); physician/osteopath; allergy

Value	Description	
110300	Physicians (MD and DO); physician/osteopath; allergy & immunology	
110301	Physicians (MD and DO); physician/osteopath; immunology, cli & lab,	
	allergy & immunology	
110400	Physicians (MD and DO); physician/osteopath; anesthesiology	
110401	Physicians (MD and DO); physician/osteopath; critical care medicine;	
	anesthesia	
110500	Physicians (MD and DO); physician/osteopath; body imaging	
110600	Physicians (MD and DO); physician/osteopath; cardiology	
110700	Physicians (MD and DO); physician/osteopath; dermatology	
110701	Physicians (MD and DO); physician/osteopath; immunology, clin & lab	
	dermatological	
110702	Physicians (MD and DO); physician/osteopath; dermatopathology;	
	dermatology	
110800	Physicians (MD and DO); physician/osteopath; emergency medicine	
110801	Physicians (MD and DO); physician/osteopath; toxicology, medical;	
	emergency medicine	
110803	Physicians (MD and DO); physician/osteopath; sports medicine; emergency	
	medicine	
110900	Physicians (MD and DO); physician/osteopath; family practice	
110901	Physicians (MD and DO); physician/osteopath; geriatric medicine; family	
11000	practice	
110902	Physicians (MD and DO); physician/osteopath; sports medicine; family	
111000	practice	
111000	Physicians (MD and DO); physician/osteopath; general practice	
111100		
111200	practice	
111200 111300	Physicians (MD and DO); physician/osteopath; hematology & oncology	
111300	Physicians (MD) and osteopaths (DO); intern, allopathic	
	Physicians (MD) and osteopaths (DO); intern, osteopathic	
111500	Physicians (MD and DO); physician/osteopath; internal medicine	
111501	Physicians (MD and DO); physician/osteopath; adolescent medicine; internal medicine	
111502	Physicians (MD and DO); physician/osteopath; cardiac electrophysiology	
111502	Physicians (MD and DO); physician/osteopath; cardiovascular disease	
111503	Physicians (MD and DO); physician/osteopath; cardiovascular disease	
111304	internal medicine	
111505	Physicians (MD and DO); physician/osteopath; critical care medicine;	
111505	internal medicine	
111506	Physicians (MD and DO); physician/osteopath; endocrinology, diabetes and	
111500	metabolism	
111507	Physicians (MD and DO); physician/osteopath; gastroenterology	
111508	Physicians (MD and DO); physician/osteopath; geriatric medicine; internal	
111000	medicine	
L		

Value	Description	
111509	Physicians (MD and DO); physician/osteopath; hematology; internal	
	medicine	
111510	Physicians (MD and DO); physician/osteopath; infectious disease	
111511	Physicians (MD and DO); physician/osteopath; oncology, medicine	
111512	Physicians (MD and DO); physician/osteopath; nephrology	
111513	Physicians (MD and DO); physician/osteopath; pulmonary disease	
111514	Physicians (MD and DO); physician/osteopath; pulmonary medicine	
111515	Physicians (MD and DO); physician/osteopath; rheumatology	
111516	Physicians (MD and DO); physician/osteopath; sports medicine; internal	
	medicine	
111520	Physicians (MD and DO); physician/osteopath; internal medicine; peripheral	
	vascular	
111600	Physicians (MD and DO); physician/osteopath; laboratory medicine	
111800	Physicians (MD and DO); physician/osteopath; medical diseases of the chest	
111900	Physicians (MD and DO); physician/osteopath; genetics, medical	
111903	Physicians (MD and DO); physician/osteopath; cylogenetics, clinical	
111904	Physicians (MD and DO); physician/osteopath; genetics, clinical (MD)	
111905	Physicians (MD and DO); physician/osteopath; genetics, clinical molecular	
112100	Physicians (MD and DO); physician/osteopath; neurology	
112200		
112300	Physicians (MD and DO); physician/osteopath; neuroradiology	
112400	Physicians (MD and DO); physician/osteopath; nuclear cardiology	
112500	Physicians (MD and DO); physician/osteopath; nuclear imaging & therapy	
112600	Physicians (MD and DO); physician/osteopath; nuclear medicine	
112601	601 Physicians (MD and DO); physician/osteopath; nuclear medicine, in vivo	
	vitro	
112800	Physicians (MD and DO); physician/osteopath; obstetrics	
112900	Physicians (MD and DO); physician/osteopath; obstetrics & gynecology	
112901	Physicians (MD and DO); physician/osteopath; critical care medicine; ob/gyn	
112902	Physicians (MD and DO); physician/osteopath; oncology, gynecologic	
112903	Physicians (MD and DO); physician/osteopath; maternal and fetal medicine	
112904	Physicians (MD and DO); physician/osteopath; endocrinology, reproductive	
113000	0 Physicians (MD and DO); physician/osteopath; ophthalmology	
113100	Physicians (MD and DO); physician/osteopath	
113200	Physicians (MD and DO); physician/osteopath; osteopathic manipulative	
	medicine, special proficiency	
113300	Physicians (MD and DO); physician/osteopath; otolaryngology	
113301	Physicians (MD and DO); physician/osteopath; otology/neurotology	
113302	Physicians (MD and DO); physician/osteopath; pediatric otolaryngology	
113400	Physicians (MD and DO); physician/osteopath; otology	
113500	Physicians (MD and DO); physician/osteopath; otorhinolaryngology	
113600	Physicians (MD and DO); physician/osteopath; surgery, otorhinolaryngology	
	& facial plastic surgery	
113700	Physicians (MD and DO); physician/osteopath; pathology	

Value	Description
113701	Physicians (MD and DO); physician/osteopath; pathology, anatomic &
	clinical
113702	Physicians (MD and DO); physician/osteopath; pathology, anatomic
113703	Physicians (MD and DO); physician/osteopath; pathology, anatomic &
	laboratory medicine
113704	Physicians (MD and DO); physician/osteopath; blood banking/transfusion
	medicine
113705	Physicians (MD and DO); physician/osteopath; pathology, chemical
113706	Physicians (MD and DO); physician/osteopath; pathology, clinical
113707	Physicians (MD and DO); physician/osteopath; cytopathology
113708	Physicians (MD and DO); physician/osteopath; dermatopathology
113709	Physicians (MD and DO); physician/osteopath; forensic pathology
113710	Physicians (MD and DO); physician/osteopath; hematology: pathology
113711	Physicians (MD and DO); physician/osteopath; immunopathology
113712	Physicians (MD and DO); physician/osteopath; medical microbiology
113713	Physicians (MD and DO); physician/osteopath; neuropathology
114000	Physicians (MD and DO); physician/osteopath; pediatric neurology
114100	Physicians (MD and DO); physician/osteopath; psychiatry, pediatric
114200	Physicians (MD and DO); physician/osteopath; pediatric
114205	Physicians (MD and DO); physician/osteopath; pediatric cardiology
114207	Physicians (MD and DO); physician/osteopath; pediatric emergency
	medicine
114210	Physicians (MD and DO); physician/osteopath; pediatric hematology and
	oncology
114212	Physicians (MD and DO); physician/osteopath; pediatric nephrology
114216	Physicians (MD and DO); physician/osteopath; sports medicine: pediatrics
114300	Physicians (MD and DO); physician/osteopath; pediatric radiology
114400	Physicians (MD and DO); physician/osteopath; pharmacology, clinical
114500	Physicians (MD and DO); physician/osteopath; physical medicine &
11100	rehabilitation
114600	Physicians (MD and DO); physician/osteopath; preventive medicine, general
114601	Physicians (MD and DO); physician/osteopath; aerospace medicine;
114600	preventive medicine
114602	Physicians (MD and DO); physician/osteopath; toxicology, medical;
114602	preventive medicine Physicians (MD and DO): physician (actoon the accurational medicine)
114603	Physicians (MD and DO); physician/osteopath; occupational medicine; preventive medicine
11/60/	A
114604 114605	Physicians (MD and DO); physician/osteopath; occupational medicine Physicians (MD and DO); physician/osteopath; public health and general
114003	preventive medicine
114800	Physicians (MD and DO); physician/osteopath; psychiatry & neurology
114800	Physicians (MD and DO); physician/osteopath; psychiatry addiction
114801	Physicians (MD and DO); physician/osteopath; psychiatry addiction Physicians (MD and DO); physician/osteopath; psychiatry child & adolescent
114802	Physicians (MD and DO); physician/osteopath; psychiatry clinic & adolescent Physicians (MD and DO); physician/osteopath; neurophysiology clinical
114003	i nysicians (wib and bo), physician/osicopani, neurophysiology chilical

Value	Description	
114804	Physicians (MD and DO); physician/osteopath; forensic psychiatry	
114805	Physicians (MD and DO); physician/osteopath; psychiatry geriatric	
114806	Physicians (MD) and osteopaths (DO); psychiatry and neurology; neurology	
114808		
114900	Physicians (MD and DO); physician/osteopath; psychiatry, child	
115000	Physicians (MD) and osteopaths (DO); psychoanalysis	
115100	Physicians (MD and DO); physician/osteopath; radiation therapy	
115200	Physicians (MD and DO); physician/osteopath; pathology, radioisotopic	
115300	Physicians (MD and DO); physician/osteopath; radiology	
115301	Physicians (MD and DO); physician/osteopath; radiology, diagnostic	
115302	Physicians (MD and DO); physician/osteopath; nuclear radiology	
115304	Physicians (MD and DO); physician/osteopath; radiation oncology	
115305	Physicians (MD and DO); physician/osteopath; radiological physics	
115306	Physicians (MD) and osteopaths (DO); radiology; radiology	
115307	Physicians (MD and DO); physician/osteopath; radiology, vascular &	
	interventional	
115400	Physicians (MD and DO); physician/osteopath; rehabilitation medicine	
115500	Physicians (MD) and osteopaths (DO); resident, allopathic	
115600	Physicians (MD) and osteopaths (DO); resident, osteopathic	
115700		
115701		
115702	Physicians (MD) and osteopaths (DO); surgery; oncology	
115704	Physicians (MD and DO); physician/osteopath; surgery, hand	
115705	Physicians (MD and DO); physician/osteopath; surgical critical care; surgery	
115800		
115900	Physicians (MD and DO); physician/osteopath; surgery, colon & rectal	
	surgery	
116000	Physicians (MD and DO); physician/osteopath; dermatology micrographic	
116100	surgery	
116100	Physicians (MD and DO); physician/osteopath; surgery, general	
	Physicians (MD and DO); physician/osteopath; surgery, head & neck	
116300	Physicians (MD) and osteopaths (DO); surgery, maxillofacial	
116400	Physicians (MD and DO); physician/osteopath; surgery, neurological	
116500	Physicians (MD and DO); physician/osteopath; surgery, obstetric &	
116600	gynecologic Physicians (MD and DO): physician (actoon the summery orthogodia	
116600	Physicians (MD and DO); physician/osteopath; surgery, orthopedic	
116700	Physicians (MD and DO); physician/osteopath; surgery, orthopedic, adult reconstructive	
116800	Physicians (MD and DO); physician/osteopath; surgery, hand; orthopedic	
110000	surgery	
116900	Physicians (MD and DO); physician/osteopath; surgery, orthopedic,	
110700	musculoskeletal oncology	
117000	Physicians (MD and DO); physician/osteopath; surgery, orthopedic, pediatric	
117100		
	100 1 r hysteranis (1112 and 120), physician oscopani, surgery, ormopeute, spine	

Value	Description	
117400	Physicians (MD and DO); physician/osteopath; surgery, plastic	
117401	Physicians (MD and DO); physician/osteopath; surgery, hand; plastic surgery	
117500	Physicians (MD and DO); physician/osteopath; surgery, plastic &	
	reconstructive	
117700	Physicians (MD and DO); physician/osteopath; surgery, thoracic	
117800	0 Physicians (MD and DO); physician/osteopath; surgery, thoracic	
	cardiovascular	
117900	Physicians (MD and DO); physician/osteopath; surgery, traumatic	
118000	Physicians (MD and DO); physician/osteopath; surgery, urological	
118100	Physicians (MD and DO); physician/osteopath; ultrasound, diagnostic	
118200	Physicians (MD and DO); physician/osteopath; urology	
118302	Physicians (MD and DO); physician/osteopath; adolescent medicine; family	
	practitioner	
118304	Physicians (MD and DO); physician/osteopath; allergy & immunology;	
	internal medicine	
118307	Physicians (MD and DO); physician/osteopath; age specific, greater than 1	
	year old	
118310	Physicians (MD and DO); physician/osteopath; cardiac electrophysiology,	
	clinical	
118313	Physicians (MD and DO); physician/osteopath; endocrinology	
118314	Physicians (MD and DO); physician/osteopath; geriatric medicine	
118315	Physicians (MD and DO); physician/osteopath; gynecology	
118316	Physicians (MD and DO); physician/osteopath; hematology	
118318	Physicians (MD and DO); physician/osteopath; immunology, dermatological	
118325	Physicians (MD and DO); physician/osteopath; pain medicine	
118326	Physicians (MD and DO); physician/osteopath; radiology, angiography &	
	interventional	
118327	Physicians (MD and DO); physician/osteopath; radiology, therapeutic	
118331	Physicians (MD and DO); physician/osteopath; roentgenology, diagnostic	
118337	Physicians (MD and DO); physician/osteopath; occupational medicine	
118339	Physicians (MD and DO); physician/osteopath; otorhinolaryngology & head	
118340	Physicians (MD and DO); physician/osteopath; otorhinolaryngology & head	
120000	Podiatric medicine and surgery	
120100	Podiatric medicine and surgery services; assistant, podiatric	
120200	Podiatric medicine and surgery services; podiatrist	
120202	Podiatric medicine and surgery; podiatrist; foot and ankle	
	orthopaedics/biomechnics	
120204	Podiatric medicine and surgery services; podiatrist; surgery, foot & ankle	
120205		
120206		
120208	Podiatric medicine and surgery; podiatrist; podiatric orthopedics	
120209	Podiatric medicine and surgery services; podiatrist; primary podiatric medicine	
130000	Respiratory, rehabilitative and restorative s	

Value	Description
130100	Respiratory, rehabilitative and restorative services; occupational therapist
130101	Respiratory, rehabilitative and restorative services; occupational therapist assistant
130102	Respiratory, rehabilitative and restorative services; occupational therapist; hand
130103	Respiratory, rehabilitative and restorative services; occupational therapist; registered occupational therapist
130104	Respiratory, rehabilitative and restorative services; occupational therapist; case management
130105	Respiratory, rehabilitative and restorative services; occupational therapist; ergonomics
130106	Respiratory, rehabilitative and restorative services; occupational therapist; human factors
130107	Respiratory, rehabilitative and restorative services; occupational therapist; neurorehabilitation
130109	Respiratory, rehabilitative and restorative services; occupational therapist; rehabilitation, driver
130200	Respiratory, rehabilitative and restorative services; other
130201	Respiratory, rehabilitative and restorative services; art therapist
130202	Respiratory, rehabilitative and restorative services; specialist/technologist; athletic trainer
130204	Respiratory, rehabilitative and restorative services; massage therapist
130205	Respiratory, rehabilitative and restorative services; music therapist
130206	Respiratory, rehabilitative and restorative services; specialist/technologist; rehabilitation, blind
130207	Respiratory, rehabilitative and restorative services; orthotics/prosthetics fitter
130208	Respiratory, rehabilitative and restorative services; other; orthotist
130209	Respiratory, rehabilitative and restorative services; recreation therapist
130210	Respiratory, rehabilitative and restorative services; other; rehabilitation coordinator
130212	Respiratory, rehabilitative and restorative services; other; vocational specialist
130213	Respiratory, rehabilitative and restorative services; orthotist
130214	Respiratory, rehabilitative and restorative services; prosthetist
130300	Respiratory, rehabilitative and restorative services; physical therapist
130301	Respiratory, rehabilitative and restorative services; physical therapist; cardiopulmonary
130302	Respiratory, rehabilitative and restorative services; physical therapist; electrophysiology, clinical
130303	Respiratory, rehabilitative and restorative services; physical therapist; geriatric
130304	Respiratory, rehabilitative and restorative services; physical therapist; hand
130305	Respiratory, rehabilitative and restorative services; physical therapist; neurology

Description	
Respiratory, rehabilitative and restorative services; physical therapist;	
rthopaedic	
espiratory, rehabilitative and restorative services; physical therapist;	
ediatrics	
espiratory, rehabilitative and restorative services; physical therapist	
ssistant	
espiratory, rehabilitative and restorative services; physical therapist; sports	
espiratory, rehabilitative and restorative services; physical therapist; case	
nanagement	
espiratory, rehabilitative and restorative services; physical therapist;	
rgonomics	
espiratory, rehabilitative and restorative services; rehabilitation practitioner	
espiratory, rehabilitative and restorative services; rehabilitation counselor	
espiratory, rehabilitative and restorative services; rehabilitation practitioner;	
ehabilitation intern	
espiratory, rehabilitative and restorative services; rehabilitation counselor;	
ssistive technology practitioner	
espiratory, rehabilitative and restorative services; rehabilitation counselor;	
ssistive technology supplier	
espiratory, rehabilitative and restorative services; respiratory care	
ractitioner; certified respiratory therapy technologist	
espiratory, rehabilitative and restorative services; respiratory care	
ractitioner; inhalation therapist	
espiratory, rehabilitative and restorative services; pulmonary function	
echnologist	
espiratory, rehabilitative and restorative services; respiratory care	
ractitioner; registered respiratory therapist	
espiratory, rehabilitative and restorative services; respiratory therapist	
espiratory, rehabilitative and restorative services; respiratory therapist; erinatal	
espiratory, rehabilitative and restorative services; respiratory therapist	
espiratory, rehabilitative and restorative services; kinesiotherapist	
peech, language and hearing services	
peech, language and hearing services; audiologist	
peech, language and hearing services; audiologist; assistive technology	
ractitioner	
peech, language and hearing services; audiologist; assistive technology	
upplier	
peech, language and hearing services; audiologist	
peech, language and hearing services; hearing instrument specialist	
peech, language and hearing services; speech and hearing therapist	
peech, language and hearing services; speech	
peech, language and hearing services; specialist/technologist;	
peech/language assistant	

Value	Description
140701	Speech, language and hearing services; specialist/technologist; audiology
	assistant
150000	Technologists, technicians & other technical
150100	Technologists, technicians & other technical; clinical pathology
150104	Technologists, technicians & other technical; specialist/technologist,
	pathology; laboratory management, diplomate
150105	Technologists, technicians & other technical; specialist/technologist,
	pathology; hemapheresis practitioner
150106	Technologists, technicians & other technical; technician, pathology; histology
150107	Technologists, technicians & other technical; specialist/technologist,
	pathology; histology
150108	Technologists, technicians & other technical; technician, pathology; medical
150100	laboratory
150109	Technologists, technicians & other technical; specialist/technologist,
150110	pathology; medical technologist
150110	Technologists, technicians & other technical; technician, pathology;
150111	phlebotomy Technologists, technicians & other technical; specialist/technologist,
130111	pathology; blood banking
150112	Technologists, technicians & other technical; specialist/technologist,
150112	pathology; chemistry
150113	Technologists, technicians & other technical; specialist/technologist,
100110	pathology; cytotechnology
150114	Technologists, technicians & other technical; specialist/technologist,
	pathology; hematology
150115	Technologists, technicians & other technical; specialist/technologist,
	pathology; microbiology
150119	Technologists, technicians & other technical; specialist/technologist,
	pathology; immunology
150200	Technologists, technicians & other technical; clinical services
150201	Technologists, technicians & other technical; specialist/technologist,
	pathology; biomedical engineering
150202	Technologists, technicians & other technical; technician, other; biomedical
150000	engineering
150203	Technologists, technicians & other technical; specialist/technologist,
150204	cardiology; cardiovascular: invasive technology
150204	Technologists, technicians & other technical; specialist/technologist, cardiology; cardiology
150205	Technologists, technicians & other technical; specialist/technologist,
150205	cardiology; cardiopulmonary
150206	Technologists, technicians & other technical; clinical services; cardiothoracic
100200	technician
150207	Technologists, technicians & other technical; specialist/technologist,
	cardiology; perfusionist

Value	Description	
150208	Technologists, technicians & other technical; technician, cardiology; ECG	
150209	Technologists, technicians & other technical; technician, other; EEG	
150210	Technologists, technicians & other technical; specialist/technologist, other;	
	EEG	
150211	Technologists, technicians & other technical; specialist/technologist, other;	
	electroneurodiagnostic	
150212	Technologists, technicians & other technical; specialist/technologist, other;	
	graphics methods	
150214	Technologists, technicians & other technical; specialist/technologist, other;	
	geneticist, medical (PhD)	
150215	Technologists, technicians & other technical; clinical services; pulmonary	
	clinician	
150216	Technologists, technicians & other technical; technician, other; renal dialysis	
150218	Technologists, technicians & other technical; specialist/technologist, other;	
	surgical	
150219	Technologists, technicians & other technical; clinical services; ultrasound	
	technologist	
150220	Technologists, technicians & other technical; clinical services	
150221	Technologists, technicians & other technical; clinical services	
150300	Technologists, technicians & other technical; radiologic sciences	
150301	Technologists, technicians & other technical; radiologic technologist;	
150501	cardiovascular	
150302	Technologists, technicians & other technical; radiologic sciences; computed	
100002	tomography technologist	
150303	Technologists, technicians & other technical; technician, other; darkroom	
150304		
120201	cardiology; sonography, diagnostic cardiac	
150305	Technologists, technicians & other technical; radiologic sciences; diagnostic	
150505	imaging operation tech	
150306	Technologists, technicians & other technical; radiologic technologist;	
150500	sonography, diagnostic medical	
150307	Technologists, technicians & other technical; radiologic sciences; magnetic	
150507	resonance technologist	
150308	Technologists, technicians & other technical; radiologic technologist;	
150508	mammography; radiography	
150310	Technologists, technicians & other technical; radiologic technologist; nuclear	
130310	medicine technology	
150311		
130311	Technologists, technicians & other technical; radiologic technologist;	
150212	radiation physicist	
150312	Technologists, technicians & other technical; radiologic technologist;	
150212	radiation therapy	
150313	Technologists, technicians & other technical; radiologic technologist;	
	radiographer	

Value	Description
150314	Technologists, technicians & other technical; radiologic sciences; radiologic
	technician
150315	Technologists, technicians & other technical; radiologic sciences; radiologic
	technologist
150316	Technologists, technicians & other technical; radiologic technologist;
	dosimetrist, medical
150319	Technologists, technicians & other technical; radiologic technologist;
	computed tomography: radiography
150320	Technologists, technicians & other technical; radiologic technologist;
	magnetic resonance imaging (MRI):r
150321	Technologists, technicians & other technical; radiologic technologist;
	magnetic resonance imaging (MRI):r
150323	Technologists, technicians & other technical; radiologic technologist; quality
	management; radiographer
150324	Technologists, technicians & other technical; radiologic technologist
150403	Technologists, technicians & other technical; specialist/technologist, other;
	biomedical photographer
150406	Technologists, technicians & other technical; specialist/technologist, other;
	art, medical
150410	Technologists, technicians & other technical; research; research study
	specialist
150414	Technologists, technicians & other technical; technician, other; veterinary
150701	Technologists, technicians & other technical; specialist/technologist,
	cardiology; cardiovascular, noninvasive technologist
150702	Technologists, technicians & other technical; specialist/technologist,
	cardiology; cardiovascular vascular technologist
150703	Technologists, technicians & other technical; specialist/technologist,
1 70001	cardiology; vascular
150801	Technologists, technicians & other technical; technician, cardiology;
150001	cardiographic
150901	Technologists, technicians & other technical; specialist/technologist, health
150000	information; coding specialist, hospital
150902	Technologists, technicians & other technical; specialist/technologist, health
150002	information; coding specialist, physician
150903	Technologists, technicians & other technical; specialist/technologist, health
151000	information; registered record administrator Technologists, technicians & other technical; specialist/technologist, other
151100	Technologists, technicians & other technical; specialist technologist, other Technologists, technicians & other technical; technician, health information
151100	Technologists, technicians & other technical; technician, health information;
131101	assistant record technician
160101	Physicians (other roles); physician/osteopath; laboratory service provider
170100	Nursing service related; Christian science practitioner/nurse
170100	Nursing service related; home health aide
170200	Nursing service related; home nearth aide
170300	

Value	Description
170400	Nursing service related; nurses aide
170500	Nursing service related; nursing home administrator
170600	Nursing service related; technician; personal care attendant
170601	Nursing service related; technician

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

**STA3N** can assume the following values:

Value	Description			
550	Illiana HCS (Danville)			
552	Dayton			
553	Detroit (John D. Dingell)			
554	Denver, Eastern Colorado HCS			
556	North Chicago IL			
557	Dublin			
558	Durham			
561	East Orange, New Jersey HCS			
562	Erie			
564	Fayetteville AR			
565	Fayetteville NC			
568	Fort Meade			
570	Fresno, Central California HCS			
573	North Florida / South Georgia 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 HCS			
595	Lebanon			
596	Lexington – Leestown			
598	Little Rock, Central AR. Veterans HCS LR			
600	Long Beach HCS			
603	Louisville			
605	Loma Linda VAMC			
607	Madison WI			
608	Manchester			
610	N. Indiana HCS – Marion			
612	NCHC Martinez			
613	Martinsburg			
614	Memphis			
618	Minneapolis			
619	Montgomery			
620	Montrose, Hudson Valley HCS			
621	Mountain Home			
623	Muskogee			
626	Middle Tennessee HCS			

Value	Description			
629	New Orleans			
630	New York Harbor HCS – NY Div.			
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 HCS – University Drive			
648	Portland			
649	Northern Arizona HCS			
650	Providence			
652	Richmond			
653	Roseburg HCS			
654	Sierra Nevada HCS			
655	Saginaw			
656	St Cloud			
657	St Louis – John Cochran			
658	Salem			
659	W.G. (Bill) Hefner Salisbury VAMC			
660	Salt Lake City HCS			
662	San Francisco			
663	Seattle, Puget Sound HCS			
664	San Diego HCS			
666	Sheridan			
667	Shreveport, Overton Brooks VAMC			
668	Spokane			
671	San Antonio VAMC			
672	San Juan			
673	Татра			
674	Temple VAMC			
676	Tomah			
678	S. Arizona HCS			
679	Tuscaloosa			
687	Walla Walla			
688	Washington			
689	West Haven			
691	Greater Los Angeles HCS			
693	Wilkes Barre			
695	Milwaukee WI			

# **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) specifying the appropriate Functional Task Code(s) for the dataset(s) requested must be submitted to the Austin Automation Center (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 <u>http://www.virec.research.va.gov/TOOLKIT/FORM9957.pdf or th</u>rough the VA at <u>http://www.va.gov/forms/dot/VAF9957.dot</u>.

# **Batch Job Service Level Categories**

When submitting programs (jobs) in the IBM OS/390 mainframe environment at the Austin Automation Center (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

Intranet addresses have been removed from this document. Intranet links are available on the Intranet version of this publication. For more information. please go to VIReC's Redaction Information web page: http://www.virec.research.va.gov/References/Redactions.htm

# 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)
- XXXUNKAn 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 attached to the variables in the SAS datasets
- SYSIN DD \* indicates that SAS program statements follow

# **Other Sources of Information**

*Guide For First Time Users of VA Austin Automation Center (AAC).* Available at: <u>http://www.virec.research.va.gov/INSIGHTS/VOL002NO001.PDF.</u> Suggested Citation: Cowper DC. *Guide for First Time Users of VA Austin Automation Center (AAC).* Hines, IL: VA Information Resource Center; 2001. *VIReC In4sights*, 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:

# **AAC Contact Information**

AAC Help Desk: 1–512–326–6780 Internet website: <u>http://www.aac.va.gov/</u> Intranet website:

# **Appendix E: Selected Bibliography**

This bibliography of articles relative to inpatient data within the Austin Automation Center (AAC) database was constructed using the following strategy.

A PubMed (<u>http://www.ncbi.nih.gov/entrez/query.fcgi</u>) search for text words was conducted on 11/22/02, with 468 references resulting from using the parameters of:

(veteran OR veterans) AND (data OR database OR databases) AND ((inpatient OR inpatients OR PTF) OR (outpatient OR outpatients or OPC))

Results were imported into Reference Manager. Each abstract was read and a qualitative judgment was made concerning relevance to the Medical SAS Datasets using the following criteria:

Does the abstract refer to "inpatient", "outpatient", or "administrative" data? Does the abstract refer to "Austin Automation Center" or "AAC" data?

If the answer to both questions was yes, the article was classified as relevant to the Medical SAS Datasets, netting a total of 142 articles.

Relevant articles were retrieved and the full text was read to confirm relevance to the Outpatient Medical SAS Datasets. Of this procedure, 49 articles were found to be relevant.

These 49 relevant articles are sorted by year and alphabetized within each year. A PubMed link to the abstract is provided for each citation.

## Year 2002

Barnett PG, Chen S, Boden WE, Chow B, Every NR, Lavori PW et al. Cost-effectiveness of a conservative, ischemia-guided management strategy after non-Q-wave myocardial infarction: results of a randomized trial. *Circulation* 2002; 105(6):680-684. (Abstract)

Desai MM, Rosenheck RA, Druss BG, Perlin JB. Mental disorders and quality of diabetes care in the veterans health administration. *Am J Psychiatry* 2002; 159(9):1584-1590. (Abstract)

Desai MM, Rosenheck RA, Druss BG, Perlin JB. Receipt of nutrition and exercise counseling among medical outpatients with psychiatric and substance use disorders. *J Gen Intern Med* 2002; 17(7):556-560. (Abstract)

Forneris CA, Bosworth HB, Butterfield MI. Outpatient care use among female veterans: differences between mental health and non-mental health users. *Mil Med* 2002; 167(1):10-13. (Abstract)

Lee ML, Yano EM, Wang M, Simon BF, Rubenstein LV. What patient population does visitbased sampling in primary care settings represent? *Med Care* 2002; 40(9):761-770. (Abstract)

Murphy PA, Cowper DC, Seppala G, Stroupe KT, Hynes DM. Veterans Health Administration inpatient and outpatient care data: an overview. *Eff Clin Pract* 2002; 5(3 Suppl):E4. (Abstract)

Rosen AK, Loveland SA, Anderson JJ, Hankin CS, Breckenridge JN, Berlowitz DR. Diagnostic cost groups (DCGs) and concurrent utilization among patients with substance abuse disorders. *Health Serv Res* 2002; 37(4):1079-1103. (Abstract)

Sernyak MJ, Leslie DL, Alarcon RD, Losonczy MF, Rosenheck R. Association of diabetes mellitus with use of atypical neuroleptics in the treatment of schizophrenia. *Am J Psychiatry* 2002; 159(4):561-566. (Abstract)

Subramanian U, Weinberger M, Eckert GJ, L'Italien GJ, Lapuerta P, Tierney W. Geographic variation in health care utilization and outcomes in veterans with acute myocardial infarction. *J Gen Intern Med* 2002; 17(8):604-611. (Abstract)

## Year 2001

Andrus CH, Johnson K, Pierce E, Romito PJ, Hartel P, Berrios-Guccione S et al. Finance modeling in the delivery of medical care in tertiary-care hospitals in the Department of Veterans Affairs. *J Surg Res* 2001; 96(2):152-157. (Abstract)

Billingsley KG, Maynard C, Schwartz DL, Dominitz JA. The use of trimodality therapy for the treatment of operable esophageal carcinoma in the veteran population: patient survival and outcome analysis. *Cancer* 2001; 92(5):1272-1280. (Abstract)

Chen RS, Rosenheck R. Using a computerized patient database to evaluate guideline adherence and measure patterns of care for major depression. *J Behav Health Serv Res* 2001; 28(4):466-474. (Abstract)

Dominitz JA, Maynard C, Boyko EJ. Assessment of vital status in Department of Veterans Affairs national databases. comparison with state death certificates. *Ann Epidemiol* 2001; 11(5):286-291. (Abstract)

El Serag HB, Richardson PA, Everhart JE. The role of diabetes in hepatocellular carcinoma: a case-control study among United States Veterans. *Am J Gastroenterol* 2001; 96(8):2462-2467. (Abstract)

El Serag HB, Hepworth EJ, Lee P, Sonnenberg A. Gastroesophageal reflux disease is a risk factor for laryngeal and pharyngeal cancer. *Am J Gastroenterol* 2001; 96(7):2013-2018. (Abstract)

Rosen AK, Loveland S, Anderson JJ, Rothendler JA, Hankin CS, Rakovski CC et al. Evaluating diagnosis-based case-mix measures: how well do they apply to the VA population? *Med Care* 2001; 39(7):692-704. (Abstract)

## Year 2000

Boyko EJ, Koepsell TD, Gaziano JM, Horner RD, Feussner JR. US Department of Veterans Affairs medical care system as a resource to epidemiologists. *Am J Epidemiol* 2000; 151(3):307-314. (Abstract)

Leslie DL, Rosenheck R, White WD. Capitated payments for mental health patients: a comparison of potential approaches in a public sector population. *J Ment Health Policy Econ* 2000; 3(1):35-44. (Abstract)

Moos RH, Finney JW, Federman EB, Suchinsky R. Specialty mental health care improves patients' outcomes: findings from a nationwide program to monitor the quality of care for patients with substance use disorders. *J Stud Alcohol* 2000; 61(5):704-713. (Abstract)

Rosenheck RA, Banks S, Pandiani J, Hoff R. Bed closures and incarceration rates among users of Veterans Affairs mental health services. *Psychiatr Serv* 2000; 51(10):1282-1287. (Abstract)

Rosenheck R. Primary care satellite clinics and improved access to general and mental health services. *Health Serv Res* 2000; 35(4):777-790. (Abstract)

#### Year 1999

Ashton CM, Petersen NJ, Souchek J, Menke TJ, Yu HJ, Pietz K et al. Geographic variations in utilization rates in Veterans Affairs hospitals and clinics. *N Engl J Med* 1999; 340(1):32-39. (Abstract)

Ashton CM, Petersen NJ, Souchek J, Menke TJ, Pietz K, Yu HJ et al. Rates of health services utilization and survival in patients with heart failure in the Department of Veterans Affairs medical care system. *Am J Med Qual* 1999; 14(1):55-63. (Abstract)

Barnett PG, Rodgers JH. Use of the Decision Support System for VA cost-effectiveness research. *Med Care* 1999; 37(4 Suppl Va):AS63-AS70. (Abstract)

Druss BG, Rosenheck RA, Stolar M. Patient satisfaction and administrative measures as indicators of the quality of mental health care. *Psychiatr Serv* 1999; 50(8):1053-1058. (Abstract)

Druss BG, Rohrbaugh RM, Rosenheck RA. Depressive symptoms and health costs in older medical patients. *Am J Psychiatry* 1999; 156(3):477-479. (Abstract)

El Serag HB, Sonnenberg A. Outcome of erosive reflux esophagitis after Nissen fundoplication. *Am J Gastroenterol* 1999; 94(7):1771-1776. (Abstract)

Hoff RA, Rosenheck RA. The cost of treating substance abuse patients with and without comorbid psychiatric disorders. *Psychiatr Serv* 1999; 50(10):1309-1315. (Abstract)

Menke TJ, Wray NP. Use of a cost accounting system to evaluate costs of a VA special program. *Med Care* 1999; 37(4 Suppl Va):AS45-AS53. (Abstract)

Menke TJ, Homan RH, Kashner TM. Determining costs in VA: research design problems and solutions illustrated with case studies. *Med Care* 1999; 37(4 Suppl Va):AS18-AS26. (Abstract)

Rosenheck R, Fontana A, Stolar M. Assessing quality of care: administrative indicators and clinical outcomes in posttraumatic stress disorder. *Med Care* 1999; 37(2):180-188. (Abstract)

Wilt TJ, Cowper DC, Gammack JK, Going DR, Nugent S, Borowsky SJ. An evaluation of radical prostatectomy at Veterans Affairs Medical Centers: time trends and geographic variation in utilization and outcomes. *Med Care* 1999; 37(10):1046-1056. (Abstract)

## Year 1998

Ashton CM, Petersen NJ, Wray NP, Yu HJ. The Veterans Affairs medical care system: hospital and clinic utilization statistics for 1994. *Med Care* 1998; 36(6):793-803. (Abstract)

Hoff RA, Rosenheck RA. Long-term patterns of service use and cost among patients with both psychiatric and substance abuse disorders. *Med Care* 1998; 36(6):835-843. (Abstract)

Kashner TM. Agreement between administrative files and written medical records: a case of the Department of Veterans Affairs. *Med Care* 1998; 36(9):1324-1336. (Abstract)

Kashner TM, Muller A, Richter E, Hendricks A, Lukas CV, Stubblefield DR. Private health insurance and veterans use of Veterans Affairs care. RATE Project Committee. Rate Alternative Technical Evaluation. *Med Care* 1998; 36(7):1085-1097. (Abstract)

## Year 1997

Druss B, Rosenheck R. Evaluation of the HEDIS measure of behavioral health care quality. Health Plan Employer Data and Information Set. *Psychiatr Serv* 1997; 48(1):71-75. (Abstract)

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Booth BM, Blow FC, Ludke RL, Ross RL. Utilization of acute inpatient services for alcohol detoxification. *J Ment Health Adm* 1996; 23(4):366-374. (Abstract)

Ehreth J. The implications for information system design of how health care costs are determined. *Med Care* 1996; 34(3 Suppl):MS69-MS82. (Abstract)

Engelhardt JB, Toseland RW, O'Donnell JC, Richie JT, Jue D, Banks S. The effectiveness and efficiency of outpatient geriatric evaluation and management. *J Am Geriatr Soc* 1996; 44(7):847-856. (Abstract)

Moos RH, Mertens JR. Patterns of diagnoses, comorbidities, and treatment in late-middle-aged and older affective disorder patients: comparison of mental health and medical sectors. *J Am Geriatr Soc* 1996; 44(6):682-688. (Abstract)

Moos RH, King MJ, Patterson MA. Outcomes of residential treatment of substance abuse in hospital- and community-based programs. *Psychiatr Serv* 1996; 47(1):68-74. (Abstract)

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Rubenstein LV, Yano EM, Fink A, Lanto AB, Simon B, Graham M et al. Evaluation of the VA's Pilot Program in Institutional Reorganization toward Primary and Ambulatory Care: Part I, Changes in process and outcomes of care. *Acad Med* 1996; 71(7):772-783. (Abstract)

Smith ME, Sheldon G, Klein RE, Feild T, Feitz R, Stockford D et al. Data and information requirements for determining veterans' access to health care. *Med Care* 1996; 34(3 Suppl):MS45-MS54. (Abstract)

#### Year 1995

Rosenheck R, Neale M, Leaf P, Milstein R, Frisman L. Multisite experimental cost study of intensive psychiatric community care. *Schizophr Bull* 1995; 21(1):129-140. (Abstract)

#### Year 1994

Weaver FM, Burdi MD, Pinzur MS. Outpatient foot care: correlation to amputation level. *Foot Ankle Int* 1994; 15(9):498-501. (Abstract)

#### Year 1993

Rosenheck R, Gallup P, Frisman LK. Health care utilization and costs after entry into an outreach program for homeless mentally ill veterans. *Hosp Community Psychiatry* 1993; 44(12):1166-1171. (Abstract)

#### Year 1992

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