DRG Grouper (ICD)

Technical Manual

Software Version 18.0

October 2000

Revised December 2016

Department of Veterans Affairs

Office of Information and Technology (OI&T)

Revision History

Date	Description (Patch # if applicable)	Project Manager	Technical Writer
December 2016	ICD*18*89 enhancements for DRG Re-Design. Changes include: • Updated Title Page. • Reorganized Section 1.1, Patch Changes. • Added Section 1.1.1, Modifications with Patch ICD*18*89. • Added 11 new files (#83 through #83.71) to Section 2.3, VA FileMan Access Codes. • Rewrote Section 3.1, Integrity Checker. • Updated Section 5.1, Globals and Files. • Added 11 new files (#83 through #83.71) to "File List with Descriptions" table in Section 5.1, Globals and Files. • Created Appendix A for routine information and checksums and moved information from various sections to appendix. • Created Appendix B and moved Glossary to appendix. • Technical edit throughout document to bring up to current OI&T documentation standards and improve Section 508 compliance.	C. Clay	K. Robbins
July 2014	ICD*18*64 enhancements for International Classification of Diseases, Tenth Revision (ICD-10) Remediation: • Title Page • Table of Contents. Added and updated headings. • p.1 Updated Introduction and Corrected HIPAA acronym	VA PM: C. Clay HP PM: M. Klein	J. Nemetz / C. DeCapua / C. Hula

Date	Description (Patch # if applicable)	Project Manager	Technical Writer
	• p. 2 Added Modifications with Patch ICD*18*64 • p. 3 Added Present on Admission (POA) to Classifying DRGs and added ICD-10 Release Notes to list of Related Manuals • p. 4 Updated VA FileMan Access Codes table • p. 7-8 Added ICD*18*64 Routine Information and updated checksum information • p. 9 Added ICDPOA():- to the list of callable routines • p. 12 Updated Globals and Files description of main globals and updated table to include items from Patch ICD*18.64 [(#80.5), (#80.6), (#82), (#82.1), (#82.11), (#82.12), and (#82.13)] • p. 11 Added ICDTBL* to Routines to Map • p. 20 Added four terms to the Glossary: ICD-10-CM; ICD-10-PCS; ICD-9; Present on Admission (POA) • Throughout: Minor technical edits such as adding table headings and punctuation.		
2/8/2005	ICD*18*14 enhancements. Updates made to: • Introduction • Implementation and Maintenance (Integrity Checker) • Files (File List with Descriptions)	B. Jones	B. Anderson

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1.   Introduction

The Diagnosis Related Group (DRG) Grouper is a "black box" utility with standalone functionality and can be called by other VistA applications. The DRG Grouper package contains two options:

- *DRG Grouper* - Used to compute and display the DRG for a patient based on that patient's diagnoses, present on admission (POA) values, and any operations/procedures performed.

- *ICD Code Inquiry* - Allows the user to display information for a selected diagnosis or operation/procedure code.

This Department of Veterans Affairs (VA)–engineered version of the DRG Grouper is based on the current Medicare Severity Diagnosis Related Group (MS-DRG) Grouper requirements as defined by the Centers for Medicare & Medicaid Services (CMS) contained in the annual update from 3M Health Information Systems (3M-HIS). The same 3M DRG Grouper is used by the Austin Automation Center (AAC).

NOTE: The International Classification of Diseases, Tenth Revision (ICD-10) Remediation did not change the International Classification of Diseases, Ninth Revision (ICD-9) functionality in the DRG Grouper application.

1.1.   Patch Changes

1.1.1.   Modifications with Patch ICD*18*89

This patch redesigns the process for calculating a DRG value when using ICD-10 diagnosis and procedure codes. Patch ICD*18*89 includes the following changes:

- Creates eleven new files (#83 through #83.71).

- Creates five new routines – ICD1889P, ICDJC, ICDJC1, ICDJC2, and ICDJC3.

- Modifies one existing routine, ICDDRG, to call the new ICDJC* routines to do the calculations.

NOTE: The existing code that calculates a DRG with ICD-10 values will remain for a future date when it will be removed. The existing code that calculates a DRG with ICD-9 values remains unchanged.

1.1.2.   Modifications with Patch ICD*18*64

This distribution loads ICD-10 data into ICD DIAGNOSIS File (#80) and ICD OPERATION/ PROCEDURE CODE File (#80.1) and the new files created for the calculation of DRG for ICD-10 codes.

The patch ICD*18.0*64 makes the following changes to the DRG Grouper application:

- Calculation of DRG code for the ICD-10 diagnosis codes and the ICD-10 procedure codes.

- Makes ICD-9 DRG Calculation routines compliant with ICD-10 file changes.

- Makes *ICD Code Inquiry* option compliant with the new Standards and Terminology Services (STS) Application Program Interface (API) changes.

- Adds Present on Admission (POA) indicator as part of calculating DRG value.

- Does not allow selection of inactive ICD-9 or ICD-10 operation or procedure codes.

1.1.3. Modifications with Patch ICD*18*14

This distribution is a multi-package combined build containing the following patches:

DRG FY05 1st Quarter Update

- LEX*2.0*33

- ICD*18.0*14

This patch modifies the logic and restructures the file in which the ICDs and DRGs are stored and resolved.

This package will allow the use of multiple versions of the code sets employed in financial transactions. This includes multiple versions of the Veterans Health Administration (VHA) diagnostic related grouping software, also known as the "VHA Grouper".

The Health Insurance Portability and Accessibility Act (HIPAA) stipulates that diagnostic and procedure codes used for billing purposes must be the codes that were applicable at the time the service was provided. Code sets required by the HIPAA legislation to be date-sensitive and included in this request are:

- ICD-9-CM (International Classification of Diseases-9-Clinical Modifications)

- DRG Codes (Diagnostic Related Group which is a part of the ICD-9 code set)

1.2. DRG Components

The DRGs are defined as a manageable, clinically coherent set of patient classes that relate a hospital case mix to the resource demands and associated costs experienced by the hospital. There are DRGs associated with the DRG Grouper. Each represents a class of patients deemed medically comparable and requiring similar amounts of resources for care.

The DRGs may be calculated for both registered VA patients and non-VA patients. Except for Transfer DRGs, the system does not store the DRG compiled for each patient. DRGs are recalculated each time the DRG Grouper option is utilized.

If data entered is insufficient for the DRG Grouper to function, the DRG will not be computed and will be displayed as "UNGROUPABLE". A message such as "Grouper needs to know if patient died during this episode!" will appear informing the user what missing data is required.

1.3. Classifying DRGs

The actual process of classifying the patients into one of the DRGs is done by the DRG Grouper using the following information:

- Age

- Sex

- Diagnosis codes

- Operation/procedure codes

- Present on admission (POA) value

- Discharge status

The patient's age and any secondary diagnoses the patient had are used to determine whether the patient's stay had significant and contributing complications and/or comorbidities. The DRG Grouper accepts one primary diagnosis and unlimited secondary diagnoses and operations/procedures.

1.4.   Related Manuals

- DRG Grouper User Manual

- DRG Grouper Installation Guide

- DRG Grouper ICD-10 Release Notes for patch ICD*18*64

- PTF Section of the PIMS (formerly MAS) User Manual contains detailed information on DRGs and DRG calculation, especially in the following options:

    o DRG Information Report

    o DRG Calculation

    o DRG Reports Menu

2. Security

2.1. Security Keys

There are no security keys in the DRG Grouper package.

2.2. Security Management

The DRG Grouper Version 18.0 software does not impose any additional legal requirements on the user, nor does it relieve the user of any legal requirements.

2.3. VA FileMan Access Codes

File security levels have been upgraded so that only read access is allowed by non-Information Resource Management (IRM) users. It is strongly recommended that this upgraded level of security is accepted for the files in the DRG Grouper package to minimize any data corruption problems.

The following table contains the recommended VA FileMan access codes associated with each file in the DRG Grouper software. This list may be used to assist in assigning appropriate VA FileMan access codes to users.

Table 1: VA FileMan Access Codes

File #	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
73	DRG PROCEDURE IDENTIFIER CODE	@	d	@	@	@
80	ICD DIAGNOSIS	@	d	@	@	@
80.1	ICD OPERATION/ PROCEDURE	@	d	@	@	@
80.2	DRG	@	d	@	@	@
80.3	MAJOR DIAGNOSTIC CATEGORY	@	d	@	@	@
80.5	DRG RULES SURGICAL HIERARCHY	@	d	@	@	@
80.6	HOSPITAL ACQUIRED CONDITIONS	@	d	@	@	@
82	DRG DIAGNOSIS IDENTIFER CODES	@	d	@	@	@
82.1	DRG PROCEDURE IDENTIFER CODES	@	d	@	@	@
82.11	DRG PROCEDURE CODE COMBINATIONS	@	d	@	@	@
82.12	DRG DIAGNOSIS CODE COMBINATIONS	@	d	@	@	@

File #	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
83	DRG MDC CATEGORY	@	@	@	@	@
83.1	DRG MDC CATEGORY DRG	@	@	@	@	@
83.11	DRG MDC CATEGORY DRG ORDER	@	@	@	@	@
83.2	DRG MDC CATEGORY CASE	@	@	@	@	@
83.3	DRG MDC CATEGORY CODE SETS	@	@	@	@	@
83.5	DRG DIAGNOSIS	@	@	@	@	@
83.51	DRG PDX EXCLUSION GROUPS	@	@	@	@	@
83.6	DRG PROCEDURE	@	@	@	@	@
83.61	DRG PROCEDURE GROUPS	@	@	@	@	@
83.7	DRG HAC GROUPS	@	@	@	@	@
83.71	DRG HAC CODE SETS	@	@	@	@	@

2.4. Mail Groups and Alerts

The DRG Grouper software does not use mail groups.

2.5. Remote Systems

There are no remote systems used with the DRG Grouper software.

2.6. Contingency Planning

Using services should have a local contingency plan to be used in the event of application problems in a live environment. The plan should identify the procedures for maintaining the functionality provided by the DRG Grouper Version 18.0 software in the event of a system outage. Field station Information Security Officers (ISOs) can get assistance from the Regional ISO (RISO).

2.7. Interfacing

There is no special interfacing required for the DRG Grouper software.

2.8. Electronic Signatures

DRG Grouper software does not use electronic signatures.

3. Implementation and Maintenance

There are no site-configurable features connected with the DRG Grouper package.

3.1. Integrity Checker

See Appendix A – Routines and Checksums for a list of the routines included in each patch. The second line of each of these routine(s) will look like:

```
;;18.0;DRG Grouper;**[patch list]**; Oct 20, 2000
```

The checksums for each patch are listed in Appendix A – Routines and Checksums and can be checked with CHECK1^XTSUMBLD.

4. Routines

4.1. Routine Information and Checksums

See Appendix A – Routines and Checksums.

4.2. Callable Routines

The following are the DRG Grouper externally callable entry points. Each application calling the DRG Grouper is responsible for setting all required variables and deleting them at the end of the call.

- ^ICDDRGM - Initiates DRG Grouper standalone system. Displays DRG results.

- ^ICDDRG – API entry point. Calculates DRG. This call will return ICDDRG, a pointer to the DRG file (#80.2). The following variables are required when calling this entry point:

    o ICDDX(): - REQUIRED - Array of pointers to ICD DIAGNOSIS file (#80) where ICDDX(1) is the primary DXLS. ICDDX(1) must be defined or DRG Grouper will stop processing.

    o ICDPOA():-REQUIRED. Array of values for "PRESENT ON ADMISSION" where ICDPOA(1) is the POA value for ICDDX(1) diagnosis code, ICDPOA(2) is the POA value for ICDDX(2) diagnosis code and so on.

    o ICDPRC(): - OPTIONAL - Array of pointers to ICD OPERATION/PROCEDURE file (#80.1).

    o ICDTRS: - REQUIRED - Numeric code (0/1) to indicate if a patient was transferred to an acute care facility.

    o ICDEXP: - REQUIRED - Numeric code (0/1) to indicate if a patient died during this episode.

    o ICDDMS: - REQUIRED - Numeric code (0/1) to indicate if a patient was discharged against medical advice.

    o AGE: - REQUIRED - Numeric code (whole number 0-124) to indicate patient age. Neonatal, newborn, or term can be indicated with 0.

    o SEX: - REQUIRED - Alphabetic code (M, F, or NULL) to indicate patient sex. Some DRGs apply to either sex so NULL is appropriate. Some DRGs apply to one sex only and DRG Grouper will return an error (Invalid Sex) if NULL or wrong sex is indicated.

    o ICDDATE: - REQUIRED - Date used to calculate the DRG in FileMan format (e.g., 3030113). If the variable is not defined, default to the current date.

- ^ICDCOD - ICD Code Inquiry. - Allows the user to enter an ICD diagnosis or operation/procedure code. It returns the code description and whether or not that code is inactive.

- GETDRG^ICDGTDRG - API entry point. An API that will return all DRG codes associated with a given ICD OPERATION/PROCEDURE or ICD DIAGNOSIS CODE

for a given effective date. It will receive the Operation/Procedure or Diagnosis code IEN, the effective date, and a flag signifying which file to check (Operation/Procedure or Diagnosis) and will return the DRG code(s) or an error flag. The following variables are passed to this API:

- o CODE: REQUIRED - The IEN of the code in the ICD OPERATION/PROCEDURE file (#80.1) or the ICD DIAGNOSIS file (#80).

- o DGNDT: The effective date used to determine the proper DRG code(s) for the code. If not defined, it will default to the current date.

- o FILE: REQUIRED

    - ▪ 9 – use file #80

    - ▪ 0 – use file #80.1

- • DRG^ICDGTDRG - API entry point. An API that will return the information associated with, and the status of, a given DRG code. It will receive the IEN of a DRG code and an effective date, and it will return a string with the information for the DRG code or an error flag. The following variables are passed to this API:

    - o CODE: REQUIRED - The IEN of the code in the ICD OPERATION/PROCEDURE file (#80.1) or the ICD DIAGNOSIS file (#80).

    - o EDT: The effective date used to determine the proper DRG code(s) for the code. If not defined, it will default to the current date.

- • ISVALID^ICDGTDRG - API entry point. An API that will be used in DIC("S") FileMan calls to check the validation of an ICD OPERATION/PROCEDURE or ICD DIAGNOSIS code. The API will return a "1" if the code/date pair passed to it is valid and can be selected from a FileMan prompt. The following variables are passed to this API:

    - o CODE: REQUIRED - The IEN of the code in the ICD OPERATION/PROCEDURE file (#80.1) or the ICD DIAGNOSIS file (#80).

    - o DATE: The effective date used to determine the proper DRG code(s) for the code. If not defined, it will default to the current date.

    - o FILE: REQUIRED

        - ▪ 9 – use file #80

        - ▪ 0 – use file #80.1

- • GETDATE^ICDGTDRG - API entry point. An API that will return the proper effective date used in Code Set Version functions. The API will return a date in FileMan format.

    - o PATNUM: REQUIRED - The IEN record number of the PTF file (#45) for the patient in question.

4.3. Routine List

Take the following steps to obtain routines contained in the DRG Grouper package:

1. Programmer Options Menu

2. Routine Tools Menu

3. First Line Routine Print Option

4. Routine Selector: **ICD***

4.4.   Routines to Map

For those sites where routine mapping is applicable, the following are the routines recommended for mapping:

- ICDDRG*

- ICDTBL*

- ICDTLB*

5. Files

5.1. Globals and Files

The main globals used in the DRG Grouper package are ^ICD9(, ^ICD0(, ^ICD(, ^ICM(, ^ICDRS, ^ICDHAC, ^ICDID, ^ICDIP, ^ICDIPD, ^ICDIDD, ^ICDCCEX, and ^ICDD.

These correspond to the ICD DIAGNOSIS, ICD OPERATION/ PROCEDURE, DRG, MAJOR DIAGNOSTIC CATEGORY files, DRG SURGICAL HIERARCHY, DRG HAC, DRG ICD DIAGNOSIS CODES, DRG ICD PROCEDURE CODES, DRG PROCEDURE CODE COMBINATIONS, DRG DIAGNOSIS CODE COMBINATIONS, DRG CC EXCLUSIONS, DRG MDC CATEGORY, DRG MDC CATEGORY DRG, DRG MDC CATEGORY CASE, DRG CATEGORY CODE SETS, DRG DIAGNOSIS, DRG PDX EXCLUSION GROUPS, DRG PROCEDURE, DRG PROCEDURE GROUPS, DRG HAC GROUPS, and DRG HAC GROUP CODE SETS.

There are no globals to journal.

Table 2: File List with Descriptions

File #	File Name	Global	Description
80	ICD DIAGNOSIS	^ICD9(	Contains all valid ICD diagnosis codes and the COMPLICATION/ COMORBIDITY EXCLUSION subfile.
80.071,.01	DRG GROUPER EFFECTIVE DATE 0;1 DATE (Multiply asked)		This field sets the effective date for the DRGs for a given fiscal year. It should normally be the first day of October of the fiscal year. Each year a new entry will be created and the DRGs hierarchy will reside within this field.
80.071,1	DRG 1;0 POINTER Multiple #80.711		DRG(s) associated with corresponding ICD Diagnosis for a given fiscal year. FILES POINTED TO FIELDS DRG (#80.2) DRG:DRG (#.01)
80.711,.01	DRG 0;1 POINTER TO DRG FILE (#80.2) (Multiply asked)		DRG(s) associated with corresponding ICD Diagnosis for a given fiscal year. FILES POINTED TO FIELDS DRG (#80.2) DRG:DRG (#.01)
80.1	ICD OPERATION/PROCEDURE	^ICD0(	Contains all valid ICD operation/ procedure codes.
80.171,.01	DRG GROUPER EFFECTIVE		This field sets the effective date

File #	File Name	Global	Description
	DATE 0;1 DATE (Multiply asked)		for the DRGs for a given fiscal year. It should normally be the first day of October of the fiscal year. Each year a new entry will be created and the DRG's hierarchy will reside within this field.
80.171,1	MAJOR DIAGNOSTIC CATEGORY 1;0 POINTER Multiple #80.1711		Major Diagnostic Category (MDC) associated with ICD Operation/Procedure.
80.1711,.01	MAJOR DIAGNOSTIC CATEGORY 0;1 POINTER TO MAJOR DIAGNOSTIC CATEGORY FILE (#80.3) (Multiply asked)		
80.1711,1	DRG 1;0 POINTER Multiple #80.17111		DRG(s) associated with corresponding ICD Operation/Procedure for a given fiscal year.
80.17111,.01	DRG 0;1 POINTER TO DRG FILE (#80.2) (Multiply asked)		FILES POINTED TO FIELDS DRG (#80.2) DRG:DRG (#.01)
80.2	DRG	^ICD(	Contains all DRGs, their trim points, affiliated and non-affiliated weights, etc.
80.072,.01	MDC EFFECTIVE DATE		0;1 DATE (Multiply asked)
80.072,1	MDC		0;2 POINTER TO MAJOR DIAGNOSTIC CATEGORY FILE (#80.3) Major Diagnostic Category (MDC) associated with ICD Diagnosis for a given fiscal year. FILES POINTED TO FIELDS MAJOR DIAGNOSTIC CATEGORY (#80.3) MDC (#1)
80.271,.01	DRG GROUPER EFFECIVE DATE 0;1 DATE		This field sets the effective date for the DRGs reference table for a given fiscal year. It should normally be the first day of October of the fiscal year. Each year a new entry will be created

File #	File Name	Global	Description
			and the DRG's reference table to be used will reside within this field.
80.271,1	REFERENCE 0;3 FREE TEXT		
80.3	MAJOR DIAGNOSTIC CATEGORY	^ICM(	Contains major diagnostic categories as used in PTF coding.
80.5	DRG SURGICAL HIERARCHY	^ICDRS	This is the Surgical Hierarchy file. It is populated with data from Centers for Medicare and Medicaid Services (CMS). The data is used to determine the Diagnosis Related Group (DRG) by Major Diagnostic Category (MDC) in surgical order of importance.
80.6	DRG HAC	^ICDHAC	This file is used to check if a Diagnosis Code is a Hospital Acquired Condition (HAC).
82	DRG DIAGNOSIS IDENTIFIER CODES	^ICDID	Contains list of valid identifier codes for ICD Diagnosis codes.
82.1	DRG PROCEDURE IDENTIFIER CODES	^ICDIP	Contains list of valid identifier codes for ICD Procedure codes.
82.11	DRG PROCEDURE CODE COMBINATIONS	^ICDIDP	Contains data which is used in DRG Grouper calculations. These data specify combinations of procedure codes that, when found to occur together in one patient case, will lead to a specific DRG code. The DRG Grouper routines will check the contents of the "One Of" field and each "With One Of" field to make this determination.
82.12	DRG DIAGNOSIS CODE COMBINATIONS	^ICDIDD	Contains data which is used in DRG Grouper calculations. These data specify combinations of diagnosis codes that, when found to occur together in one patient case, will lead to a specific DRG code. The DRG Grouper routines will check the contents of the "One

File #	File Name	Global	Description
			Of" field and each "With One Of" field to make this determination.
82.13	DRG CC EXCLUSIONS	^ICDCCEX	Contains data that was extracted from Appendix C of the Medicare/Medicaid website www.cms.gov.
83	DRG MDC CATEGORY	^ICDD	File contains all MDC Categories that define Diagnostic Related Groups (DRG). This includes both Surgical and Medical Categories. This file contains DRG information defined by the Centers for Medicare and Medicaid Services. This file should not be modified locally.
83.1	DRG MDC CATEGORY DRG	^ICDD	File contains all Diagnostic Related Groups (DRG) with their related criteria required for DRG calculations. This results in multiple DRG entries based on the MCC/CC definition and the various codes assigned. This file contains DRG information defined by the Centers for Medicare and Medicaid Services. This file should not be modified locally. Any necessary updates or modifications will be released nationally.
83.11	DRG MDC CATEGORY DRG ORDER	^ICDD	File contains the hierarchical order of precedence for Diagnostic Related Groups (DRGs) by version. Multiple DRGs may be calculated based on a set of Diagnosis and Procedure Codes. The order in this file will determine the basic precedence for the final selection. Each version where the order is modified will have a new record by date with all

File #	File Name	Global	Description
			active DRGs assigned in order. This file should not be modified locally.
83.2	DRG MDC CATEGORY CASE	^ICDD	File contains sets of Code Sets that when used in combination satisfy the definition of a Diagnostic Related Group (DRG). This file contains DRG information defined by the Centers for Medicare and Medicaid Services. This file should not be modified locally.
83.3	DRG MDC CATEGORY CODE SETS	^ICDD	File contains the definition of sets of either diagnosis or procedure codes that when used satisfy at least one coding criteria of a Diagnostic Related Group (DRG). This file contains DRG information defined the Centers for Medicare and Medicaid Services. This file should not be modified locally. Any necessary updates or modifications will be released nationally.
83.5	DRG DIAGNOSIS	^ICDD	All Diagnosis codes assigned to a Diagnostic Related Group (DRG). File contains sub-sections for the criteria that a Diagnosis defines. This file contains DRG information defined by the Centers for Medicare and Medicaid Services. This file should not be modified locally.
83.51	DRG PDX EXCLUSION GROUPS	^ICDD	Primary Diagnosis Exclusion Groups associated with Diagnostic Related Groups (DRG). Any secondary diagnosis assigned to the Primary's exclusion group may

File #	File Name	Global	Description
			not impart either MCC or CC attributes.
			This file contains DRG information defined by the Centers for Medicare and Medicaid Services.
			This file should not be modified locally.
83.6	DRG DRG PROCEDURE	^ICDD	All ICD Procedure codes assigned to a Diagnostic Related Group (DRG). File contains sub-sections for the criteria a Procedure defines.
			This file contains DRG information defined by the Centers for Medicare and Medicaid Services.
			This file should not be modified locally.
83.61	DRG DRG PROCEDURE GROUPS	^ICDD	Procedure Clusters associated with Diagnostic Related Groups (DRG). The set of procedures in a cluster act as a single procedure when determining if a Code Set is satisfied.
			This file contains DRG information defined by the Centers for Medicare and Medicaid Services.
			This file should not be modified locally.
83.7	DRG HAC GROUPS	^ICDD	File contains the Hospital Acquired Conditions defined by the Diagnostic Related Groups (DRG). Conditions identified by these groups may not be included in the DRG calculation if they were not present on admission.
			This file contains DRG information defined by the Centers for Medicare and Medicaid Services.
			This file should not be modified locally.

File #	File Name	Global	Description
83.71	DRG HAC CODE SETS	^ICDD	File contains the definition of sets of either diagnosis or procedure codes that when used satisfy at least one coding criteria of a Hospital Acquired Condition (HAC).
			This file contains Diagnostic Related Group (DRG) information defined by the Centers for Medicare and Medicaid Services.
			This file should not be modified locally.

5.2. Templates

There are no templates contained in the DRG Grouper package.

5.3. File Flow (Relationships between Files)

1. VA FileMan Menu

2. Data Dictionary Utilities Menu

3. Map Pointer Relations

4. Select PACKAGE NAME: **ICD**

5. Remove FILE: **<RET>**

6. Add FILE: (**Enter name or number for files you want to include in the output.**) This prompt will repeat.

7. Enter name of file group for optional graph header: DRG GROUPER//**<RET>**

6. Exported Options

No options are exported with the release of DRG Grouper Version 18.0. The options exported with Version 14.0 will continue to be used.

7. Archiving and Purging

There are no archiving and purging capabilities connected with the DRG Grouper package as the data is a national table.

8. External/Internal Relations

The following minimum software versions are required to run DRG Grouper V. 18.0:

- VA FileMan V. 21.0
- Kernel V. 8.0
- PIMS V. 5.3

8.1. Database Integration Agreements (DBIAs)

Take the following steps to obtain the DBIAs for DRG Grouper V. 18.0:

Custodial Package

1. FORUM
2. DBA Menu
3. Integration Agreements Menu
4. Custodial Package Menu
5. Active by Custodial Package Option
6. Select Package Name: **ICD**

Subscriber Package

1. FORUM
2. DBA Menu
3. Integration Agreements Menu
4. Subscriber Package Menu
5. Print Active by Subscriber Package Option
6. Start with subscriber package: **ICD**

9.   Package-wide Variables

There are no package-wide variables associated with the DRG Grouper package.

9.1.   SACC Exemptions/Non-Standard Code

There are no SACC exemptions/non-standard code in the DRG Grouper package.

10. How to Generate Online Documentation

This section describes some of the various methods by which you can secure DRG Grouper technical documentation. You can generate online technical documentation pertaining to the DRG Grouper software (in addition to that which is located in the help prompts and on the help screens which are found throughout the DRG Grouper package) through the utilization of several KERNEL options. These include, but are not limited to, the following:

- XINDEX
- Menu Management Inquire Option File
- Print Option File
- FileMan List File Attributes

An option name preceded by a question mark (?OPTION) shows extended help, if available, for that option. Entering question marks at the "Select ... Option:" prompt provides valuable technical information. The level of information provided depends on the number of question marks entered.

- A single question mark (?) lists all options which can be accessed from the current option.
- Two question marks (??) lists all options accessible from the current one, showing the formal name and lock for each.
- Three question marks (???) displays a brief description for each option in a menu.

For a more detailed option listing and further information about other utilities which supply online technical information, please consult the VistA Kernel Reference Manual.

10.1. XINDEX

This option analyzes the structure of routines to determine in part if the routines adhere to VistA Programming Standards. The XINDEX output might include the following components:

- Compiled list of errors and warnings
- Routine listing
- Local variables
- Global variables
- Naked globals
- Label references
- External references

By running XINDEX for a specified set of routines, users are afforded the opportunity to discover any deviations from VistA Programming Standards which exist in the selected routines and to see how routines interact with one another (i.e., which routines call or are called by other routines).

To run XINDEX for the DRG Grouper software, specify the following namespace at the "routine(s) ?>" prompt: **ICD***.

DRG Grouper initialization routines which reside in the UCI in which XINDEX is being run, compiled template routines, and local routines found within the ICD namespace should be omitted at the "routine(s) ?>" prompt. To omit routines from selection, preface the namespace with a minus sign (-).

10.2. Inquire To Option File

To secure information about DRG Grouper options, users must specify the name or namespace of the option(s) desired. This Menu Manager option provides the following information about user-specified option(s):

- Option name
- Menu text
- Option description
- Type of option
- Lock (if any)

10.3. Print Options File

Use this utility to generate a listing of options from the OPTION file (#19). Users can choose to print all of the entries in this file, or specify a single option or range of options. To obtain a list of DRG Grouper options, specify the ICD option namespace.

10.4. List File Attributes

Use this FileMan option to generate documentation pertaining to files and file structure. Use the Standard format to obtain the following data dictionary information for a specified file(s):

- File name and description
- Identifiers
- Cross-references
- Files pointed to by the file specified
- Files which point to the file specified
- Input, print, and sort templates

Additionally, the following information is supplied for each field in the file:

- Field name and number
- Global location
- Description
- Help prompt
- Cross-reference(s)

- Input transform

- Date last edited

- Notes

Use the Global Map format of this option to generate an output which lists:

- All cross-references for the selected file

- Global location of each field in the file

- Input, print, and sort templates

A. Appendix A – Routines and Checksums

A.1. Patch ICD*18*89 Routine Information

The second line of each of these routines for ICD*18*89 looks like:

```
;;18.0;DRG Grouper;**89**;Oct 20, 2000;Build 9
```

The checksums below are new checksums for ICD*18*89, and can be checked with CHECK1^XTSUMBLD.

Routine list of preceding patches: 64.

Table 3: ICD*18*89 Routine Checksums

Routine Name	Before	After	Patch List
ICD1889P	N/A	B6543207	**89**
ICD10TB0	B7031640	B7031640	**64**
ICD10TB1	B9911744	B9911744	**64**
ICD10TB2	B18222140	B18222140	**64**
ICD10TB3	B6789079	B6789079	**64**
ICD10TB4	B9167308	B9167308	**64**
ICD10TB5	B7411864	B7411864	**64**
ICD10TB6	B7217970	B7217970	**64**
ICD10TB7	B3864507	B3864507	**64**
ICD10TB8	B7326303	B7326303	**64**
ICD10TB9	B3049940	B3049940	**64**
ICD1864A	B168364316	B168364316	**64**
ICD1864B	B65361906	B65361906	**64**
ICDCOD	B7196903	B7196903	**7,57,64**
ICDCODLK	B33886229	B33886229	**64**
ICDDG010	B87527545	B87527545	**64**
ICDDRG	B61462104	B63337295	**2,7,10,14,20,31,37,57,64,89**
ICDDRG5	B35156082	B35156082	**2,5,7,10,20,22,31,37,64**
ICDDRGM	B190593495	B190593495	**7,36,57,64**
ICDDRGX	B28133843	B28133843	**1,2,5,7,10,14,20,24,27,31,64**
ICDDRGX1	B12298991	B12298991	**64**
ICDDRGX2	B156836573	B156836573	**64**

Routine Name	Before	After	Patch List
ICDDRGX3	B25217688	B25217688	**64**
ICDDRGXM	B11815979	B11815979	**31,50,62,64**
ICDDSLK	B118601308	B118601308	**64**
ICDGTDRG	B3882310	B3882310	**7,12,14,17,57,64**
ICDJC	N/A	B14003979	**89**
ICDJC1	N/A	B56485540	**89**
ICDJC2	N/A	B50437415	**89**
ICDJC3	N/A	B51705763	**89**
ICDREF	B572987	B572987	**14,17,57,64**
ICDRGAPI	B53995245	B53995245	**64**
ICDSELDS	B42651368	B42651368	**64**
ICDSELPS	B30531047	B30531047	**64**
ICDTBL2C	B51015005	B51015005	**50,49,54,55,61,62,64**
ICDTBL2D	B49902612	B49902612	**56,55,61,62,64**
ICDTBL2E	B49902881	B49902881	**65,64**
ICDTBL8A	B25027347	B25027347	**37,34,43,45,46,49,64**
ICDTBL8B	B25669193	B25669193	**45,46,49,54,64**
ICDTBL8C	B25174597	B25174597	**50,49,54,61,64**
ICDTBL8D	B25677376	B25677376	**56,61,62,64**
ICDTBL8E	B25715742	B25715742	**65,64**
ICDTBL9B	B4890646	B4890646	**45,54,64**
ICDTBL9C	B4895199	B4895199	**50,54,64**
ICDTBL9D	B5269928	B5269928	**56,69,64**
ICDTBL9E	B5179109	B5179109	**65,69,64**
ICDTLB4A	B18195336	B18195336	**14,64**
ICDTLB4B	B18194277	B18194277	**20,64**
ICDTLB6	B36196041	B36196041	**2,5,10,64**
ICDTLB61	B1300182	B1300182	**10,22,64**
ICDTLB6A	B37224357	B37224357	**14,17,64**
ICDTLB6B	B51960750	B51960750	**20,22,64**
ICDTLB6C	B58914547	B58914547	**24,30,64**

A.2. Patch ICD*18*64 Routine Information

The second line of each of these routines for ICD*18*64 looks like:

```
;;18.0;DRG Grouper;**64**;Oct 20, 2000;Build 103
```

The checksums below are new checksums for ICD*18*64, and can be checked with CHECK1^XTSUMBLD.

Routine list of preceding patches: 30, 57, 62, 69.

Table 4: ICD*18*64 Routine Checksums

Routine Name	Before	After	Patch List
ICD10TB0	N/A	B7031640	**64**
ICD10TB1	N/A	B9911744	**64**
ICD10TB2	N/A	B18222140	**64**
ICD10TB3	N/A	B6789079	**64**
ICD10TB4	N/A	B9167308	**64**
ICD10TB5	N/A	B7411864	**64**
ICD10TB6	N/A	B7217970	**64**
ICD10TB7	N/A	B3864507	**64**
ICD10TB8	N/A	B7326303	**64**
ICD10TB9	N/A	B3049940	**64**
ICD1864A	N/A	B168364316	**64**
ICD1864B	N/A	B65361906	**64**
ICDCOD	B5702581	B7196903	**7,57,64**
ICDCODLK	N/A	B33886229	**64**
ICDDG010	N/A	B87527545	**64**
ICDDRG	B34375895	B61462104	**2,7,10,14,20,31,37,57,64**
ICDDRG5	B33887705	B35156082	**2,5,7,10,20,22,31,37,64**
ICDDRGM	B31028651	B190593495	**7,36,57,64**
ICDDRGX	B26050820	B28133843	**1,2,5,7,10,14,20,24,27,31,64**
ICDDRGX1	N/A	B12298991	**64**
ICDDRGX2	N/A	B156836573	**64**
ICDDRGX3	N/A	B25217688	**64**
ICDDRGXM	B10793046	B11815979	**31,50,62,64**
ICDDSLK	N/A	B118601308	**64**

Routine Name	Before	After	Patch List
ICDGTDRG	B3954114	B3882310	**7,12,14,17,57,64**
ICDREF	B499599	B572987	**14,17,57,64**
ICDRGAPI	N/A	B53995245	**64**
ICDSELDS	N/A	B42651368	**64**
ICDSELPS	N/A	B30531047	**64**
ICDTBL2C	B51314411	B51015005	**50,49,54,55,61,62,64**
ICDTBL2D	B50198003	B49902612	**56,55,61,62,64**
ICDTBL2E	B50198273	B49902881	**65,64**
ICDTBL8A	B24430641	B25027347	**37,34,43,45,46,49,64**
ICDTBL8B	B25187689	B25669193	**45,46,49,54,64**
ICDTBL8C	B24982928	B25174597	**50,49,54,61,64**
ICDTBL8D	B25476852	B25677376	**56,61,62,64**
ICDTBL8E	B25476861	B25715742	**65,64**
ICDTBL9B	B4777979	B4890646	**45,54,64**
ICDTBL9C	B4782468	B4895199	**50,54,64**
ICDTBL9D	B5060180	B5269928	**56,69,64**
ICDTBL9E	B5060300	B5179109	**65,69,64**
ICDTLB4A	B17888489	B18195336	**14,64**
ICDTLB4B	B17888498	B18194277	**20,64**
ICDTLB6	B35811469	B36196041	**2,5,10,64**
ICDTLB61	B1234931	B1300182	**10,22,64**
ICDTLB6A	B36834501	B37224357	**14,17,64**
ICDTLB6B	B51496024	B51960750	**20,22,64**
ICDTLB6C	B58422258	B58914547	**24,30,64**

A.3.   Patch ICD*18*14 Routine Information

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The second line of each of these routines for ICD*18*14 looks like:

```
;;18.0;DRG Grouper;**14**;Oct 20, 2000;Build XXX
```

The checksums below are new checksums for ICD*18*14, and can be checked with CHECK1^XTSUMBLD.

Table 5: ICD*18*14 Routine Checksums

Routine Name	Before	After	Patch List
ICDCODE	9860985	10783406	6,12,14
ICDDRG	10514799	10859684	2,7,10,14
ICDDRG0	13317595	13917436	1,2,7,10,14
ICDDRG14	678754	828073	14
ICDDRGX	7838475	9269103	1,2,5,7,10,14
ICDGTDRG	12513862	13082153	7,12,14
ICDHLPD	1384673	1534351	10,14
ICDHLPO	1270146	1468369	10,14
ICDREF	N/A	255032	14
ICDTLB1A	N/A	6720875	14
ICDTLB2A	N/A	10549059	14
ICDTLB3	7318440	7283201	14
ICDTLB3A	N/A	7299188	14
ICDTLB4A	N/A	8003662	14
ICDTLB5A	N/A	10043142	14
ICDTLB6A	N/A	11665363	14

B. Appendix B – Glossary

The following table includes terms and definitions.

Table 6: Terms and Definitions

Term	Definition
Complication/comorbidity	A condition whose presence in conjunction with a specific primary diagnosis would cause an increase in length of stay by at least one day in 75% of the patients.
DRG	Diagnosis Related Group. A manageable, clinically coherent set of patient classes that relate a hospital case mix to the resource demands and associated costs experienced by the hospital.
ICD-10-CM	International Classification of Diseases, Tenth Revision, Clinical Modification.
ICD-10-PCS	International Classification of Diseases, Tenth Revision, Procedure Coding System.
ICD-9-CM	International Classification of Diseases, Ninth Revision, Clinical Modification.
Present on Admission (POA)	Present at the time the order for inpatient admission occurs — conditions that develop during an outpatient encounter, including emergency department, observation, or outpatient surgery, are considered POA.
Primary Diagnosis	Diagnosis that is chiefly responsible for causing the patient's admission to the hospital.
PTF	Patient Treatment File
Registered VA Patient	Patient contained in the PATIENT file (#2).
Ungroupable	Where sufficient data has not been entered for the DRG Grouper to function, the DRG will not be computed and will be displayed as UNGROUPABLE.