

ICD-10 R1 Pilot

For personal computers

Medicare Severity Grouper with Medicare Code Editor Software

Installation and User's Manual

Microsoft, Windows, and Windows NT are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Document number PBL-030
September 2011

CMS Statement

CMS is providing the public with ICD-10 MS-DRGs v28.0 (FY 2011) software which will be distributed through NTIS. We believe this software will allow the public to more easily review and provide feedback on updates to the ICD-10 MS-DRGs. Based on the feedback we receive, we will continue to make annual updates to the MS-DRGs. Please note that the FY 2014 (v31.0) ICD-10 MS-DRGs will be developed through the FY 2014 rulemaking process.

ICD-10 R1 Pilot

Version 28 This Medicare Severity (MS) Grouper with Medicare Code Editor (MCE) ICD-10 R1 Pilot software contains ICD-9-CM codes effective 10/01/2010 and ICD-10 codes published in December 2010. This software is intended to give users the opportunity to group and edit claims using both ICD-9-CM codes, ICD-10 CM and ICD-10 PCS codes defined by the Code Set indicator. It is not intended to be used to process claims as the ICD- 10 code set will not be mandated for use until October 1, 2013.

This piloted version will only group and edit claims using version 28 of the MS Grouper with version 27 of the MCE with effective dates 10/01/2010-9/30/2011. No grouping or editing will occur for claims prior to the valid date range for this component. If the discharge date is out of range for this component, version 28 will be used.

About this document

Purpose of the manual

This manual is written to assist health information management professionals with an average level of computer knowledge in installing and using the Medicare Severity Grouper with Medicare Code Editor (MSG/MCE) software in a Windows® environment on a personal computer.

The documentation assumes you are familiar with Diagnosis Related Groups (DRGs) methodology for processing medical claims, and with MCE software's evaluation of patient data to help identify possible errors in coding.

Information in the manual

The manual begins with a brief introduction describing the functionality of MSG/MCE software. You are then given instructions to install the software, followed by chapters on processing claims data interactively and in batch. There is an Accessibility Features chapter for people with disabilities to assist them with interactive claim processing. An appendix is included that lists the Major Diagnostic Categories (MDCs) and DRGs in the current MS grouper with the DRG-associated cost weights.

For a general outline of the topics covered in the manual, see the table of contents immediately following this preface. We recommend that you also use the index at the back of the manual to locate specific information.

Sequential steps in the manual to select an option use the “greater than” symbol. For example, rather than telling you to first go to the

Start menu, select Programs, select Accessories, and finally select Notepad, that instruction would appear as:

- **From the Start menu, select Programs > Accessories > Notepad.**

Contents

Preface	About this document	v
Chapter 1	Introduction	1.3
	Program versions	1.3
Chapter 2	Installing the software	2.3
	Hardware and system requirements	2.3
	Installing the current software product	2.5
	Description files	2.7
	Installed program functions	2.8
	<i>Accessing the functions</i>	2.8
	Uninstalling this grouper	2.9
Chapter 3	Interactive data processing	3.3
	Data entry	3.4
	Grouper selection	3.4
	Steps for entering data	3.4
	Data entry fields	3.7
	Data entry menu options	3.11
	Data entry command buttons	3.11
	Interactive error messages	3.12
	Program output	3.13
	Viewing interactive output	3.16
	Exiting the report window	3.16
	Output report fields	3.17
	Output report menu options	3.21
	Output report command button	3.22

	Program edits	3.23
Chapter 4	Batch processing	4.3
	Steps in batch processing	4.4
	Input file format	4.6
	Command line processing options	4.9
	Command line examples	4.10
	Output file formats	4.11
	Formatted output (-o option)	4.11
	Upload file (-u option)	4.11
	Working with batch output	4.17
	Viewing output	4.17
	Printing output	4.17
	Renaming a file	4.17
	Batch processing error messages	4.18
	Log files	4.20
	Viewing the file	4.21
	Printing the file	4.21
	Renaming the file	4.21
Chapter 5	Accessibility Features	5.3
	System requirements	5.3
	Data entry	5.4
	Grouper selection	5.4
	Steps for entering data	5.4
	Data entry fields	5.6
	Data entry menu options	5.10
	Data entry command buttons	5.11
	Interactive error messages	5.12
	Program output	5.13
	Viewing interactive output	5.16
	Exiting the report window	5.16
	Output report fields	5.17
	Output report menu options	5.21
	Output report command button	5.22
	Program edits	5.23
Appendix A	Current MDCs and DRGs	A.3
	Index	I.1

Figures

Figure	Title and page
3-1	Data entry window 3.5
3-2	Sample output report 3.15
4-1	Batch processing overview 4.4
4-2	Sample log file 4.20
5-1	Sample output report 5.15

Tables

Table	Title and page
1-1	Grouper versions in the program 1.3
2-1	Hardware requirements 2.3
2-2	Description files 2.7
2-3	Installed program functions 2.8
3-1	Help for interactive data entry 3.6
3-2	Data entry fields 3.7
3-3	Data entry menu items 3.11
3-4	Data entry command buttons 3.11
3-5	Interactive error messages 3.12
3-6	Interactive output report fields 3.17
3-7	Output report menu items 3.21
3-8	Output report command button 3.22
3-9	Program edits 3.23
4-1	Batch processing performance information 4.5
4-2	Input file record layout 4.6
4-3	Batch processing options 4.9
4-4	Batch processing output 4.11
4-5	Upload file record layout 4.12
4-6	Batch processing error messages 4.18
5-1	Help for interactive data entry 5.5
5-2	Data entry fields 5.6
5-3	Data entry menu items 5.10
5-4	Data entry command buttons 5.11
5-5	Interactive error messages 5.12
5-6	Interactive output report fields 5.17
5-7	Output report menu items 5.21
5-8	Output report command button 5.22

5-9	Program edits	5.23
A-1	List of MDCs	A.3
A-2	List of DRGs with cost weights	A.4

Chapter 1

Introduction

Contents	Introduction 1.3
	Program versions 1.3

Introduction

THE MEDICARE SEVERITY GROUPER with Medicare Code Editor (MSG/MCE) software edits medical record data to help identify coding errors and inconsistencies between clinical data and coding.

The software:

- ◆ Assigns the medical record to a Major Diagnostic Category (MDC) and a Diagnosis Related Group (DRG).
- ◆ Displays clinical edits that identify inconsistencies after evaluating a patient's principal diagnosis, any secondary diagnoses, surgical procedures, age, sex, and discharge status for possible errors.
- ◆ Displays the cost weight associated with the assigned DRG for each patient record.
- ◆ Processes medical record data either from a MS-DOS batch file or interactively in a Windows environment.

Program versions

This release of MS grouper with MCE software for Windows-based personal computers supports versions 28.0 of the grouper only, as shown in table 1–1.

Table 1–1. Grouper versions in the program

MS grouper version	MCE version	Effective date range
28.0	27.0	10/01/2010–09/30/2011

Version 28.0 of the MS grouper supports diagnosis and procedures codes with their descriptions, effective October 1, 2010.

There are specific rules for the discharge date field as it relates to the discharge status and the version of software used to process a claim. *See table 3–2 on page 3.7 for details.*

Chapter 2

Installing the software

Contents	Installing the software	2.3
	Hardware and system requirements	2.3
	Installing the current software product	2.5
	Description files	2.7
	Installed program functions	2.8
	<i>Accessing the functions</i>	2.8
	Uninstalling this grouper	2.9

Installing the software

- *Note: R1 Pilot version users do not need to uninstall previous MSG MCE software. This R1 Pilot version will work in parallel with other MSG MCE versions.*

THE MEDICARE SEVERITY GROUPER WITH MEDICARE CODE EDITOR (MSG/MCE) software is completely self-installable on a stand-alone personal computer (PC). The installation must be performed by a person with Windows administrative status. The software is not designed for networked systems.

Hardware and system requirements

The hardware and system requirements for the software are shown in table 2–1.

Table 2–1. Hardware requirements

Component	Requirement
Operating system	Windows 2003 Windows XP (service pack 1) Windows Vista (32 bit & 64 bit) Windows 7 (32 bit & 64 bit)
RAM	512 MB
Required disk space	150 MB
Monitor	Super VGA color (1024x768) resolution)
Windows permissions	Administrative status

- *Note: This software is not intended to operate in a networked environment.*

The following are system requirements for accessibility:

- ◆ Windows-based Assistive Technology software
- ◆ JAVA Access Bridge

- *Note: Assistive Technology software needs to be running prior to using MSG MCE.*

Installing the current software product

To install the current version of MS grouper with MCE software, follow the steps below. The installation automatically checks for the appropriate operating system, screen resolution, free disk space, administrator status, and previously installed MSG/MCE software versions. If any requirement is not met, you will see a message stating the nature of the problem during the installation. Correct the problem and begin the installation again. At any time, you can click Cancel to end the installation process.

- ❑ **With your computer turned on, close all unnecessary applications running on your computer.**
- ❑ **Insert the product CD into the CD-ROM drive.**

The installation procedure will start automatically unless your auto-run feature is turned off.

If the setup does not start in a few seconds, browse to your CD drive and select the following executable:

Disk1\InstData\VMMSGMCEInstaller.exe

You see a message stating that InstallAnywhere[®] is preparing to install.

For the R1 Pilot version only, the following CMS statement appears as a pop-up window.

CMS is providing the public with ICD-10 MS-DRGs v28.0 (FY 2011) software which will be distributed through NTIS. We believe this software will allow the public to more easily review and provide feedback on updates to the ICD-10 MS-DRGs. Based on the feedback we receive, we will continue to make annual updates to the MS-DRGs. Please note that the FY 2014 (v31.0) ICD-10 MS-DRGs will be developed through the FY 2014 rulemaking process.

On the pop-up window, click OK to continue with the installation.

- *Note: For Windows 7 and Vista users if you see a warning message for "unidentified publisher" click OK to continue with the install.*
- ❑ **On the Introduction screen, read the introductory information, then click Next to continue.**
- ❑ **On the Choose Install Folder screen, specify the folder where you want to install the product.**

The default folder is C:\Program Files\MSGMCE SOFTWARE PILOT.

- ◆ To choose a different folder, click Choose and browse to the folder you want to use.
 - ◆ If you want to restore the default folder after making a change, click Restore Default Folder
- **After choosing an install folder, click Next.**

- ❑ **Review the information on the Pre-Installation Summary screen.**

If you need to make any changes, click Previous and make the necessary changes, then click Next to return to the Pre-Installation Summary screen.

- ❑ **When you are satisfied with the pre-installation summary information, click Install.**

While the installation process runs, you see the Installing screen. If errors occur, you see a message directing you to the installation log for more information.

- ❑ **On the Install Complete screen, click Done.**

Description files

Files containing descriptions for diagnosis and procedure codes, DRGs, and MDCs are included as part of the installation process. The files, listed in table 2–2, are located in the Descriptions directory off the product directory. In the file names, xxx represents the current software version number.

Table 2–2. Description files

File name	Contains descriptions for...
icd9dx.vxxx	ICD-9-CM diagnosis codes
icd9sg.vxxx	ICD-9-CM procedure codes
icd10dx.vxxx	ICD-10-CM diagnosis codes
icd10sg.vxxx	ICD-10-PCS procedure codes
msdrg3.vxxx	3-digit DRGs
msdrg4.vxxx	4-digit DRGs
msmdc.vxxx	MDCs

Installed program functions

The installation places the three functions, shown in table 2–3, in the MS Grouper with Medicare Code Editor Software R1 Pilot folder of Programs in the Start menu on your PC.

Table 2–3. Installed program functions

Function	When to select the function
Interactive	Select to display the MS Grouper with Medicare Code Editor Software R1 Pilot interactive data entry window.
MS-DOS prompt	Select to display a window containing a MS-DOS prompt to process records with batch processing. <i>Note: If the MS-DOS prompt window does not appear when you select this function, verify that the environment path includes C:\WINDOWS\system32. If necessary, add it to the path.</i>
Readme	Select to read product-specific information for the current release.

Accessing the functions

To access any of the functions in table 2–3:

- Go to the Start menu.**
- Select Programs > MS Grouper with Medicare Code Editor Software R1 Pilot.**
- Select the appropriate function.**
- For information on interactive claims processing, go to chapter 3.**

— or —

For information on batch processing, go to chapter 4.

Uninstalling this grouper

The following instructions explain how to uninstall this grouper.

- ❑ **Launch the uninstall process from the Windows Control Panel or from the product directory.**
 - ◆ To launch the uninstall process from the Control Panel,
 - Click the Start menu and select Settings > Control Panel > Add or Remove Programs. (Windows 7 users, click Start > Control Panel > Programs and Features.)
 - From the list of installed products, select MS Grouper with Medicare Code Editor Software R1 Pilot.
 - Click Change/Remove.
 - ◆ To launch the uninstall process from the product directory,
 - Locate the product directory. The default directory is C:\Program Files\MSG MCE Software Pilot.
 - Open the folder named Uninstall_MS Grouper with Medicare Code Editor Software R1 Pilot, then select Change MS Grouper with Medicare Code Editor Software R1 Pilot.exe.
- ❑ **On the Uninstall MS Grouper with Medicare Code Editor Software R1 Pilot screen, read the message summarizing the uninstall process, then click Next.**
- ❑ **On the Uninstall Options screen, select Complete Uninstall to uninstall the software.**
- ❑ **Click Next.**
- ❑ **On the Uninstall MS Grouper with Medicare Code Editor Software R1 Pilot screen, click Uninstall.**
- ❑ **On the Uninstall Complete screen, click Done.**

Chapter 3

Interactive data processing

Contents	Interactive data processing 3.3
	Data entry 3.4
	Grouper selection 3.4
	Steps for entering data 3.4
	Data entry fields 3.7
	Data entry menu options 3.11
	Data entry command buttons 3.11
	Interactive error messages 3.12
	Program output 3.13
	Viewing interactive output 3.16
	Exiting the report window 3.16
	Output report fields 3.17
	Output report menu options 3.21
	Output report command button 3.22
	Program edits 3.23

Interactive data processing

THE MEDICARE SEVERITY GROUPER with Medicare Code Editor (MSG/MCE) software processes medical record data by two methods:

- ◆ Interactively entering one record at a time;
- ◆ By batch, processing data from a group of records entered in an MS-DOS file.

This chapter discusses the interactive method of claim processing. Interactive processing enables you to correct invalid data or codes at the time a record is processed. This method uses a Windows environment to enter data and view the output.

Sections in this chapter give you information on:

- ◆ Data entry, including field descriptions, information on menus and command buttons on the data entry window, and error messages.
- ◆ Program output, including an example output report and explanation of output fields, information on menus and command buttons on the data output window.
- ◆ Descriptions of the edits in the MSG/MCE software program.

Data entry

The information gives you field information and valid entry ranges where they exist, to assist in data entry. You will be able to navigate through the data entry window and perform functions, such as editing fields or copying text. Error messages that can occur during data entry are listed and explained.

Grouper selection

As you enter data, the program automatically selects the appropriate grouper for processing using the discharge date entered from the patient's medical record. If the discharge date is 10/01/2010 or later, MS grouper 28.0 is used.

If the discharge date of the patient is not within an effective date range for any installed grouper, or if the discharge date is missing, the program defaults to the most current version installed, version 28. In that case, this message is displayed on the output report:

Grouper version [current #] will be used because the discharge date is either missing or is outside the effective date range for the installed groupers.

- ***Note:** Because of the retroactivity in the Medicare Code Editor a discharge date is needed to elicit edits. If there is no discharge date entered, the Medicare Code Editor will not be called.*

Steps for entering data

Follow these steps for interactive data entry:

- ❑ **From the Start menu, select Programs > MS Grouper with Medicare Code Editor Software R1 Pilot > Interactive.**

The About box window appears briefly followed by the data entry (or input) window titled, MS Grouper with Medicare Code Editor Software R1 Pilot, shown in figure 3–1.

The data entry window is organized into three sections:

- ◆ Patient Information
- ◆ Patient Stay Information
- ◆ Codes

The cursor will be positioned at the first field. To enter data, you can tab to move through fields. Use Shift+Tab to move back to the previous field. When in the codes table, text will appear below the code tables displaying the location of the cursor.

MS Grouper with Medicare Code Editor Software R1 Pilot

Patient Edit Help

Patient Information

Name: Medical record num...
 Birth date: Age in ye... S...

Patient Stay Information

Account number Primary pay... 01 Medicare
 Admit date: Discharge da... Discharge status:
 LOS: Optional informati...

Codes

Admit ... Code Set: ICD... Apply Hospital Acquired Condition (HAC) Logic

Diagnoses:

	Code	POA	Description	Edits
PDX:		<input type="text"/>		
2		<input type="text"/>		
3		<input type="text"/>		
4		<input type="text"/>		
5		<input type="text"/>		
6		<input type="text"/>		
7		<input type="text"/>		

Procedures:

	Code	Description	Edits
PP:			
2			
3			
4			

Report Clear

Figure 3–1. Data entry window

- ❑ **Enter data into the appropriate fields.**

If you need assistance when working on the data entry window, table 3–1 contains information to help you.

Table 3–1. Help for interactive data entry

What do you want to do?	Help
Find specific data entry field information	Go to table 3–2 on page 3.7.
Work with text on the window	Use standard Windows options (e.g., cut, copy, paste).
Make a menu selection	Go to table 3–3 on page 3.11.
Correct an entry in the patient information or patient stay information section	Simply highlight and overwrite the entry with the correct information.
Delete a code entry row in the codes section	For the Admit Dx, highlight the code and press the Delete key. For other codes, click on the number of the row to highlight it, then use the Edit > Delete option. <i>For more information, see the Diagnoses and Procedures field descriptions in table 3–2; also see tables 3–3 and 3–4 for additional information on the Delete and Clear functions.</i>
View a long field description or edit message associated with a code	Use the scroll bar.
Eliminate an error message	Select OK to close the dialog box, and correct the problem. The “Interactive error messages” section on page 3.12 lists error messages that can occur with their descriptions.

- **When you have completed data entry for a record, select Report to view the processed record.**

You can select Report by clicking on it or by tabbing to the it and then pressing Enter. Pressing Alt+R also opens the report.

The “Viewing interactive output” section on page 3.16 contains output information, including printing of the report. An example of an output report is shown on page 3.15.

Data entry fields Table 3–2 describes the fields on the data entry window. An asterisk (*) indicates a required field.

Table 3–2. Data entry fields

Field name	Length	Description
Patient information		
Name	31	Name of the patient. Alphanumeric. First and last names can be entered in any order.
Medical record number	13	Patient's medical record number. Alphanumeric.
Birth date	10	Birth date of the patient. Format: mm/dd/yy, mm/dd/yyyy, mmdyyy, or mmdyy. A dash (-), slash (/), period or space is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. If the patient is more than 99 years of age, a four-digit year is required. A birth date prior to 01/01/1883 can not be entered. The birth and admit dates are used to calculate the age of the patient; calculated age overrides entered age.
Age in years*	3	Age of the patient. Valid values: 0–124 years. Age can be an entered or a calculated value. <i>For more information, see the Birth date field description.</i>
Sex*	1	Patient gender. Select a value from the drop-down list: 0, u, U = Unknown 1, m, M = Male 2, f, F = Female
Patient Stay information		
Account number	17	Patient account number. Alphanumeric.
Primary payer	2	Primary payer for the service provided. Select a value from the drop-down list: 01 Medicare (default) 06 Blue Cross 02 Medicaid 07 Insur Co 03 Title V 08 Self Pay 04 Other Govt 09 Other 05 Work Comp 10 No Charge
Admit date	10	Date of admission to the facility. Format: mm/dd/yy, mm/dd/yyyy, mmdyyy, or mmdyy. A dash (-), slash (/), period or space is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. The birth and admit dates are used to calculate the age of the patient; <i>for more information, see the Birth date field description.</i> The admit and discharge dates are used to calculate length of stay (LOS); calculated LOS overrides entered LOS.

Table 3–2. Data entry fields (*continued*)

Field name	Length	Description
Discharge date	10	<p>Date of discharge from the facility. Format: mm/dd/yy, mm/dd/yyyy, mmdyyy, or mmdyy.</p> <p>A dash (-), slash (/), period or space is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display.</p> <p>The discharge date determines the grouper version called to process the record. The discharge date also determines which discharge status codes are displayed. For this reason, we recommend entering the discharge date before discharge status (<i>see also Discharge status, below</i>).</p> <p>An error message is displayed when you click Report, and the discharge date field is blank or contains a date outside the effective date range of any installed grouper; Click OK to accept the default (current) grouper version to process the claim, or Cancel to enter a discharge date. When you accept the default version, the output report includes a USED BY DEFAULT notation.</p> <p>The discharge and admit dates are used to calculate LOS; <i>for more information, see the Admit date field description.</i></p>
Discharge status*	2	<p>Status of discharge. Enter the discharge date before entering the discharge status so that the appropriate discharge status codes are displayed in a drop-down list (<i>see also Discharge date, above</i>). An error message is displayed when a discharge status is selected first and is invalid for a discharge date entered afterward (<i>see “Interactive error messages” on page 3.12</i>).</p> <p>All available discharge status codes are listed below.</p> <p>01 = Home or self-care 02 = Disch/trans to another short term hosp 03 = Disch/trans to SNF 04 = Custodial/supportive care (revised 10/01/09) 05 = Disch/trans to a designated cancer center or children's hospital (revised 04/01/08) 06 = Care of home health service 07 = Left against medical advice 20 = Died 21 = Disch/trans to court/law enforcement 30 = Still a patient 43 = Fed hospital (added 10/01/03) 50 = Hospice-home 51 = Hospice-medical facility 61 = Swing Bed (added 10/01/2001) 62 = Rehab fac/unit (added 10/01/2001) 63 = LTC hospital (added 10/01/2001) 64 = Nursing facility–Medicaid certified (added 10/01/02) 65 = Psych hosp/unit (added 10/01/03) 66 = Critical access hospital (added 10/01/05) 70 = Disch/trans to another type of health care institution not defined elsewhere in the code list (added 04/01/08)</p>

Table 3–2. Data entry fields (*continued*)

Field name	Length	Description
LOS (length of stay)	3	Number of days the patient was in the facility. Valid entries: 000–999. LOS can be user-entered, or calculated when admit and discharge dates have been entered. <i>For more information, see the Admit date field description.</i>
Optional information	72	Comments or other user-specified information. Alphanumeric.
Codes		
Admit Dx*	5	Enter a diagnosis code without decimals. Lower case is automatically converted to upper case. The code description is displayed as you type the code. If the code is not valid, the word “invalid” displays in the description field. Note: The interactive program accepts only diagnosis codes of up to five digits for ICD–9 processing and seven digits for ICD–10 processing.
Apply HAC (hospital-acquired condition) logic	1	The checked box indicates that HAC logic will be applied. By default, this box will always be checked.

Table 3–2. Data entry fields (*continued*)

Field name	Length	Description
Code Set indicators	1	This box indicates whether the record is coded using ICD-9 codes or ICD-10 codes. This box always defaults to ICD-10. Use the drop down to change to ICD-9.
Diagnoses: PDX (principal diagnosis)* Diagnoses 2–25	7	<p>Enter diagnosis codes without decimals. Lower case is automatically converted to upper case. The code description and any applicable edits are displayed as you type the code. A maximum of 25 codes can be entered. Pressing the Tab key at the first blank diagnosis code field moves focus to the first blank procedure code field.</p> <p>The Description and Edits fields are display only. A maximum of four edits per code can be displayed (<i>see table 3–9 for a list of code edits</i>).</p> <p>If you enter a secondary diagnosis and later delete it, the program moves up the diagnoses following the deleted row, if there are any, to fill in the empty row. This behavior does not apply to the principal diagnosis.</p> <p>Note: The interactive program accepts only diagnosis codes of up to five digits for ICD–9 processing and seven digits for ICD–10 processing.</p>
Present on Admission Indicators	1	<p>Enter one of the following Present on Admission Indicators, required for a diagnosis other than the admit diagnosis:</p> <p>Y = Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission U = Insufficient documentation to determine if present on admission W = Clinically unable to determine if present at time of admission 1 = Exempt from reporting Blank = exempt from reporting</p>
Procedures: PP (principal procedure) Procedures 2–25	7	<p>Enter procedure codes without decimals. Lower case is automatically converted to upper case. The code description and any applicable edits are displayed as you type the code. A maximum of 25 codes can be entered. Pressing the Tab key at the first blank procedure code field moves focus to the Report button.</p> <p>The Description and Edits fields are display only. A maximum of four edits per code can be displayed (<i>see table 3–9 for a list of code edits</i>).</p> <p>If you enter a secondary procedure and later delete it, the program moves up the procedures following the deleted row, if there are any, to fill in the empty row. This behavior does not apply to the principal procedure.</p> <p>Note: The interactive program accepts only procedure codes of up to four digits for ICD–9 processing and seven digits for ICD–10 processing.</p>

Data entry menu options

Table 3–3 describes the menu options on the data entry window. Refer to the Function column to locate the task you want to perform. Accelerator keys allow you to bypass a menu and activate a function more quickly.

Table 3–3. Data entry menu items

Menu	Item	Function	Accelerator key
Patient (Alt + P)	New	Displays the demographics tab cleared of all previously entered information.	Ctrl+N
	Exit	Exits the program.	Alt+F4
Edit (Alt + E)	Cut	Removes the selected text and copies it to the clipboard.	Ctrl+X
	Copy	Copies the selected text to the clipboard.	Ctrl+C
	Paste	Inserts contents of the clipboard at the insertion point.	Ctrl+V
	Delete	Deletes the selected text, or the selected row in the Codes section.	Delete
Help (Alt + H)	About	Displays the About box with current version information.	

Data entry command buttons

Table 3–4 describes the command buttons on the data entry window. Use the Function column to locate the task you want to perform.

Table 3–4. Data entry command buttons

Button	Function
Clear	Clears all diagnosis (including admit dx) and procedure code entries and their descriptions, and any associated edits. You must click Clear to activate its function; tabbing to the button and pressing Enter will not work. Alt+C also clears fields.
Report	Displays a pre-formatted output report that can be printed or saved. Alt+R also displays reports. An error message displays in place of the report when any required fields are missing or invalid; correct the error, then tab to Report or press Alt+R to open the report again. Data output is discussed on page 3.13.

Interactive error messages Table 3–5 is an alphabetical list of the error messages that can occur during data entry. The messages help prevent invalid or incorrect entries.

Table 3–5. Interactive error messages

Message	Description
Admit date cannot be after Discharge date.	The program checks for logical sequencing of dates.
[Admit date] [Birth date] [Discharge date] [Procedure date] cannot be after today's date	The date entered in the date field is after the system (today's) date.
Admit date cannot precede Birth date.	The program checks for logical sequencing of dates.
[Admit date] [Birth date] [Discharge date] is invalid. Dates must be entered in this format: mm/dd/yyyy, mm/dd/yy, mmdyyy, or mmdyy.	The value entered for the month, day or year is outside the valid range. <i>See table 3–2 for more information on date fields.</i>
Admit diagnosis is a required field. Please enter an admit diagnosis code.	The program does not process a record with a blank required field.
Age is invalid. Calculated age must be between 0 and 124 years.	The valid range for age in years is 0–124.
Birth date cannot be after Admit date.	The program checks for logical sequencing of dates.
Birth date cannot be after Discharge date.	The program checks for logical sequencing of dates.
Discharge date cannot precede Admit date.	The program checks for logical sequencing of dates.
Discharge date cannot precede Birth date.	The program checks for logical sequencing of dates.
Discharge status invalid for discharge date entered.	When the discharge status is entered before the discharge date, and the discharge status is invalid for the entered discharge date, this message is displayed. To avoid this message, enter the discharge date before selecting a discharge status.
Length of stay (LOS) is invalid. Calculated length of stay must be between 0 and 999 days.	The entered or calculated LOS exceeds the upper limit allowed for the field.
The following required fields are missing and/or invalid: Age in years Sex Discharge status Admit Dx PDX Discharge date	You can not produce an output report when a required field contains invalid data or is blank. The program sets the focus to the first invalid or blank required field.

Program output

The information in this section describes the output resulting from the processing of the data entered interactively into the program. The output is displayed on your computer screen and can be printed, copied, or saved to a text file.

Reports are saved singly, that is, the program does not append them. If you want a file of multiple reports, you can create one by copying several output reports, one at a time, and pasting them into a text file.

Once data is erased from the data entry window and the Report window closed, the output is no longer available unless you re-enter the data.

This section also contains an illustration of an output report and information on the report fields. Program edits are explained in the following section.

- **To display the output report, select Report on the data entry window (figure 3-1) or press Alt+R.**

You can select Report by clicking on it or by tabbing to it then pressing Enter.

A sample report is shown in figure 3–2 and contains the following elements:

- ◆ A title line giving the version of the grouper that processed the claim.
- ◆ Patient information copied from the entries you made on the data entry window.
- ◆ Grouper information: the assigned MDC, Final DRG, and Final DRG cost weight.
- ◆ Hospital-acquired condition (HAC) status message.
- ◆ Code Set indicator.
- ◆ Clinical information: a listing of the entered diagnosis and procedure codes with their English descriptions.
- ◆ Present on Admission (POA) indicators for diagnosis codes, as applicable.
- ◆ Edits for diagnosis and procedure codes, as applicable.
- ◆ Initial DRG.

The DRG cost weight represented by xx.xxxx in the sample report will be replaced by the actual current cost weight for the assigned DRG.

Title line ————— MS-DRG Assignment with Medicare Code Editor R1 Pilot V28.0

Patient information ————— Patient name: Jane Smith Medical rec #: 1054879

Admit date: 10/01/2010 Discharge date: 10/06/2010 Birth date: 09/09/1943
Optional information:

Patient acct #: 458799
Age in years: 67 Sex: Female
Discharge status: 01 Home or self-care

Grouping information ————— MDC: 10 ENDOCRINE, NUTRITIONAL & METABOLIC DISEASES & DISORDERS
Final
DRG: 639 Diabetes w/o CC/MCC
Cost weight: 00.5544
MS-DRG Grouper version 28.0 (October 1, 2010) used.
HAC Status: One or more HAC criteria met, Final DRG changes.

Clinical information ————— Admitting Diagnosis:
E109 Type 1 diabetes mellitus without complications

Principal Diagnosis:
E109 Type 1 diabetes mellitus without complications (DRG)
POA: Yes, present at the time of inpatient admission

Secondary Diagnoses:
E109 Type 1 diabetes mellitus without complications
POA: Yes, present at the time of inpatient admission

Edit ————— Edit: Duplicate of principal diagnosis (MCE)

POA indicator ————— T8351XA Infect/inflm reaction due to indwell urinary catheter, init (DRG)(HAC)
POA: No, not present at the time of inpatient admission
N390 Urinary tract infection, site not specified (DRG)(HAC)
POA: No, not present at the time of inpatient admission
I10 Essential (primary) hypertension
POA: Yes, present at the time of inpatient admission
N469 Male infertility, unspecified
POA: Yes, present at the time of inpatient admission
Edit: Sex conflict (MCE)

No procedures performed

Initial
DRG: 638 Diabetes w CC
Primary Payer: 01 Medicare

Actual LOS: 5

Patient Summary Edits:
MCE pre-payment errors only

Figure 3–2. Sample output report

Viewing interactive output

Output report fields are described in table 3–6 on page 3.17.

Use the menu options described in table 3–7 on page 3.21 to:

- ◆ Print the output report
- ◆ Copy part or all of the report
- ◆ Save the report to a file

The output report is read-only. To change data on the output report, close the report window (Alt+C) and return to the data entry window, edit information there and re-generate the report.

Exiting the report window

With the output report displayed on your screen:

- **Select Close (Alt+C) at the bottom of the report window.**

The data entry window is re-displayed. You can:

- ◆ Edit the data for the current record shown.
- or —
- ◆ Select Patient > New (Ctrl+N) to begin data entry for a new record.

Output report fields Table 3–6 describes the fields on the output report.

Table 3–6. Interactive output report fields

Name	Description
Patient name Medical record number Admit date Discharge date Optional information Patient account number Age in years Sex Discharge status	These output fields carry over the data entry information. <i>See table 3–2 on page 3.7 for information on these fields.</i>

Table 3–6. Interactive output report fields (*continued*)

Name	Description
<p>Grouping information (MDC, final DRG, final cost weight, grouper version used)</p>	<p>The Major Diagnostic Category (MDC) and Final Diagnosis Related Group (DRG) assigned to the record based on the age, sex, discharge status, Hospital Acquired Conditions (HAC), Code Set indicator, Present on Admission (POA) indicators, and codes entered from the record. The MS-designated DRG cost weight shows under the DRG line. <i>For a list of DRGs and associated cost weights in the current version of the MS grouper, see appendix A.</i></p> <p>Patient records assigned to DRGs 998 (Principal diagnosis invalid as discharge diagnosis) or 999 (Ungroupable) may not have an assigned valid MDC. In this case, no MDC number or description is displayed.</p> <p>When DRG 999 is assigned, one of the following messages identifies the reason why the record is ungroupable:</p> <ul style="list-style-type: none"> ◆ Invalid principal diagnosis ◆ Invalid age (<0 or >124) ◆ Invalid discharge date ◆ Invalid sex (not 1 or 2) ◆ Invalid discharge status (batch only) ◆ Record does not meet criteria for any DRG ◆ Illogical principal diagnosis ◆ Diagnosis code can not be used as principal diagnosis ◆ POA logic nonexempt - HAC-POA(s) invalid or missing or 1. *Long description: POA logic Indicator = Z AND at least one HAC POA is invalid or missing or 1 *Batch only ◆ POA logic invalid/missing - HAC-POA(s) are N, U. *Long description: POA logic Indicator is invalid or missing AND at least one HAC POA is N or U *Batch only ◆ POA logic invalid/missing - HAC-POA(s) invalid/missing or 1. *Long description: POA logic Indicator is invalid or missing AND at least one HAC POA is invalid or missing or 1 *Batch only ◆ POA logic invalid/missing - multiple distinct HAC-POAs not Y,W. *Long description: POA Logic Indicator is invalid or missing AND there are multiple HACs that have different HAC POA values that are not Y or W *Batch only <p>The version of the grouper used for grouping is displayed with the effective date associated with the grouper. If you default to the current grouper version when the discharge date is invalid or missing (<i>see page 3.8 for discharge date information</i>), the output states USED BY DEFAULT.</p>

Table 3–6. Interactive output report fields (*continued*)

Name	Description
Clinical information	<p>Displayed codes include admit diagnosis, principal diagnosis, secondary diagnoses, and procedures. Descriptions follow the codes and, if applicable, the following indicators:</p> <p>DRG Indicates a secondary diagnosis or procedure used to determine DRG assignment. A secondary diagnosis code assigned with HAC and DRG indicates a DRG change with demotion. A procedure code assigned with HAC and DRG indicates code was used for the definition of HAC.</p> <p>HAC Indicates a code flagged as a Hospital Acquired Condition.</p> <p>MCC Indicates a diagnosis code considered to be a major complication or co-morbidity. An MCC diagnosis can significantly influence DRG assignment. When more than one MCC code is present, a DRG indicator replaces the MCC indicator to mark the MCC code used to determine DRG assignment.</p> <p>CC indicates a diagnosis code considered to be a complication or co-morbidity. A CC diagnosis can significantly influence DRG assignment. When more than one CC code is present, a DRG indicator replaces the CC indicator to mark the CC code used to determine DRG assignment.</p> <p>OR Indicates a procedure code that normally requires use of an operating room and which can significantly influence DRG assignment. When more than one OR code is present, DRG replaces OR to mark the OR code used to assign the DRG.</p>
Present on Admission (POA) information	Indicates whether the diagnosis was present at the time the patient was admitted.
Edit information	Program edits that indicate a possible coding problem are displayed under the codes that generated them. Each edit includes a Medicare Code Editor notation (MCE). A maximum of four edits per code will be displayed. <i>See table 3–9 for a description of each edit and why they occur.</i>
Initial DRG	Initial Diagnosis Related Group (DRG) assignment prior to Hospital Acquired Condition logic grouper processing.
Primary payer LOS	These output fields carry over the data entry information. <i>See table 3–2 on page 3.7 for information on these fields.</i>

Table 3–6. Interactive output report fields (*continued*)

Name	Description
Patient summary edits	<p>This section is where clinical edits and data entry error messages not pertaining to a specific code are displayed. The Invalid sex edit is currently the only edit that could display in this section.</p> <p>Edits are flagged as pre-payment or post-payment errors, noted as one of the following: MCE pre-payment errors only MCE post-payment errors only MCE pre- and post-payment errors No MCE pre- or post-payment errors</p> <p>For this flag, edits are categorized as follows:</p> <p><u>Pre-payment</u> Age conflict Duplicate of principal diagnosis V00–Y99 codes as principal diagnosis Invalid ICD-9-CM code or invalid ICD-10 code Manifestation code as principal diagnosis Non-covered procedure Questionable admission Sex conflict Unacceptable principal diagnosis/Requires secondary diagnosis Invalid age Invalid sex Invalid discharge status Limited coverage Wrong procedure performed</p>

Output report menu options

Table 3–7 describes the menu options on the output report window. Use the Function column to locate the task you want to perform. Accelerator keys allow you to bypass a menu and activate a function more quickly.

Table 3–7. Output report menu items

Menu	Item	Function	Accelerator key
File (Alt + F)	Print	Prints the output report.	Ctrl+P
	Save As	Opens a Save As dialog box to save the currently displayed output report as a text file. Unless you specify otherwise, the filename will be report.txt, and the file will be saved in the directory where the product was installed. Unless you specified otherwise at the time of installation, this directory is C:\Program Files\MSGMCE SOFTWARE PILOT. You can browse and save the file in any directory you choose. Records can not be appended in the report.txt file. The file is overwritten each time you save a report unless you specify a different filename. The program asks if you want to overwrite the report.txt file before proceeding with the save.	Ctrl+S
	Exit	Closes the output report and re-displays the data entry window.	Ctrl+Q
Edit (Alt + E)	Copy	Copies the selected text to the clipboard.	Ctrl+C
	Select All	Selects the entire output report.	Ctrl+A

Output report command button

Table 3–8 describes the command button on the output report window. Refer to the Function column to locate the task you want to perform.

Table 3–8. Output report command button

Button	Function
Close (Alt+C)	Closes the output report and re-displays the data entry window.

Program edits

The MCE edits in MSG/MCE software are described in this section. Table 3–9 lists the edits and where the edit is activated. Edits can appear on the interactive data entry window in the Codes section, and on program output under the codes that generated them.

Table 3–9. Program edits

Message	Description
Diagnosis codes	
Age conflict	Some diagnoses are unlikely for specific ages (e.g., a 5-year old with prostatic hypertrophy). Codes can be assigned to four age categories: Newborn - age of 0 years Pediatric - age 0–17 years inclusive Maternity - age 12–55 years inclusive Adult - age 15–124 years inclusive
Duplicate of principal diagnosis	When the same code is entered as the principal and a secondary diagnosis, this edit appears after the secondary diagnosis code. If the code happens to be on the CC list, the DRG assignment could be affected.
V00–Y99 codes as principal diagnosis	V00–Y99 codes describe circumstances causing an injury and not the nature of the injury, and should not be used as a principal diagnosis.
Invalid ICD-9-CM code or ICD-10 code	The code is not in the list of valid codes for the chosen Code Set indicator and is assumed to be invalid or have a missing digit. A record with an invalid principal diagnosis code is assigned to DRG 999, Ungroupable.
Manifestation code as principal diagnosis	A manifestation code describes an underlying disease, not the disease itself, and should not be used as a principal diagnosis.
Questionable admission	Some diagnoses are not usually considered sufficient justification for admission to an acute care facility (e.g., benign hypertension).
Sex conflict	Some codes are specific to gender. The edit indicates when such a code indicates a diagnosis (e.g., maternity) inconsistent with the gender of the patient (male).
Unacceptable principal diagnosis	Selected codes describe a circumstance that influences an individual's health status but is not the current injury or illness. These codes should not be used as a principal diagnosis.
Requires secondary diagnosis	However, a code otherwise considered as unacceptable is accepted if any secondary diagnosis is present (e.g., a code for specified aftercare, Z5189, requires a secondary diagnosis). If no secondary diagnosis is present for this code, the Requires secondary diagnosis message will appear.
Wrong procedure performed	Certain codes indicate that the wrong procedure was performed. This edit indicates that one of these codes is present.

Table 3–9. Program edits (*continued*)

Message	Description
Procedure codes	
Invalid ICD-9-CM code or ICD-10 code	The code is not in the list of valid codes and is assumed to be invalid or have a missing digit.
Limited coverage	For certain procedures whose medical complexity and serious nature incur extraordinary associated costs, Medicare limits coverage to a portion of the cost. The limited coverage edit is generated on claims containing any of the procedures listed below. Lung transplant Combination heart/lung transplant Heart transplant Implantable heart assist system Intest/multi-visceral transplant Liver transplant Kidney transplant Pancreas transplant Artificial heart transplant The edit message indicates the type of limited coverage (e.g., Heart transplant-Limited coverage, Lung transplant-Limited coverage, etc.)
Non-covered procedure	Some procedures are not covered by Medicare payment.
Sex conflict	Some codes are specific to gender. The edit indicates when a procedure code (e.g., prostatectomy) is inconsistent with the gender of the patient (female).
Invalid^a	
Invalid age	A patient's age is usually necessary for appropriate DRG determination. If the age is not between 0 and 124 years, the age is assumed to be in error.
Invalid sex	A patients sex is sometimes necessary for appropriate DRG determination. The sex code reported must be either 1 (male) or 2 (female).
Invalid discharge status	A patient's discharge status is sometimes necessary for appropriate DRG determination. Discharge status must be coded according to the UB–04 conventions (<i>see page 3.8 for a list of valid entries</i>).

a. Of the three invalid edits, only the invalid sex edit will be shown in the Patient Summary Edits section for interactive on the output report. For batch, all three invalid edits will be shown in the Patient Summary Edit section on the output report.

Chapter 4

Batch processing

Contents	Batch processing 4.3
	Steps in batch processing 4.4
	Input file format 4.6
	Command line processing options 4.9
	Command line examples 4.10
	Output file formats 4.11
	Formatted output (-o option) 4.11
	Upload file (-u option) 4.11
	Working with batch output 4.17
	Viewing output 4.17
	Printing output 4.17
	Renaming a file 4.17
	Batch processing error messages 4.18
	Log files 4.20
	Viewing the file 4.21
	Printing the file 4.21
	Renaming the file 4.21

Batch processing

THE MEDICARE SEVERITY GROUPER with Medicare Code Editor (MSG/MCE) software processes medical record data by two methods:

- ◆ Interactively entering one record at a time;
- ◆ By batch, processing data from a group of records entered in an MS-DOS file.

This chapter discusses the batch method of claim processing. Batch processing enables you to process many records at a time by entering data into an input file, and then running that file through the grouper. This method uses an MS-DOS environment to run an input file and to produce a file of formatted output reports and/or an upload file.

Sections in this chapter give you information on:

- ◆ Steps to run batch processing
- ◆ Input and output file formats
- ◆ Processing options
- ◆ How to work with batch output
- ◆ Error messages
- ◆ Log files

Steps in batch processing

Figure 4–1 is a flow chart that shows the steps in processing records in batch using the MSG/MCE software.

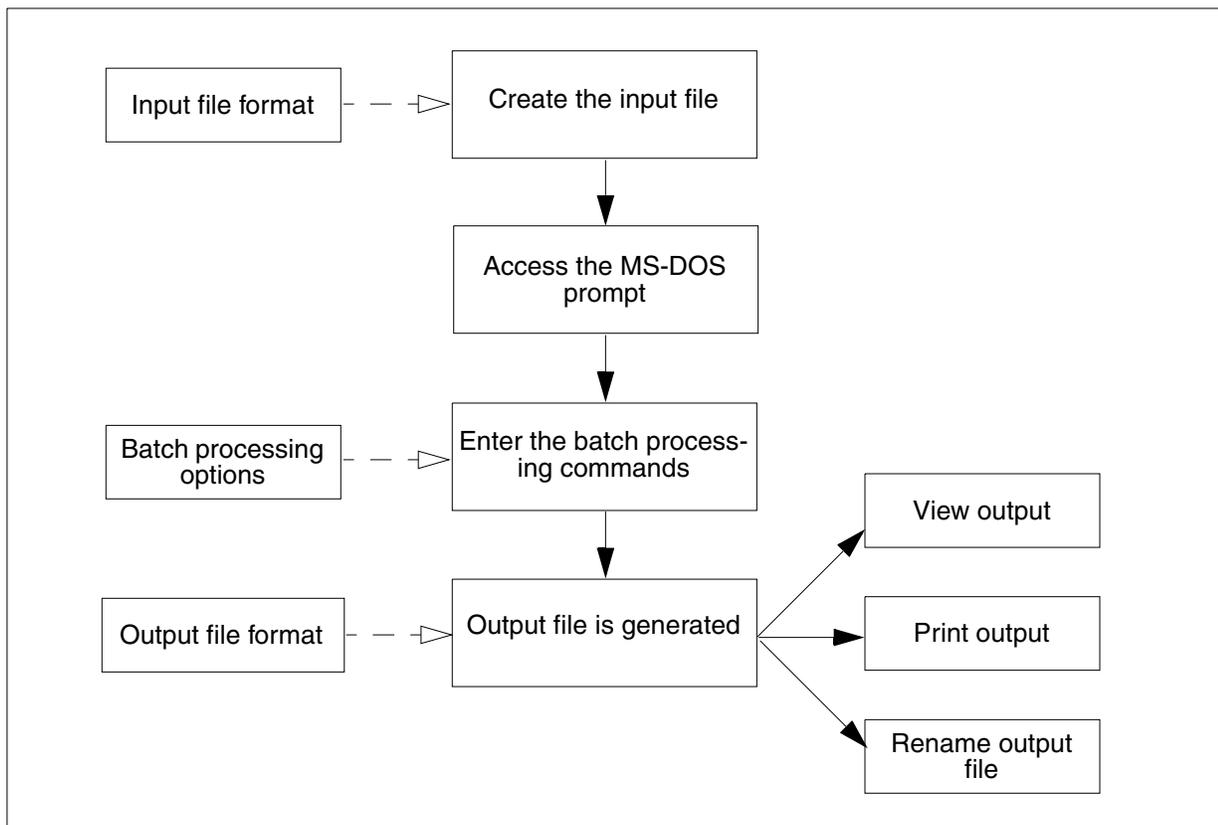


Figure 4–1. Batch processing overview

Follow these procedural steps to perform batch processing:

- ❑ **Create the input file.**

See the “Input file format” section on page 4.6 for detailed information on formatting the input field information.

- ❑ **From the Start menu, select Programs > MS Grouper with Medicare Code Editor Software R1 Pilot > MS-DOS prompt.**

A window with the MS-DOS prompt is displayed.

- **At the prompt in the DOS window, type the batch processing command line specifying the input file, the output that you want, then press Enter.**

The command line must contain:

- ◆ The executable command *mce*
- ◆ An input filename
- ◆ An output filename and/or an upload filename

For batch processing performance information, see table 4–1.

See page 4.9 for information on processing options and command lines, including examples.

- **If an error message is displayed on the screen and the program ends, resolve the problem and run the process again.**

See table 4–6 on page 4.18 for information on error messages that can occur with their descriptions.

- **View and/or print the output file.**

See section “Working with batch output” on page 4.17 for more information, if necessary.

Table 4–1. Batch processing performance information

Number of records	File size (bytes)			Processing time
	Input	Upload	Report	Both
50,000	41,703,753	63,305,697	56,576,085	1:59
500,000	417,037,530	633,056,970	565,760,845	27:15
5,000,000	4,170,375,300	6,330,569,700	5,657,608,450	4:29:17

This performance information is based on a computer with the following configuration:

- ◆ CPU: Intel Xeon 5150 @2.66 Ghz
- ◆ Memory: 3.00 GB RAM
- ◆ OS: Microsoft Windows XP SP 2

Input file format

The batch input file is a single-line, fixed format consisting of sequential 832 character input records. Table 4–2 defines the record layout for this format.

Table 4–2. Input file record layout

Field name	Position	Length	Occurrences	Description
Patient name	1	31	1	Patient name. Alphanumeric. Left-justified, blank-filled. All blanks if no value is entered.
Medical record number	32	13	1	Medical record number. Alphanumeric. Left-justified, blank-filled. All blanks if no value is entered.
Account number	45	17	1	Account number. Alphanumeric. Left-justified, blank-filled. All blanks if no value is entered.
Admit date	62	10	1	Admit date. mm/dd/yyyy format. All blanks if no value is entered. Used in age and LOS calculations.
Discharge date	72	10	1	Discharge date. mm/dd/yyyy. All blanks if no value is entered. Used in LOS calculation.
Discharge status	82	2	1	UB-04 discharge status. Right-justified, zero-filled. Valid values: 01 = Home or self-care 02 = Disch/trans to another short term hosp 03 = Disch/trans to SNF 04 = Custodial/supportive care (revised 10/01/09) 05 = Canc/child hosp (revised 04/01/08) 06 = Care of home health service 07 = Left against medical advice 20 = Died 21 = Disch/trans to court/law enforcement 30 = Still a patient 43 = Fed hospital (added 10/01/03) 50 = Hospice-home 51 = Hospice-medical facility 61 = Swing Bed (added 10/01/2001) 62 = Rehab fac/unit (added 10/01/2001) 63 = LTC hospital (added 10/01/2001) 64 = Nursing facility–Medicaid certified (added 10/01/02) 65 = Psych hosp/unit (added 10/01/03) 66 = Critical access hospital (added 10/01/05) 70 = Oth institution (added 04/01/08)

Table 4–2. Input file record layout (*continued*)

Field name	Position	Length	Occurrences	Description
Primary payer	84	2	1	Primary pay source. Right-justified, zero-filled. Valid values: 01 = Medicare 02 = Medicaid 03 = Title V 04 = Other Govt 05 = Work Comp 06 = Blue Cross 07 = Insur Co 08 = Self Pay 09 = Other 10 = No Charge
LOS	86	3	1	Length of stay. Right-justified, zero-filled. All blanks if no value is entered. Calculated LOS overrides entered LOS.
Birth date	89	10	1	Birth date. mm/dd/yyyy format. All blanks if no value is entered. Used in age calculation.
Age	99	3	1	Age. Right-justified, zero-filled. All blanks if no value is entered. Valid values: 0–124 years. Calculated age overrides entered age.
Sex	102	1	1	Sex. Numeric. Valid values: 0 = Unknown 1 = Male 2 = Female
Admit diagnosis	103	7	1	Admit diagnosis. Left-justified, blank-filled. Diagnosis code without decimal. All blanks if no value is entered. Note: Only diagnosis codes of up to five digits are currently recognized as valid for ICD-9 and seven digits for ICD-10. When a code longer than five digits is entered for ICD-9, it will be blank filled through the seventh position.
Principal diagnosis	110	8	1	Principal diagnosis. First 7 bytes left-justified, blank filled without decimals. Eighth byte represents POA indicator. Valid values: Y = present at the time of inpatient admission N = not present at the time of inpatient admission U = the documentation is insufficient to determine if the condition was present at the time of inpatient admission W = the provider is unable to clinically determine whether the condition was present at the time of inpatient admission or not 1 = Unreported/Not used - Exempt from POA reporting Blank = Exempt from POA reporting

Table 4–2. Input file record layout (*continued*)

Field name	Position	Length	Occurrences	Description
Secondary diagnoses	118	8	24	Diagnoses. First 7 bytes left-justified, blank filled. Eighth byte represents POA indicator. Up to 24 diagnosis codes without decimals. First blank code ends diagnosis processing. Valid values: Y = present at the time of inpatient admission N = not present at the time of inpatient admission U = the documentation is insufficient to determine if the condition was present at the time of inpatient admission W = the provider is unable to clinically determine whether the condition was present at the time of inpatient admission or not 1 = Unreported/Not used - Exempt from POA reporting Blank = Exempt from POA reporting
Principal Procedure	310	7	1	Procedure codes. Seven left-justified characters, blank-filled. Note: Only procedure codes of up to four digits are currently recognized as valid for ICD-9 and seven digits for ICD-10. When a code longer than four digits is entered for ICD-9, it will be blank filled through the seventh position.
Secondary Procedures	317	7	24	Procedure codes. Seven left-justified characters, blank-filled. Up to 25 procedure codes without decimals. <i>See the note in the Principal Procedure field above.</i>
Procedure date	485	10	25	For future use. Procedure dates. The format is mm/dd/yyyy (for future use with POA logic.) All blanks if no value is entered. Up to 25 procedure dates accepted.
Apply HAC logic	735	1	1	Values X or Z to be captured for use with HAC logic. These values reflect whether a hospital requires POA reporting. X = Exempt from POA indicator reporting Z = Requires POA indicator reporting
Code Set indicator	736	1	1	This field indicates whether the record is coded using ICD-9 codes or ICD-10 codes. 9 = ICD-9 0 = ICD-10
Optional information	737	72	1	Optional field. Left-justified, blank-filled. All blanks if no value is entered.
Filler	809	25	1	Not used. Blank-filled.

Command line processing options

When processing a batch file, you must include specific options on the command line to tell the program what file to process and what type of output you want. Table 4–3 lists the available batch processing options with their descriptions. Examples of command lines follow the table.

When dealing with filenames and/or directories that include spaces, you should quote the entire path including drive specifications, as follows:

```
"C:/Program Files/MsgMce/Production/input file 1.txt"
```

- **Note:** When quoting directory paths that contain backslashes '\', the backslashes need to be doubled as follows:

```
"C:\\Program Files\\MsgMce\\Production\\input file 1.txt"
```

The same rule applies to relative paths. For example, up two directories to Production would be written as follows:

```
"..\..\Production\\"
```

Table 4–3. Batch processing options

Option	Description
-i	Use with the input filename. <i>Required</i> for all batch runs. The name can not be the same as the output filename.
-o	Use with the output filename to create a formatted output report. You must enter a filename. The name can not be the same as the upload filename. If a file already exists with the same name as the one you specify with the -o option, the existing file will be overwritten. The -o option is not required when the -u option is used.
-u	Specifies an single-line upload file without code descriptions. You must enter a filename. The name can not be the same as the output filename. If a file already exists with the same name as the one you specify with the -u option, the existing file will be overwritten. The -u option is required when there is no -o option.

Command line examples Examples of batch processing commands are given below.

Example 1 mce -i <input filename> -o <output filename>

Result Runs the specified input file and creates a formatted output report file.

Example 2 mce -i <input filename> -u <upload filename>

Result Runs the specified input file and creates a single-line upload file.

Example 3 mce -i <input filename> -o <output filename> -u <upload filename>

Result Runs the specified input file and creates both a formatted output report file and a single-line upload file.

Output file formats

The output from a batch run is determined by the option(s) you entered on the command line. Table 4–4 describes the options.

Table 4–4. Batch processing output

Option	Output created
-o	An output file of formatted reports
-u	An upload file of records without code descriptions

Formatted output (-o option)

The file of formatted output reports generated with the -o option is saved where the product was installed. Unless you specified otherwise, this directory is: C:\Program Files\MSGMCE SOFTWARE PILOT. Figure 3–2 on page 3.15 is an example of an output report. Note that optional information is displayed in the Optional information field on the output report.

If you name the output file the same for every batch run, the file will be overwritten during each run. To save an output file, rename it after a batch run or specify a different name on the command line. The “Renaming a file” section on page 4.17 contains instructions, if you need them.

Upload file (-u option)

The file of records generated with the -u option is saved where the product was installed. Unless you specified otherwise, this directory is: C:\Program Files\MSGMCE SOFTWARE PILOT.

If you name the upload file the same for every batch run, the file will be overwritten during each run. To save an upload file, rename it after a batch run or specify a different name on the command line. The “Renaming a file” section on page 4.17 contains instructions, if you need them.

The upload file consists of fixed-format, sequential 1266-character output records. Table 4–5 defines the upload file record layout.

Table 4–5. Upload file record layout

Field name	Position	Length	Occurrences	Description
	001	833	1	Input record
MSG/MCE version used	834	3	1	Version of the software used to process the claim. Right-justified, blank-filled. Stored without decimal point. Valid value: 280. If the discharge date field is blank, invalid, or out of range of versions loaded, the grouper defaults to the most current version of the grouper installed, version 28.0, and the term “used by default” is displayed on output.
Initial DRG	837	3	1	Initial diagnosis related group. Right-justified, zero-filled.
Initial M/S indicator	840	1	1	Initial medical/surgical indicator. 0 = DRG return code was not zero 1 = Medical DRG 2 = Surgical DRG
Final MDC	841	2	1	Major diagnostic category. Right-justified, zero-filled.
Final DRG	843	3	1	Final diagnosis related group. Right-justified, zero-filled.
Final M/S indicator	846	1	1	Final medical/surgical indicator. 0 = DRG return code was not zero 1 = Medical DRG 2 = Surgical DRG
DRG return code	847	2	1	Numeric. Right-justified, zero-filled. Valid values: 0 = OK, DRG assigned 1 = Diagnosis code cannot be used as PDX 2 = Record does not meet criteria for any DRG 3 = Invalid age 4 = Invalid sex 5 = Invalid discharge status 10 = Illogical PDX 11 = Invalid PDX 12 = POA logic nonexempt - HAC-POA(s) invalid or missing or 1 (batch only) 13 = POA logic invalid/missing - HAC-POA(s) are N, U (batch only) 14 = POA logic invalid/missing - HAC-POA(s) invalid/missing or 1 (batch only) 18 = POA logic invld/mssng - multiple distinct HAC-POAs not Y,W (batch only)

Table 4–5. Upload file record layout (*continued*)

Field name	Position	Length	Occurrences	Description
MSG/MCE edit return code	849	4	1	Right-justified, zero-filled. Valid values: 0000 = MCE – No errors found 0001 = MCE – Pre-payment error 0002 = MCE – Post-payment error 0003 = MCE – Pre and post-payment errors 0004 = MCE – Invalid discharge status 0061 = Invalid Code Set indicator <i>See page 3.20 for information on which edits are classified as pre- and post-payment errors.</i>
Diagnosis code count	853	2	1	Number of diagnosis codes processed. Right-justified, zero-filled. This field does not include the admit diagnosis.
Procedure code count	855	2	1	Number of procedure codes processed. Right-justified, zero-filled.

Table 4–5. Upload file record layout (*continued*)

Field name	Position	Length	Occurrences	Description
Principal diagnosis edit return flag	857	8	1	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each diagnosis code. Valid values: 01 = Invalid diagnosis code 02 = Sex conflict 03 = Not applicable for principal diagnosis 04 = Age conflict 05 = V00–Y99 codes as principal diagnosis 07 = Manifestation code as principal diagnosis 08 = Questionable admission 09 = Unacceptable principal diagnosis 10 = Secondary diagnosis required 11 = Not applicable for principal diagnosis 12 = Code affected DRG assignment 13 = MSP alert (<i>MCE versions 15.0–17.0 only</i>) 15 = Diagnosis affected the final DRG only 16 = Diagnosis affected the initial DRG only 17 = Diagnosis is a MCC for initial DRG and a Non-CC for final DRG 18 = Diagnosis is a CC for initial DRG and a Non-CC for final DRG 19 = Wrong Procedure Performed 99 = Principal diagnosis part of HAC assignment criteria
Principal diagnosis Hospital Acquired Condition assigned	865	2	1	Hospital Acquired Condition (HAC) assignment criteria 00 = Criteria to be assigned as an HAC not met 11 = Infection after bariatric surgery Blank = Dx was not considered by grouper
Principal diagnosis Hospital Acquired Condition	867	1	1	Hospital Acquired Condition (HAC) 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met
Secondary diagnosis return flag	868	8	24	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each diagnosis code. Valid values: 01 = Invalid diagnosis code 02 = Sex conflict 03 = Duplicate of principal diagnosis 04 = Age conflict 11 = Secondary diagnosis is a CC 12 = Code affected DRG assignment 13 = MSP alert (discontinued 10/01/01) 14 = Secondary diagnosis is an MCC 19 = Wrong procedure performed 99 = Secondary diagnosis is a HAC

Table 4–5. Upload file record layout (*continued*)

Field name	Position	Length	Occurrences	Description
Secondary diagnosis Hospital Acquired Condition assigned	1060	2	24	Hospital Acquired Condition (HAC) assigned 00 = Criteria to be assigned as an HAC not met 01 = Foreign object retained after surgery 02 = Air embolism 03 = Blood incompatibility 04 = Pressure ulcers 05 = Falls and trauma 06 = Catheter associated UTI 07 = Vascular catheter-associated infection 08 = Infection after CABG 09 = Manifestations of poor glycemic control 10 = DVT/PE after knee or hip replacement 11 = Infection after bariatric surgery 12 = Infection after certain orthopedic procedures of spine, shoulder and elbow Blank = Diagnosis was not considered by grouper
Secondary diagnosis Hospital Acquired Condition	1108	1	24	Hospital Acquired Condition (HAC) 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met
Procedure edit return flag	1132	8	25	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each procedure code. Valid values: 01 = Invalid procedure code 02 = Sex conflict 12 = Code affected DRG assignment 15 = Procedure affected the final DRG assignment only 16 = Procedure affected the initial DRG assignment only 20 = Procedure is an OR procedure 23 = Non-covered procedure 31 = Lung transplant - limited coverage 32 = Combo heart/lung transplant - limited coverage 33 = Heart transplant - limited coverage 34 = Implantable hrt assist - limited coverage 35 = Intest/multi-visceral transplant - limited coverage 36 = Liver transplant - limited coverage 37 = Kidney transplant - limited coverage 38 = Pancreas transplant - limited coverage 39 = Artificial Heart Transplant-Limit Coverage 99 = Procedure part of HAC assignment criteria

Table 4–5. Upload file record layout (*continued*)

Field name	Position	Length	Occurrences	Description
Procedure Hospital Acquired Condition assigned	1332	2	25	Hospital Acquired Condition (HAC) assignment criteria 00 = Criteria to be assigned as an HAC not met 08 = Infection after CABG 10 = DVT/PE after knee or hip replacement 11 = Infection after bariatric surgery 12 = Infection after certain orthopedic procedures of spine, shoulder and elbow Blank = Procedure not considered by grouper
Initial 4-digit DRG	1382	4	1	Initial 4-digit DRG. Right-justified, zero-filled.
Final 4-digit DRG	1386	4	1	Final 4-digit DRG. Right-justified, zero-filled.
Final DRG CC/MCE usage	1390	1	1	0 = DRG assigned is not based on the presence of CC or MCC 1 = DRG assigned is based on presence of MCC 2 = DRG assigned is based on presence of CC.
Initial DRG CC/MCC Usage	1391	1	1	0 = DRG assigned is not based on the presence of a CC or MCC 1 = DRG assigned is based on presence of MCC 2 = DRG assigned is based on presence of CC
Number of Unique Hospital Acquired Conditions Met	1392	2	1	The number of Unique Hospital Acquired Conditions that have been met.
Hospital Acquired Condition Status	1394	1	1	HAC Status 0 – HAC Status: Not Applicable 1 – HAC Status: One or more HAC criteria met; Final DRG does not change 2 – HAC Status: One or more HAC criteria met; Final DRG changes 3 – HAC Status: One or more HAC criteria met; Final DRG changes to ungroupable
Cost Weight	1395	7	1	The DRG cost weight. This 7-byte field is displayed as 2 digits, followed by a decimal point, followed by 4 digits.
newline	1402	2	1	End of record (carriage return/line feed). Not included on last record.

Working with batch output

Output from batch processing can be viewed on your computer screen or printed as hard copy. This section also tells you how to rename a file so you can use the same output filename in the command line and not overwrite the records from a preceding run when you process a new batch of input data.

Viewing output To view the formatted reports in the output file (using the `-o` option on the command line):

- ❑ **At the system prompt in the directory where the file was created, enter:**

```
type <filename> | more
```

This command displays the contents of the file, one screen at a time. Press the space bar to advance through the file.

Printing output To print the contents of the output file:

- ❑ **At the system prompt in the directory where the file was created, enter:**

```
print <filename>
```

Renaming a file To rename an output file:

- ❑ **At the system prompt in the directory where the file was created, enter:**

```
rename <old filename> <new filename>
```

- **Note:** Please see performance table on page 4.5.

Batch processing error messages

Table 4–6 is an alphabetical list of the error messages that can occur during batch processing, and their outcomes.

- **Note:** When a potential for two processing option errors occurs, the process option coupling takes precedence over the process option duplication. Since (-i, -o, and -u) require a filename parameter, the parameter is checked prior to a duplicate process option.

Example: `mce -i -i inputfile -o outputfile` [Error: Invalid option or its value: -i is missing or has an invalid option.]

Example: `mce -i inputfile -i anotherinput -o outputfile` [Error: The processing option (-i) should only be entered once.]

Table 4–6. Batch processing error messages

Message	Why it's generated	What happens
Admit date cannot be after discharge date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
Admit date is invalid	Any of the month, day, and year entries are not in the valid ranges.	The input record is processed and an error message is written in the log file.
An input file (-i) must be specified	The required -i option is missing.	The message is displayed on the screen and the program ends.
An output file (-o) or upload file (-u) must be specified	At least one of the -o and -u options must be specified.	The message is displayed on the screen and the program ends.
Birth date cannot be after admit date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
Birth date is invalid	Any of the month, day, and year entries are not in the valid ranges.	The input record is processed and an error message is written in the log file.
Could not initialize run-time environment		The message is displayed on the screen and in the log file, and the program ends.
Discharge date is invalid	Any of the month, day, and year entries are not in the valid ranges.	The input record is processed and an error message is written in the log file.
Discharge status is invalid	The discharge status field entry is invalid (see table 4–2 on page 4.6 for a list of valid discharge status values).	The input record is processed and an error message is written in the log file.

Table 4–6. Batch processing error messages (*continued*)

Message	Why it's generated	What happens
Error opening input file: <filename>	The specified input file could not be opened or is missing.	The message is displayed on the screen and in the log file, and the program ends.
Error opening output file: <filename>	The specified output file could not be opened.	The message is displayed on the screen and the program ends.
Error reading input file: <filename>	The specified input file could not be read.	The message is displayed on the screen and in the log file, and the program ends.
Input filename must be different than the output filename	The same name is used for the input and output files located in the same directory.	The message is displayed on the screen and the program ends.
Invalid age	The age field entry is invalid.	The input record is processed and an error message is written in the log file.
Invalid option or its value: <entered value>	An argument was entered without a processing option or a processing option without an argument.	The message is displayed on the screen and the program ends.
Invalid length of stay	The entered or calculated LOS exceeds the upper limit allowed for the field (999 days).	The input record is processed and an error message is written in the log file.
Invalid processing option: <entered value>	An option entered on the command line is not valid.	The message is displayed on the screen and the program ends.
Invalid sex	The sex field entry is invalid.	The input record is processed and an error message is written in the log file.
Output filename must be different than the upload filename	The same name is used for the output and upload files located in the same directory.	The message is displayed on the screen and the program ends.
Record number <value>: Invalid line length; record not processed.	A single-line format input record length can not be more or less than 834 characters.	It skips the record and continues processing and an error message is written in the log file.
The processing option <entered value> should only be entered once.	Only one occurrence of each processing option is allowed.	The message is displayed on the screen and the program ends.
You have too many applications open. Close any unnecessary applications that are open.	The system does not have enough memory to run the MSG/MCE application.	The message is displayed on the screen and the program ends.
Invalid Code Set indicator.	The Code Set indicator differs from the code set.	The input record is processed and an error message is written in the log file.

Log files

The software generates a log file for every batch run and saves it where the product was installed. Unless specified otherwise, this directory is: C:\Program Files\MSG MCE Software Pilot.

By default, the log file is named msgmce.log, and contains the following information:

- ◆ A title line with the name and version number of the product
- ◆ Input filename
- ◆ Output filename (if specified)
- ◆ Upload filename (if specified)
- ◆ Run start time
- ◆ Patient ID: <value> followed by error
This line is repeated for however error messages occur for the same patient record.
- ◆ Run end time

An example log file is shown in figure 4–2. In this illustration, no upload filename was specified.

MS Grouper with Medicare Code Editor R1 Pilot v28.0

Input file: test.in
Report file: test.out
Upload file:

Start Time: 10/26/09 10:15:34

Patient ID "Record 1": Birth date is invalid
Patient ID "Record 15": Discharge date is invalid

End Time: 10/26/09 10:15:34

Figure 4–2. Sample log file

The log file can be viewed on your computer screen or printed as hard copy. The file can also be renamed if you want to save it since the log file produced in a batch run overwrites the previous one.

Viewing the file To display the contents of the log file on your screen:

- At the system prompt in the directory where the log file was created, enter:**

```
type <filename> | more
```

Printing the file To print the contents of the log file:

- At the system prompt in the directory where the log file was created, enter:**

```
print <filename>
```

Renaming the file To rename a log file:

- At the system prompt in the directory where the file was created, enter:**

```
rename <old filename> <new filename>
```


Chapter 5

Accessibility Features

Contents	Accessibility Features 5.3
	System requirements 5.3
	Data entry 5.4
	Group selection 5.4
	Steps for entering data 5.4
	Data entry fields 5.6
	Data entry menu options 5.10
	Data entry command buttons 5.11
	Interactive error messages 5.12
	Program output 5.13
	Viewing interactive output 5.16
	Exiting the report window 5.16
	Output report fields 5.17
Output report menu options 5.21	
Output report command button 5.22	
Program edits 5.23	

Accessibility Features

THE MEDICARE SEVERITY GROUPER with Medicare Code Editor (MSG/MCE) software can process medical record data interactively entering one record at a time using the accessibility features discussed in this chapter.

Interactive processing enables you to correct invalid data or codes at the time a record is processed. This method uses a Windows environment to enter data and view the output.

Sections in this chapter give you information on:

- ◆ System requirements.
- ◆ Data entry—including field descriptions, information on menus and command buttons on the data entry window, and error messages.
- ◆ Program output, including an example output report and explanation of output fields, information on menus and command buttons on the data output window.
- ◆ Descriptions of the edits in the MSG/MCE software program.

System requirements

The following are system requirements for accessibility:

- ◆ Windows-based Assistive Technology software
- ◆ JAVA Access Bridge

➤ *Note: Assistive Technology software needs to be running prior to using MSG/MCE.*

Data entry

This information gives you field information and valid entry ranges where they exist, to assist in data entry. You will be able to navigate through the data entry window and perform functions, such as editing fields or copying text. Error messages that can occur during data entry are listed and explained.

Grouper selection

As you enter data, the program automatically selects the appropriate grouper for processing using the discharge date entered from the patient's medical record. If the discharge date is 10/01/2010 or later, MS grouper 28.0 is used.

If the discharge date of the patient is not within an effective date range for any installed grouper, or if the discharge date is missing, the program defaults to the most current version installed, version 28. In that case, this message is displayed on the output report:

Grouper version [current #] will be used because the discharge date is either missing or is outside the effective date range for the installed groupers.

- ***Note:** Because of the retroactivity in the Medicare Code Editor a discharge date is needed to illicit edits. If there is no discharge date entered, the Medicare Code Editor will not be called.*

Steps for entering data

Follow these steps for interactive data entry:

- **From the Start menu, select Programs > MS Grouper with Medicare Code Editor Software R1 Pilot > Interactive.**

The About box window appears briefly followed by the data entry (or input) window titled, MS Grouper with Medicare Code Editor Software R1 Pilot.

The data entry window is organized into three sections:

- ◆ Patient Information
- ◆ Patient Stay Information
- ◆ Codes

The cursor will be positioned at the first field. To enter data, tab to move through fields. Use Shift+Tab to move back to the previous field.

❑ **Enter data into the appropriate fields.**

If you need assistance when working on the data entry window, table 5-1 contains information to help you.

Table 5-1. Help for interactive data entry

What do you want to do?	Help
Find specific data entry field information	Go to table 5-2 on page 5.6.
Work with text on the window	Use standard Windows options (e.g., cut, copy, paste).
Make a menu selection	Go to table 5-3 on page 5.10.
Correct an entry in the patient information or patient stay information section	Tab to the field and use backspace key to delete the content, then enter the correct information.
Delete a code entry row in the codes section	For the Admit Dx, tab to the field and use the backspace key to delete the content. For other codes, tab to the field (or use the up/down error key), then press Delete to remove the entry. <i>For more information, see the Diagnoses and Procedures field descriptions in table 5-2; also see tables 5-3 and 5-4 for additional information on the Delete and Clear functions.</i>
Eliminate an error message	Select OK to close the dialog box, and correct the problem. The “Interactive error messages” section on page 5.12 lists error messages that can occur with their descriptions.

❑ **When you have completed data entry for a record, select Report to view the processed record.**

You can select Report by pressing Alt+R, or by tabbing to the Report button and then pressing Enter.

The “Viewing interactive output” section on page 5.16 contains output information, including printing of the report. An example of an output report is shown on page 5.15.

Data entry fields Table 5–2 describes the fields on the data entry window. An asterisk indicates a required field.

Table 5–2. Data entry fields

Field name	Length	Description
Patient information		
Name	31	Name of the patient. Alphanumeric. First and last names can be entered in any order.
Medical record number	13	Patient's medical record number. Alphanumeric.
Birth date	10	Birth date of the patient. Format: mm/dd/yy, mm/dd/yyyy, mmdyyy, or mmdyy. A dash (-), slash (/), period or space is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. If the patient is more than 99 years of age, a four-digit year is required. A birth date prior to 01/01/1883 can not be entered. The birth and admit dates are used to calculate the age of the patient; calculated age overrides entered age.
Age in years*	3	Age of the patient. Valid values: 0–124 years. Age can be an entered or a calculated value. <i>For more information, see the Birth date field description.</i>
Sex*	1	Patient gender. Select a value from the drop-down list: 0, u, U = Unknown 1, m, M = Male 2, f, F = Female
Patient Stay information		
Account number	17	Patient account number. Alphanumeric.
Primary payer	2	Primary payer for the service provided. Select a value from the drop-down list: 01 Medicare (default) 06 Blue Cross 02 Medicaid 07 Insur Co 03 Title V 08 Self Pay 04 Other Govt 09 Other 05 Work Comp 10 No Charge
Admit date	10	Date of admission to the facility. Format: mm/dd/yy, mm/dd/yyyy, mmdyyy, or mmdyy. A dash (-), slash (/), period or space is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. The birth and admit dates are used to calculate the age of the patient; <i>for more information, see the Birth date field description.</i> The admit and discharge dates are used to calculate length of stay (LOS); calculated LOS overrides entered LOS.

Table 5–2. Data entry fields (*continued*)

Field name	Length	Description
Discharge date	10	<p>Date of discharge from the facility. Format: mm/dd/yy, mm/dd/yyyy, mmdyyy, or mmddy.</p> <p>A dash (-), slash (/), period or space is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display.</p> <p>The discharge date determines the grouper version called to process the record. The discharge date also determines which discharge status codes are displayed. For this reason, we recommend entering the discharge date before discharge status (<i>see also Discharge status, below</i>).</p> <p>An error message is displayed when you elicit Report, and the discharge date field is blank or contains a date outside the effective date range of any installed grouper; Press Enter to accept the default (current) grouper version to process the claim, or tab to Cancel then press Enter to go back and enter a discharge date. When you accept the default version, the output report includes a USED BY DEFAULT notation.</p> <p>The discharge and admit dates are used to calculate LOS; <i>for more information, see the Admit date field description.</i></p>

Table 5–2. Data entry fields (*continued*)

Field name	Length	Description
Discharge status*	2	<p>Status of discharge. Enter the discharge date before entering the discharge status so that the appropriate discharge status codes are displayed in a drop-down list (<i>see also Discharge date, above</i>). An error message is displayed when a discharge status is selected first and is invalid for a discharge date entered afterward (<i>see “Interactive error messages” on page 5.12</i>).</p> <p>All available discharge status codes are listed below.</p> <p>01 = Home or self-care 02 = Disch/trans to another short term hosp 03 = Disch/trans to SNF 04 = Custodial/supportive care (revised 10/01/09) 05 = Disch/trans to a designated cancer center or children’s hospital (revised 04/01/08) 06 = Care of home health service 07 = Left against medical advice 20 = Died 21 = Disch/trans to court/law enforcement 30 = Still a patient 43 = Fed hospital (added 10/01/03) 50 = Hospice-home 51 = Hospice-medical facility 61 = Swing Bed (added 10/01/2001) 62 = Rehab fac/unit (added 10/01/2001) 63 = LTC hospital (added 10/01/2001) 64 = Nursing facility–Medicaid certified (added 10/01/02) 65 = Psych hosp/unit (added 10/01/03) 66 = Critical access hospital (added 10/01/05) 70 = Disch/trans to another type of health care institution not defined elsewhere in the code list (added 04/01/08)</p>
LOS (length of stay)	3	<p>Number of days the patient was in the facility. Valid entries: 000–999. LOS can be user-entered, or calculated when admit and discharge dates have been entered. <i>For more information, see the Admit date field description.</i></p>
Optional information	72	Comments or other user-specified information. Alphanumeric.
Codes		
Admit Dx*	5	<p>Enter a diagnosis code without decimals. Lower case is automatically converted to upper case. The code description is displayed as you type the code. If the code is not valid, the word “invalid” displays in the description field.</p> <p>Note: The interactive program accepts only diagnosis codes of up to five digits for ICD-9 processing and seven digits for ICD-10 processing.</p>
Apply HAC (hospital-acquired condition) logic	1	The checked box indicates that HAC logic will be applied. By default, this box will always be checked.

Table 5–2. Data entry fields (*continued*)

Field name	Length	Description
Code Set indicator	1	This box indicates whether the record is coded using ICD-9 codes or ICD-10 codes. This box always defaults to ICD-10. Use the drop down to change to ICD-9.
Diagnoses: PDX (principal diagnosis)* Diagnoses 2–25	7	<p>Enter diagnosis codes without decimals. Lower case is automatically converted to upper case. The code description and any applicable edits are displayed as you type the code. A maximum of 25 codes can be entered. Pressing the Tab key at the first blank diagnosis code field moves focus to the first blank procedure code field.</p> <p>The Description and Edits fields are display only. A maximum of four edits per code can be displayed (<i>see table 5–9 for a list of code edits</i>).</p> <p>If you enter a secondary diagnosis and later delete it, the program moves up the diagnoses following the deleted row, if there are any, to fill in the empty row. This behavior does not apply to the principal diagnosis.</p> <p>Note: The interactive program accepts only diagnosis codes of up to five digits for ICD-9 processing and seven digits for ICD-10 processing.</p>
Present on Admission Indicators	1	<p>Enter one of the following Present on Admission Indicators, required for a diagnosis other than the admit diagnosis:</p> <p>Y= Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission U = Insufficient documentation to determine if present on admission W= Clinically unable to determine if present at time of admission 1= Exempt from reporting Blank = Exempt from reporting</p>
Procedures: PP (principal procedure) Procedures 2–25	7	<p>Enter procedure codes without decimals. Lower case is automatically converted to upper case. The code description and any applicable edits are displayed as you type the code. A maximum of 25 codes can be entered. Pressing the Tab key at the first blank procedure code field moves focus to the Report button.</p> <p>The Description and Edits fields are display only. A maximum of four edits per code can be displayed (<i>see table 5–9 for a list of code edits</i>).</p> <p>If you enter a secondary procedure and later delete it, the program moves up the procedures following the deleted row, if there are any, to fill in the empty row. This behavior does not apply to the principal procedure.</p> <p>Note: The interactive program accepts only procedure codes of up to four digits for ICD-9 processing and seven digits for ICD-10 processing.</p>

Data entry menu options

Table 5–3 describes the menu options on the data entry window. Refer to the Function column to locate the task you want to perform. Accelerator keys allow you to bypass a menu and activate a function more quickly.

Table 5–3. Data entry menu items

Function	Description	Accelerator keys	Menu-based keystrokes
New	Displays the demographics tab cleared of all previously entered information.	Ctrl+N	On Patient menu (Alt + P), select New (key = N)
Exit	Exits the program.	Alt+F4	On Patient menu (Alt + P), select Exit (key = X)
Cut	Removes the selected text and copies it to the clipboard.	Ctrl+X	On Edit menu (Alt + E), select Cut (key = T)
Copy	Copies the selected text to the clipboard.	Ctrl+C	On Edit menu (Alt + E), select Copy (key = C)
Paste	Inserts contents of the clipboard at the insertion point.	Ctrl+V	On Edit menu (Alt + E), select Paste (key = P)
Delete	Deletes the selected text, or the selected row in the Codes section.	Delete	On Edit menu (Alt + E), select Delete (key = D)
About	Displays the About box with current version information.		On Help menu (Alt + H), select About (key = A)

Data entry command buttons

Table 5–4 describes the command buttons on the data entry window. Refer to the Function column to locate the task you want to perform.

Table 5–4. Data entry command buttons

Button	Function
Clear	Clears all diagnosis (including admit dx) and procedure code entries and their descriptions, and any associated edits. You must press Alt+C to activate its function; tabbing to the button and pressing Enter will not work.
Report	Displays a pre-formatted output report that can be printed or saved. An error message displays in place of the report when any required fields are missing or invalid; correct the error, then do one of the following to open the report: tab to the Report button and press Enter or press Alt+R. Data output is discussed on page 5.13.

Interactive error messages Table 5–5 is an alphabetical list of the error messages that can occur during data entry. The messages help prevent invalid or incorrect entries.

Table 5–5. Interactive error messages

Message	Description
Admit date cannot be after Discharge date.	The program checks for logical sequencing of dates.
[Admit date] [Birth date] [Discharge date] [Procedure date] cannot be after today's date	The date entered in the date field is after the system (today's) date.
Admit date cannot precede Birth date.	The program checks for logical sequencing of dates.
[Admit date] [Birth date] [Discharge date] is invalid. Dates must be entered in this format: mm/dd/yyyy, mm/dd/yy, mmmddyyyy, or mmddyy.	The value entered for the month, day or year is outside the valid range. <i>See table 5–2 for more information on date fields.</i>
Admit diagnosis is a required field. Please enter an admit diagnosis code.	The program does not process a record with a blank required field.
Age is invalid. Calculated age must be between 0 and 124 years.	The valid range for age in years is 0–124.
Birth date cannot be after Admit date.	The program checks for logical sequencing of dates.
Birth date cannot be after Discharge date.	The program checks for logical sequencing of dates.
Discharge date cannot precede Admit date.	The program checks for logical sequencing of dates.
Discharge date cannot precede Birth date.	The program checks for logical sequencing of dates.
Discharge status invalid for discharge date entered.	When the discharge status is entered before the discharge date, and the discharge status is invalid for the entered discharge date, this message is displayed. To avoid this message, enter the discharge date before selecting a discharge status.
Length of stay (LOS) is invalid. Calculated length of stay must be between 0 and 999 days.	The entered or calculated LOS exceeds the upper limit allowed for the field.
The following required fields are missing and/or invalid: Age in years Sex Discharge status Admit Dx PDX Discharge date	You can not produce an output report when a required field contains invalid data or is blank. The program sets the focus to the first invalid or blank required field.

Program output

The information in this section describes the output resulting from the processing of the data entered interactively into the program. The output is displayed on your computer screen and can be printed, copied, or saved to a text file.

Reports are saved singly, that is, the program does not append them. If you want a file of multiple reports, you can create one by copying several output reports, one at a time, and pasting them into a text file.

Once data is erased from the data entry window and the Report window closed, the output is no longer available unless you re-enter the data.

This section also contains an illustration of an output report and information on the report fields. Program edits are explained in the following section.

- **To display the output report, press Alt+R or tab to Report and then press Enter.**

When the report first opens, you are told the number of lines before the report is read. You can press Alt+C at any time to close the report.

A sample report is shown in figure 5–1 and contains the following elements:

- ◆ A title line giving the version of the grouper that processed the claim.
- ◆ Patient information copied from the entries you made on the data entry window.
- ◆ Grouper information: the assigned MDC, Final DRG, and Final DRG cost weight.
- ◆ Hospital-acquired condition (HAC) status message.
- ◆ Code Set indicator.
- ◆ Clinical information: a listing of the entered diagnosis and procedure codes with their English descriptions.
- ◆ Present on Admission (POA) indicators for diagnosis codes, as applicable.
- ◆ Edits for diagnosis and procedure codes, as applicable.
- ◆ Initial DRG.

The DRG cost weight represented by xx.xxxx in the sample report will be replaced by the actual current cost weight for the assigned DRG.

Title line ————— MS-DRG Assignment with Medicare Code Editor R1 Pilot V28.0

Patient information ————— Patient name: Jane Smith Medical rec #: 1054879

Admit date: 10/01/2010 Discharge date: 10/06/2010 Birth date: 09/09/1943
Optional information:

Patient acct #: 458799
Age in years: 67 Sex: Female
Discharge status: 01 Home or self-care

Grouping information ————— MDC: 10 ENDOCRINE, NUTRITIONAL & METABOLIC DISEASES & DISORDERS
Final
DRG: 639 Diabetes w/o CC/MCC
Cost weight: 00.5544
MS-DRG Grouper version 28.0 (October 1, 2010) used.
HAC Status: One or more HAC criteria met, Final DRG changes.

Clinical information ————— Admitting Diagnosis:
E109 Type 1 diabetes mellitus without complications

Principal Diagnosis:
E109 Type 1 diabetes mellitus without complications (DRG)
POA: Yes, present at the time of inpatient admission

Secondary Diagnoses:
E109 Type 1 diabetes mellitus without complications
POA: Yes, present at the time of inpatient admission

Edit ————— Edit: Duplicate of principal diagnosis (MCE)

POA indicator ————— T8351XA Infect/inflm reaction due to indwell urinary catheter, init (DRG)(HAC)
POA: No, not present at the time of inpatient admission
N390 Urinary tract infection, site not specified (DRG)(HAC)
POA: No, not present at the time of inpatient admission
I10 Essential (primary) hypertension
POA: Yes, present at the time of inpatient admission
N469 Male infertility, unspecified
POA: Yes, present at the time of inpatient admission
Edit: Sex conflict (MCE)

No procedures performed

Initial
DRG: 638 Diabetes w CC
Primary Payer: 01 Medicare

Actual LOS: 5

Patient Summary Edits:
MCE pre-payment errors only

Figure 5–1. Sample output report

Viewing interactive output

Output report fields are described in table 5–6 on page 5.17.

Use the menu options described in table 5–7 on page 5.21 to:

- ◆ Print the output report
- ◆ Copy part or all of the report
- ◆ Save the report to a file

The output report is read-only. To change data on the output report, close the report window (Alt+C) and return to the data entry window, edit information there and re-generate the report.

Exiting the report window

With the output report displayed on your screen:

- **Select Close (Alt+C) at the bottom of the report window.**

The data entry window is re-displayed. You can:

- ◆ Edit the data for the current record shown.
- or —
- ◆ Select Patient > New (Ctrl+N) to begin data entry for a new record.

Output report fields Table 5–6 describes the fields on the output report.

Table 5–6. Interactive output report fields

Name	Description
Patient name Medical record number Admit date Discharge date Optional information Patient account number Age in years Sex Discharge status	These output fields carry over the data entry information. <i>See table 5–2 on page 5.6 for information on these fields.</i>

Table 5–6. Interactive output report fields (*continued*)

Name	Description
<p>Grouping information (MDC, final DRG, final cost weight, grouper version used)</p>	<p>The Major Diagnostic Category (MDC) and Final Diagnosis Related Group (DRG) assigned to the record based on the age, sex, discharge status, Hospital Acquired Conditions (HAC), Code Set indicator, Present on Admission (POA) indicators, and codes entered from the record. The MS-designated DRG cost weight shows under the DRG line. <i>For a list of DRGs and associated cost weights in the current version of the MS grouper, see appendix A.</i></p> <p>Patient records assigned to DRGs 998 (Principal diagnosis invalid as discharge diagnosis) or 999 (Ungroupable) may not have an assigned valid MDC. In this case, no MDC number or description is displayed.</p> <p>When DRG 999 is assigned, one of the following messages identifies the reason why the record is ungroupable:</p> <ul style="list-style-type: none"> ◆ Invalid principal diagnosis ◆ Invalid age (<0 or >124) ◆ Invalid discharge date ◆ Invalid sex (not 1 or 2) ◆ Invalid discharge status (batch only) ◆ Record does not meet criteria for any DRG ◆ Illogical principal diagnosis ◆ Diagnosis code can not be used as principal diagnosis ◆ Invalid principal diagnosis ◆ POA logic nonexempt - HAC-POA(s) invalid or missing or 1. *Long description: POA logic Indicator = Z AND at least one HAC POA is invalid or missing or 1 *Batch only ◆ POA logic invalid/missing - HAC-POA(s) are N, U. *Long description: POA logic Indicator is invalid or missing AND at least one HAC POA is N or U *Batch only ◆ POA logic invalid/missing - HAC-POA(s) invalid/missing or 1. *Long description: POA logic Indicator is invalid or missing AND at least one HAC POA is invalid or missing or 1 *Batch only ◆ POA logic invalid/missing - multiple distinct HAC-POAs not Y,W. *Long description: POA Logic Indicator is invalid or missing AND there are multiple HACs that have different HAC POA values that are not Y or W *Batch only <p>The version of the grouper used for grouping is displayed with the effective date associated with the grouper. If you default to the current grouper version when the discharge date is invalid or missing (<i>see page 5.8 for discharge date information</i>), the output states USED BY DEFAULT.</p>

Table 5–6. Interactive output report fields (*continued*)

Name	Description
Clinical information	<p>Displayed codes include admit diagnosis, principal diagnosis, secondary diagnoses, and procedures. Descriptions follow the codes and, if applicable, the following indicators:</p> <p>DRG Indicates a secondary diagnosis or procedure used to determine DRG assignment. A secondary diagnosis code assigned with HAC and DRG indicates a DRG change with demotion. A procedure code assigned with HAC and DRG indicates code was used for the definition of HAC.</p> <p>HAC Indicates a code flagged as a Hospital Acquired Condition.</p> <p>MCC Indicates a diagnosis code considered to be a major complication or co-morbidity. An MCC diagnosis can significantly influence DRG assignment. When more than one MCC code is present, a DRG indicator replaces the MCC indicator to mark the MCC code used to determine DRG assignment.</p> <p>CC Indicates a diagnosis code considered to be a complication or co-morbidity. A CC diagnosis can significantly influence DRG assignment. When more than one CC code is present, a DRG indicator replaces the CC indicator to mark the CC code used to determine DRG assignment.</p> <p>OR Indicates a procedure code that normally requires use of an operating room and which can significantly influence DRG assignment. When more than one OR code is present, DRG replaces OR to mark the OR code used to assign the DRG.</p>
Present on Admission (POA) information	Indicates whether the diagnosis was present at the time the patient was admitted.
Edit information	Program edits that indicate a possible coding problem are displayed under the codes that generated them. Each edit includes a Medicare Code Editor notation (MCE). A maximum of four edits per code will be displayed. <i>See table 5–9 for a description of each edit and why they occur.</i>
Initial DRG	Initial Diagnosis Related Group (DRG) assignment prior to Hospital Acquired Condition logic grouper processing.
Primary payer LOS	These output fields carry over the data entry information. <i>See table 5–2 on page 5.6 for information on these fields.</i>

Table 5–6. Interactive output report fields (*continued*)

Name	Description
Patient summary edits	<p>This section is where clinical edits and data entry error messages not pertaining to a specific code are displayed. The Invalid sex edit is currently the only edit that could display in this section.</p> <p>Edits are flagged as pre-payment, noted as one of the following: MCE pre-payment errors only No MCE pre- or post-payment errors</p> <p>For this flag, edits are categorized as follows:</p> <p><u>Pre-payment</u> Age conflict Duplicate of principal diagnosis V00–Y99 codes as principal diagnosis Invalid ICD-9-CM code or invalid ICD-10 code Manifestation code as principal diagnosis Non-covered procedure Questionable admission Sex conflict Unacceptable principal diagnosis/Requires secondary diagnosis Invalid age Invalid sex Invalid discharge status Limited coverage Wrong procedure performed</p>

Output report menu options

Table 5–7 describes the menu options on the output report window. Refer to the Function column to locate the task you want to perform. Accelerator keys allow you to bypass a menu and activate a function more quickly.

Table 5–7. Output report menu items

Function	Description	Accelerator key	Menu-based keystrokes
Print	Prints the output report.	Ctrl+P	On File menu, (Alt + F), select Print (key = P)
Save As	<p>Opens a Save As dialog box to save the currently displayed output report as a text file. Unless you specify otherwise, the filename will be report.txt, and the file will be saved in the directory where the product was installed. Unless you specified otherwise at the time of installation, this directory is C:\Program Files\MSGMCE SOFTWARE PILOT. You can browse and save the file in any directory you choose.</p> <p>Records can not be appended in the report.txt file. The file is overwritten each time you save a report unless you specify a different filename. The program asks if you want to overwrite the report.txt file before proceeding with the save.</p>	Ctrl+S	On File menu (Alt + F), select Save As (key = A)
Exit	Closes the output report and re-displays the data entry window.	Ctrl+Q	On File menu (Alt + F), select Exit (key = X)

Table 5–7. Output report menu items

Function	Description	Accelerator key	Menu-based keystrokes
Copy	Copies the selected text to the clipboard.	Ctrl+C	On Edit menu (Alt + E), select Copy (key = C)
Select All	Selects the entire output report.	Ctrl+A	On Edit menu (Alt + E), choose Select All (key = A)

Output report command button

Table 5–8 describes the command button on the output report window. Refer to the Function column to locate the task you want to perform.

Table 5–8. Output report command button

Button	Function
Close (Alt+C)	Closes the output report and re-displays the data entry window.

Program edits

The MCE edits in MSG/MCE software are described in this section. Table 5–9 lists the edits and where the edit is activated. Edits can appear on the interactive data entry window in the Codes section, and on program output under the codes that generated them.

Table 5–9. Program edits

Message	Description
Diagnosis codes	
Age conflict	Some diagnoses are unlikely for specific ages (e.g., a 5-year old with prostatic hypertrophy). Codes can be assigned to four age categories: Newborn - age of 0 years Pediatric - age 0–17 years inclusive Maternity - age 12–55 years inclusive Adult - age 15–124 years inclusive
Duplicate of principal diagnosis	When the same code is entered as the principal and a secondary diagnosis, this edit appears after the secondary diagnosis code. If the code happens to be on the CC list, the DRG assignment could be affected.
V00–Y99 codes as principal diagnosis	V00–Y99 codes describe circumstances causing an injury and not the nature of the injury, and should not be used as a principal diagnosis.
Invalid ICD-9-CM code or ICD-10 code	The code is not in the list of valid codes for the chosen Code Set indicator and is assumed to be invalid or have a missing digit. A record with an invalid principal diagnosis code is assigned to DRG 999, Ungroupable.
Manifestation code as principal diagnosis	A manifestation code describes an underlying disease, not the disease itself, and should not be used as a principal diagnosis.
Questionable admission	Some diagnoses are not usually considered sufficient justification for admission to an acute care facility (e.g., benign hypertension).
Sex conflict	Some codes are specific to gender. The edit indicates when such a code indicates a diagnosis (e.g., maternity) inconsistent with the gender of the patient (male).
Unacceptable principal diagnosis	Selected codes describe a circumstance that influences an individual's health status but is not the current injury or illness. These codes should not be used as a principal diagnosis.
Requires secondary diagnosis	However, a code otherwise considered as unacceptable is accepted if any secondary diagnosis is present (e.g., a code for specified aftercare, Z5189, requires a secondary diagnosis). If no secondary diagnosis is present for this code, the Requires secondary diagnosis message will appear..
Wrong procedure performed	Certain codes indicate that the wrong procedure was performed. This edit indicates that one of these codes is present.

Table 5–9. Program edits (*continued*)

Message	Description
Procedure codes	
Invalid ICD-9-CM code or ICD-10 code	The code is not in the list of valid codes for the chosen Code Set indicator and is assumed to be invalid or have a missing digit.
Limited coverage	For certain procedures whose medical complexity and serious nature incur extraordinary associated costs, Medicare limits coverage to a portion of the cost. The limited coverage edit is generated on claims containing any of the procedures listed below. Lung transplant Combination heart/lung transplant Heart transplant Implantable heart assist system Intest/multi-visceral transplant Liver transplant Kidney transplant Pancreas transplant Artificial heart transplant The edit message indicates the type of limited coverage (e.g., Heart transplant-Limited coverage, Lung transplant-Limited coverage, etc.)
Non-covered procedure	Some procedures are not covered by Medicare payment.
Sex conflict	Some codes are specific to gender. The edit indicates when a procedure code (e.g., prostatectomy) is inconsistent with the gender of the patient (female).
Invalid^a	
Invalid age	A patient's age is usually necessary for appropriate DRG determination. If the age is not between 0 and 124 years, the age is assumed to be in error.
Invalid sex	A patient's sex is sometimes necessary for appropriate DRG determination. The sex code reported must be either 1 (male) or 2 (female).
Invalid discharge status	A patient's discharge status is sometimes necessary for appropriate DRG determination. Discharge status must be coded according to the UB-04 conventions (<i>see page 5.8 for a list of valid entries</i>).

a. Of the three invalid edits, only the invalid sex edit will be shown in the Patient Summary Edits section for interactive on the output report. For batch, all three invalid edits will be shown in the Patient Summary Edit section on the output report.

Appendix A

Current MDCs and DRGs

Contents	Current MDCs and DRGs	A.3
-----------------	------------------------------	------------

Current MDCs and DRGs

TABLE A–1 LISTS the Major Diagnostic Categories (MDCs) for version 28.0 of the Medicare Severity (MS) grouper. Table A–2 lists the Diagnosis Related Groups (DRGs) for version 28.0 of the grouper and their CMS-designated cost weights. The DRG cost weight is shown on the software output report (*see page 3.15*).

Table A–1. List of MDCs(*sheet 1 of 2*)

MDC	Description
01	Diseases & Disorders of the Nervous System
02	Diseases & Disorders of the Eye
03	Diseases & Disorders of the Ear, Nose, Mouth & Throat
04	Diseases & Disorders of the Respiratory System
05	Diseases & Disorders of the Circulatory System
06	Diseases & Disorders of the Digestive System
07	Diseases & Disorders of the Hepatobiliary System & Pancreas
08	Diseases & Disorders of the Musculoskeletal System & Conn Tissue
09	Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast
10	Endocrine, Nutritional & Metabolic Diseases & Disorders
11	Diseases & Disorders of the Kidney & Urinary Tract
12	Diseases & Disorders of the Male Reproductive System
13	Diseases & Disorders of the Female Reproductive System
14	Pregnancy, Childbirth & the Puerperium

Table A-1. List of MDCs(sheet 2 of 2)

MDC	Description
15	Newborns & Other Neonates With Condtn Orig In Perinatal Period
16	Diseases & Disorders of Blood, Blood Forming Organs, Immunolog Disord
17	Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasm
18	Infectious & Parasitic Diseases, Systemic or Unspecified Sites
19	Mental Diseases & Disorders
20	Alcohol/drug Use & Alcohol/drug Induced Organic Mental Disorders
21	Injuries, Poisonings & Toxic Effects Of Drugs
22	Burns
23	Factors Influencing Hlth Stat & Othr Contacts With Hlth Servcs
24	Multiple Significant Trauma
25	Human Immunodeficiency Virus Infections

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
001,MDC P,Heart transplant or implant of heart assist system w MCC	26.3441
002,MDC P,Heart transplant or implant of heart assist system w/o MCC	13.6127
003,MDC P,ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	18.1239
004,MDC P,Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	11.2403
005,MDC P,Liver transplant w MCC or intestinal transplant	10.1771
006,MDC P,Liver transplant w/o MCC	4.8353
007,MDC P,Lung transplant	9.3350
008,MDC P,Simultaneous pancreas/kidney transplant	4.9632
010,MDC P,Pancreas transplant	3.7831
011,MDC P,Tracheostomy for face,mouth & neck diagnoses w MCC	4.7666
012,MDC P,Tracheostomy for face,mouth & neck diagnoses w CC	3.1311
013,MDC P,Tracheostomy for face,mouth & neck diagnoses w/o CC/MCC	1.9505
014,MDC P,Allogeneic bone marrow transplant	11.5947
015,MDC P,Autologous bone marrow transplant	5.9504
020,MDC 01P,Intracranial vascular procedures w PDX hemorrhage w MCC	8.2479
021,MDC 01P,Intracranial vascular procedures w PDX hemorrhage w CC	6.2886
022,MDC 01P,Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC	4.1581
023,MDC 01P,Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	5.0883
024,MDC 01P,Cranio w major dev impl/acute complex CNS PDX w/o MCC	3.4952

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
025,MDC 01P,Craniotomy & endovascular intracranial procedures w MCC	4.7575
026,MDC 01P,Craniotomy & endovascular intracranial procedures w CC	2.9825
027,MDC 01P,Craniotomy & endovascular intracranial procedures w/o CC/MCC	2.1307
028,MDC 01P,Spinal procedures w MCC	5.3549
029,MDC 01P,Spinal procedures w CC or spinal neurostimulators	2.8741
030,MDC 01P,Spinal procedures w/o CC/MCC	1.6433
031,MDC 01P,Ventricular shunt procedures w MCC	4.1261
032,MDC 01P,Ventricular shunt procedures w CC	1.9220
033,MDC 01P,Ventricular shunt procedures w/o CC/MCC	1.3626
034,MDC 01P,Carotid artery stent procedure w MCC	3.5242
035,MDC 01P,Carotid artery stent procedure w CC	2.1437
036,MDC 01P,Carotid artery stent procedure w/o CC/MCC	1.6390
037,MDC 01P,Extracranial procedures w MCC	3.1543
038,MDC 01P,Extracranial procedures w CC	1.5462
039,MDC 01P,Extracranial procedures w/o CC/MCC	1.0185
040,MDC 01P,Periph/cranial nerve & other nerv syst proc w MCC	3.9353
041,MDC 01P,Periph/cranial nerve & other nerv syst proc w CC or periph neurostim	2.1430
042,MDC 01P,Periph/cranial nerve & other nerv syst proc w/o CC/MCC	1.6905
052,MDC 01M,Spinal disorders & injuries w CC/MCC	1.6109
053,MDC 01M,Spinal disorders & injuries w/o CC/MCC	0.8441
054,MDC 01M,Nervous system neoplasms w MCC	1.4863
055,MDC 01M,Nervous system neoplasms w/o MCC	1.0649
056,MDC 01M,Degenerative nervous system disorders w MCC	1.6748
057,MDC 01M,Degenerative nervous system disorders w/o MCC	0.9350
058,MDC 01M,Multiple sclerosis & cerebellar ataxia w MCC	1.5856
059,MDC 01M,Multiple sclerosis & cerebellar ataxia w CC	0.9811
060,MDC 01M,Multiple sclerosis & cerebellar ataxia w/o CC/MCC	0.7578
061,MDC 01M,Acute ischemic stroke w use of thrombolytic agent w MCC	2.9568
062,MDC 01M,Acute ischemic stroke w use of thrombolytic agent w CC	1.9479
063,MDC 01M,Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	1.5251
064,MDC 01M,Intracranial hemorrhage or cerebral infarction w MCC	1.8674
065,MDC 01M,Intracranial hemorrhage or cerebral infarction w CC	1.1667
066,MDC 01M,Intracranial hemorrhage or cerebral infarction w/o CC/MCC	0.8198
067,MDC 01M,Nonspecific cva & precerebral occlusion w/o infarct w MCC	1.4231

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
068,MDC 01M,Nonspecific cva & precerebral occlusion w/o infarct w/o MCC	0.8751
069,MDC 01M,Transient ischemia	0.7311
070,MDC 01M,Nonspecific cerebrovascular disorders w MCC	1.8417
071,MDC 01M,Nonspecific cerebrovascular disorders w CC	1.1054
072,MDC 01M,Nonspecific cerebrovascular disorders w/o CC/MCC	0.7499
073,MDC 01M,Cranial & peripheral nerve disorders w MCC	1.2907
074,MDC 01M,Cranial & peripheral nerve disorders w/o MCC	0.8606
075,MDC 01M,Viral meningitis w CC/MCC	1.6567
076,MDC 01M,Viral meningitis w/o CC/MCC	0.9050
077,MDC 01M,Hypertensive encephalopathy w MCC	1.7376
078,MDC 01M,Hypertensive encephalopathy w CC	1.0154
079,MDC 01M,Hypertensive encephalopathy w/o CC/MCC	0.7533
080,MDC 01M,Nontraumatic stupor & coma w MCC	1.1909
081,MDC 01M,Nontraumatic stupor & coma w/o MCC	0.7392
082,MDC 01M,Traumatic stupor & coma, coma >1 hr w MCC	2.0130
083,MDC 01M,Traumatic stupor & coma, coma >1 hr w CC	1.3264
084,MDC 01M,Traumatic stupor & coma, coma >1 hr w/o CC/MCC	0.8959
085,MDC 01M,Traumatic stupor & coma, coma <1 hr w MCC	2.1423
086,MDC 01M,Traumatic stupor & coma, coma <1 hr w CC	1.2051
087,MDC 01M,Traumatic stupor & coma, coma <1 hr w/o CC/MCC	0.7929
088,MDC 01M,Concussion w MCC	1.4872
089,MDC 01M,Concussion w CC	0.9667
090,MDC 01M,Concussion w/o CC/MCC	0.6927
091,MDC 01M,Other disorders of nervous system w MCC	1.6318
092,MDC 01M,Other disorders of nervous system w CC	0.9404
093,MDC 01M,Other disorders of nervous system w/o CC/MCC	0.6827
094,MDC 01M,Bacterial & tuberculous infections of nervous system w MCC	3.6769
095,MDC 01M,Bacterial & tuberculous infections of nervous system w CC	2.3977
096,MDC 01M,Bacterial & tuberculous infections of nervous system w/o CC/MCC	1.9247
097,MDC 01M,Non-bacterial infect of nervous sys exc viral meningitis w MCC	3.2191
098,MDC 01M,Non-bacterial infect of nervous sys exc viral meningitis w CC	1.9106
099,MDC 01M,Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC	1.2084
100,MDC 01M,Seizures w MCC	1.5107
101,MDC 01M,Seizures w/o MCC	0.7619

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
102,MDC 01M,Headaches w MCC	1.0288
103,MDC 01M,Headaches w/o MCC	0.6701
113,MDC 02P,Orbital procedures w CC/MCC	1.8311
114,MDC 02P,Orbital procedures w/o CC/MCC	0.8989
115,MDC 02P,Extraocular procedures except orbit	1.2084
116,MDC 02P,Intraocular procedures w CC/MCC	1.2675
117,MDC 02P,Intraocular procedures w/o CC/MCC	0.7305
121,MDC 02M,Acute major eye infections w CC/MCC	0.9104
122,MDC 02M,Acute major eye infections w/o CC/MCC	0.6522
123,MDC 02M,Neurological eye disorders	0.7144
124,MDC 02M,Other disorders of the eye w MCC	1.1903
125,MDC 02M,Other disorders of the eye w/o MCC	0.6859
129,MDC 03P,Major head & neck procedures w CC/MCC or major device	2.2349
130,MDC 03P,Major head & neck procedures w/o CC/MCC	1.2299
131,MDC 03P,Cranial/facial procedures w CC/MCC	2.0915
132,MDC 03P,Cranial/facial procedures w/o CC/MCC	1.2447
133,MDC 03P,Other ear, nose, mouth & throat O.R. procedures w CC/MCC	1.7000
134,MDC 03P,Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC	0.8514
135,MDC 03P,Sinus & mastoid procedures w CC/MCC	1.9082
136,MDC 03P,Sinus & mastoid procedures w/o CC/MCC	0.9751
137,MDC 03P,Mouth procedures w CC/MCC	1.3007
138,MDC 03P,Mouth procedures w/o CC/MCC	0.7841
139,MDC 03P,Salivary gland procedures	0.8756
146,MDC 03M,Ear, nose, mouth & throat malignancy w MCC	2.1886
147,MDC 03M,Ear, nose, mouth & throat malignancy w CC	1.2413
148,MDC 03M,Ear, nose, mouth & throat malignancy w/o CC/MCC	0.8066
149,MDC 03M,Dysequilibrium	0.6389
150,MDC 03M,Epistaxis w MCC	1.2808
151,MDC 03M,Epistaxis w/o MCC	0.6393
152,MDC 03M,Otitis media & URI w MCC	0.9584
153,MDC 03M,Otitis media & URI w/o MCC	0.6290
154,MDC 03M,Other ear, nose, mouth & throat diagnoses w MCC	1.3965
155,MDC 03M,Other ear, nose, mouth & throat diagnoses w CC	0.9017
156,MDC 03M,Other ear, nose, mouth & throat diagnoses w/o CC/MCC	0.6226

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
157,MDC 03M,Dental & Oral Diseases w MCC	1.5794
158,MDC 03M,Dental & Oral Diseases w CC	0.9027
159,MDC 03M,Dental & Oral Diseases w/o CC/MCC	0.5897
163,MDC 04P,Major chest procedures w MCC	5.0828
164,MDC 04P,Major chest procedures w CC	2.6236
165,MDC 04P,Major chest procedures w/o CC/MCC	1.7758
166,MDC 04P,Other resp system O.R. procedures w MCC	3.7383
167,MDC 04P,Other resp system O.R. procedures w CC	2.0567
168,MDC 04P,Other resp system O.R. procedures w/o CC/MCC	1.3008
175,MDC 04M,Pulmonary embolism w MCC	1.6096
176,MDC 04M,Pulmonary embolism w/o MCC	1.0706
177,MDC 04M,Respiratory infections & inflammations w MCC	2.0667
178,MDC 04M,Respiratory infections & inflammations w CC	1.4887
179,MDC 04M,Respiratory infections & inflammations w/o CC/MCC	0.9861
180,MDC 04M,Respiratory neoplasms w MCC	1.7361
181,MDC 04M,Respiratory neoplasms w CC	1.2182
182,MDC 04M,Respiratory neoplasms w/o CC/MCC	0.8096
183,MDC 04M,Major chest trauma w MCC	1.4942
184,MDC 04M,Major chest trauma w CC	0.9755
185,MDC 04M,Major chest trauma w/o CC/MCC	0.6803
186,MDC 04M,Pleural effusion w MCC	1.5637
187,MDC 04M,Pleural effusion w CC	1.1027
188,MDC 04M,Pleural effusion w/o CC/MCC	0.7678
189,MDC 04M,Pulmonary edema & respiratory failure	1.2809
190,MDC 04M,Chronic obstructive pulmonary disease w MCC	1.1924
191,MDC 04M,Chronic obstructive pulmonary disease w CC	0.9735
192,MDC 04M,Chronic obstructive pulmonary disease w/o CC/MCC	0.7220
193,MDC 04M,Simple pneumonia & pleurisy w MCC	1.4796
194,MDC 04M,Simple pneumonia & pleurisy w CC	1.0152
195,MDC 04M,Simple pneumonia & pleurisy w/o CC/MCC	0.7096
196,MDC 04M,Interstitial lung disease w MCC	1.6062
197,MDC 04M,Interstitial lung disease w CC	1.1176
198,MDC 04M,Interstitial lung disease w/o CC/MCC	0.8203
199,MDC 04M,Pneumothorax w MCC	1.7895

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
200,MDC 04M,Pneumothorax w CC	1.0252
201,MDC 04M,Pneumothorax w/o CC/MCC	0.7210
202,MDC 04M,Bronchitis & asthma w CC/MCC	0.8424
203,MDC 04M,Bronchitis & asthma w/o CC/MCC	0.6081
204,MDC 04M,Respiratory signs & symptoms	0.6714
205,MDC 04M,Other respiratory system diagnoses w MCC	1.2972
206,MDC 04M,Other respiratory system diagnoses w/o MCC	0.7575
207,MDC 04M,Respiratory system diagnosis w ventilator support 96+ hours	5.2068
208,MDC 04M,Respiratory system diagnosis w ventilator support <96 hours	2.2630
215,MDC 05P,Other heart assist system implant	12.6086
216,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	10.0238
217,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w card cath w CC	6.8038
218,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	5.3293
219,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	8.0831
220,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	5.3787
221,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	4.4801
222,MDC 05P,Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	8.5230
223,MDC 05P,Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	6.4250
224,MDC 05P,Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	7.5819
225,MDC 05P,Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	6.0202
226,MDC 05P,Cardiac defibrillator implant w/o cardiac cath w MCC	6.4510
227,MDC 05P,Cardiac defibrillator implant w/o cardiac cath w/o MCC	5.1936
228,MDC 05P,Other cardiothoracic procedures w MCC	7.5881
229,MDC 05P,Other cardiothoracic procedures w CC	4.7745
230,MDC 05P,Other cardiothoracic procedures w/o CC/MCC	3.5451
231,MDC 05P,Coronary bypass w PTCA w MCC	7.8582
232,MDC 05P,Coronary bypass w PTCA w/o MCC	5.8183
233,MDC 05P,Coronary bypass w cardiac cath w MCC	7.2081
234,MDC 05P,Coronary bypass w cardiac cath w/o MCC	4.8281
235,MDC 05P,Coronary bypass w/o cardiac cath w MCC	5.8530
236,MDC 05P,Coronary bypass w/o cardiac cath w/o MCC	3.7707
237,MDC 05P,Major cardiovasc procedures w MCC or thoracic aortic aneurysm repair	5.1903
238,MDC 05P,Major cardiovasc procedures w/o MCC	3.0830
239,MDC 05P,Amputation for circ sys disorders exc upper limb & toe w MCC	4.5544

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
240,MDC 05P,Amputation for circ sys disorders exc upper limb & toe w CC	2.6589
241,MDC 05P,Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	1.4631
242,MDC 05P,Permanent cardiac pacemaker implant w MCC	3.7277
243,MDC 05P,Permanent cardiac pacemaker implant w CC	2.6508
244,MDC 05P,Permanent cardiac pacemaker implant w/o CC/MCC	2.0398
245,MDC 05P,AICD generator procedures	4.2486
246,MDC 05P,Perc cardiovasc proc w drug-eluting stent w MCC or 4+ vessels/stents	3.1802
247,MDC 05P,Perc cardiovasc proc w drug-eluting stent w/o MCC	1.9691
248,MDC 05P,Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents	2.9248
249,MDC 05P,Perc cardiovasc proc w non-drug-eluting stent w/o MCC	1.7732
250,MDC 05P,Perc cardiovasc proc w/o coronary artery stent w MCC	2.8836
251,MDC 05P,Perc cardiovasc proc w/o coronary artery stent w/o MCC	1.7992
252,MDC 05P,Other vascular procedures w MCC	2.9754
253,MDC 05P,Other vascular procedures w CC	2.4014
254,MDC 05P,Other vascular procedures w/o CC/MCC	1.6152
255,MDC 05P,Upper limb & toe amputation for circ system disorders w MCC	2.5043
256,MDC 05P,Upper limb & toe amputation for circ system disorders w CC	1.5969
257,MDC 05P,Upper limb & toe amputation for circ system disorders w/o CC/MCC	0.9750
258,MDC 05P,Cardiac pacemaker device replacement w MCC	2.8880
259,MDC 05P,Cardiac pacemaker device replacement w/o MCC	1.8334
260,MDC 05P,Cardiac pacemaker revision except device replacement w MCC	3.5500
261,MDC 05P,Cardiac pacemaker revision except device replacement w CC	1.6469
262,MDC 05P,Cardiac pacemaker revision except device replacement w/o CC/MCC	1.1246
263,MDC 05P,Vein ligation & stripping	1.7565
264,MDC 05P,Other circulatory system O.R. procedures	2.5305
265,MDC 05P,AICD lead procedures	2.3157
280,MDC 05M,Acute myocardial infarction, discharged alive w MCC	1.8503
281,MDC 05M,Acute myocardial infarction, discharged alive w CC	1.1912
282,MDC 05M,Acute myocardial infarction, discharged alive w/o CC/MCC	0.8064
283,MDC 05M,Acute myocardial infarction, expired w MCC	1.7151
284,MDC 05M,Acute myocardial infarction, expired w CC	0.8888
285,MDC 05M,Acute myocardial infarction, expired w/o CC/MCC	0.5712
286,MDC 05M,Circulatory disorders except AMI, w card cath w MCC	2.0014
287,MDC 05M,Circulatory disorders except AMI, w card cath w/o MCC	1.0879

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
288,MDC 05M,Acute & subacute endocarditis w MCC	2.9397
289,MDC 05M,Acute & subacute endocarditis w CC	1.8492
290,MDC 05M,Acute & subacute endocarditis w/o CC/MCC	1.2959
291,MDC 05M,Heart failure & shock w MCC	1.4943
292,MDC 05M,Heart failure & shock w CC	1.0302
293,MDC 05M,Heart failure & shock w/o CC/MCC	0.6853
294,MDC 05M,Deep vein thrombophlebitis w CC/MCC	1.0373
295,MDC 05M,Deep vein thrombophlebitis w/o CC/MCC	0.6403
296,MDC 05M,Cardiac arrest, unexplained w MCC	1.1692
297,MDC 05M,Cardiac arrest, unexplained w CC	0.6792
298,MDC 05M,Cardiac arrest, unexplained w/o CC/MCC	0.4497
299,MDC 05M,Peripheral vascular disorders w MCC	1.4072
300,MDC 05M,Peripheral vascular disorders w CC	0.9776
301,MDC 05M,Peripheral vascular disorders w/o CC/MCC	0.6615
302,MDC 05M,Atherosclerosis w MCC	0.9755
303,MDC 05M,Atherosclerosis w/o MCC	0.5830
304,MDC 05M,Hypertension w MCC	1.0263
305,MDC 05M,Hypertension w/o MCC	0.6138
306,MDC 05M,Cardiac congenital & valvular disorders w MCC	1.4667
307,MDC 05M,Cardiac congenital & valvular disorders w/o MCC	0.7974
308,MDC 05M,Cardiac arrhythmia & conduction disorders w MCC	1.2339
309,MDC 05M,Cardiac arrhythmia & conduction disorders w CC	0.8387
310,MDC 05M,Cardiac arrhythmia & conduction disorders w/o CC/MCC	0.5709
311,MDC 05M,Angina pectoris	0.5070
312,MDC 05M,Syncope & collapse	0.7172
313,MDC 05M,Chest pain	0.5499
314,MDC 05M,Other circulatory system diagnoses w MCC	1.8145
315,MDC 05M,Other circulatory system diagnoses w CC	0.9681
316,MDC 05M,Other circulatory system diagnoses w/o CC/MCC	0.6147
326,MDC 06P,Stomach, esophageal & duodenal proc w MCC	5.8142
327,MDC 06P,Stomach, esophageal & duodenal proc w CC	2.7231
328,MDC 06P,Stomach, esophageal & duodenal proc w/o CC/MCC	1.4298
329,MDC 06P,Major small & large bowel procedures w MCC	5.2807
330,MDC 06P,Major small & large bowel procedures w CC	2.5830

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
331,MDC 06P,Major small & large bowel procedures w/o CC/MCC	1.6267
332,MDC 06P,Rectal resection w MCC	4.8635
333,MDC 06P,Rectal resection w CC	2.4960
334,MDC 06P,Rectal resection w/o CC/MCC	1.5979
335,MDC 06P,Peritoneal adhesiolysis w MCC	4.2777
336,MDC 06P,Peritoneal adhesiolysis w CC	2.3456
337,MDC 06P,Peritoneal adhesiolysis w/o CC/MCC	1.4789
338,MDC 06P,Appendectomy w complicated principal diag w MCC	3.2115
339,MDC 06P,Appendectomy w complicated principal diag w CC	1.8659
340,MDC 06P,Appendectomy w complicated principal diag w/o CC/MCC	1.2393
341,MDC 06P,Appendectomy w/o complicated principal diag w MCC	2.2643
342,MDC 06P,Appendectomy w/o complicated principal diag w CC	1.3246
343,MDC 06P,Appendectomy w/o complicated principal diag w/o CC/MCC	0.9568
344,MDC 06P,Minor small & large bowel procedures w MCC	3.1586
345,MDC 06P,Minor small & large bowel procedures w CC	1.7035
346,MDC 06P,Minor small & large bowel procedures w/o CC/MCC	1.1883
347,MDC 06P,Anal & stomal procedures w MCC	2.4183
348,MDC 06P,Anal & stomal procedures w CC	1.3705
349,MDC 06P,Anal & stomal procedures w/o CC/MCC	0.7981
350,MDC 06P,Inguinal & femoral hernia procedures w MCC	2.4877
351,MDC 06P,Inguinal & femoral hernia procedures w CC	1.3539
352,MDC 06P,Inguinal & femoral hernia procedures w/o CC/MCC	0.8628
353,MDC 06P,Hernia procedures except inguinal & femoral w MCC	2.7510
354,MDC 06P,Hernia procedures except inguinal & femoral w CC	1.5523
355,MDC 06P,Hernia procedures except inguinal & femoral w/o CC/MCC	1.0329
356,MDC 06P,Other digestive system O.R. procedures w MCC	4.0293
357,MDC 06P,Other digestive system O.R. procedures w CC	2.1466
358,MDC 06P,Other digestive system O.R. procedures w/o CC/MCC	1.3010
368,MDC 06M,Major esophageal disorders w MCC	1.7578
369,MDC 06M,Major esophageal disorders w CC	1.0772
370,MDC 06M,Major esophageal disorders w/o CC/MCC	0.7546
371,MDC 06M,Major gastrointestinal disorders & peritoneal infections w MCC	2.0986
372,MDC 06M,Major gastrointestinal disorders & peritoneal infections w CC	1.2935
373,MDC 06M,Major gastrointestinal disorders & peritoneal infections w/o CC/MCC	0.8599

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
374,MDC 06M,Digestive malignancy w MCC	2.0674
375,MDC 06M,Digestive malignancy w CC	1.2801
376,MDC 06M,Digestive malignancy w/o CC/MCC	0.8478
377,MDC 06M,G.I. hemorrhage w MCC	1.7541
378,MDC 06M,G.I. hemorrhage w CC	1.0274
379,MDC 06M,G.I. hemorrhage w/o CC/MCC	0.7146
380,MDC 06M,Complicated peptic ulcer w MCC	1.9656
381,MDC 06M,Complicated peptic ulcer w CC	1.1207
382,MDC 06M,Complicated peptic ulcer w/o CC/MCC	0.8130
383,MDC 06M,Uncomplicated peptic ulcer w MCC	1.1982
384,MDC 06M,Uncomplicated peptic ulcer w/o MCC	0.8326
385,MDC 06M,Inflammatory bowel disease w MCC	1.9102
386,MDC 06M,Inflammatory bowel disease w CC	1.0435
387,MDC 06M,Inflammatory bowel disease w/o CC/MCC	0.7813
388,MDC 06M,G.I. obstruction w MCC	1.6457
389,MDC 06M,G.I. obstruction w CC	0.9344
390,MDC 06M,G.I. obstruction w/o CC/MCC	0.6369
391,MDC 06M,Esophagitis, gastroent & misc digest disorders w MCC	1.1550
392,MDC 06M,Esophagitis, gastroent & misc digest disorders w/o MCC	0.7173
393,MDC 06M,Other digestive system diagnoses w MCC	1.6593
394,MDC 06M,Other digestive system diagnoses w CC	0.9939
395,MDC 06M,Other digestive system diagnoses w/o CC/MCC	0.6749
405,MDC 07P,Pancreas, liver & shunt procedures w MCC	5.5743
406,MDC 07P,Pancreas, liver & shunt procedures w CC	2.7791
407,MDC 07P,Pancreas, liver & shunt procedures w/o CC/MCC	1.8665
408,MDC 07P,Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC	3.9368
409,MDC 07P,Biliary tract proc except only cholecyst w or w/o c.d.e. w CC	2.4875
410,MDC 07P,Biliary tract proc except only cholecyst w or w/o c.d.e. w/o CC/MCC	1.6114
411,MDC 07P,Cholecystectomy w c.d.e. w MCC	3.6818
412,MDC 07P,Cholecystectomy w c.d.e. w CC	2.4912
413,MDC 07P,Cholecystectomy w c.d.e. w/o CC/MCC	1.7180
414,MDC 07P,Cholecystectomy except by laparoscope w/o c.d.e. w MCC	3.6675
415,MDC 07P,Cholecystectomy except by laparoscope w/o c.d.e. w CC	2.0897
416,MDC 07P,Cholecystectomy except by laparoscope w/o c.d.e. w/o CC/MCC	1.3080

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
417,MDC 07P,Laparoscopic cholecystectomy w/o c.d.e. w MCC	2.5029
418,MDC 07P,Laparoscopic cholecystectomy w/o c.d.e. w CC	1.6996
419,MDC 07P,Laparoscopic cholecystectomy w/o c.d.e. w/o CC/MCC	1.1698
420,MDC 07P,Hepatobiliary diagnostic procedures w MCC	3.6443
421,MDC 07P,Hepatobiliary diagnostic procedures w CC	1.8910
422,MDC 07P,Hepatobiliary diagnostic procedures w/o CC/MCC	1.2742
423,MDC 07P,Other hepatobiliary or pancreas O.R. procedures w MCC	4.4577
424,MDC 07P,Other hepatobiliary or pancreas O.R. procedures w CC	2.4335
425,MDC 07P,Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC	1.6273
432,MDC 07M,Cirrhosis & alcoholic hepatitis w MCC	1.7001
433,MDC 07M,Cirrhosis & alcoholic hepatitis w CC	0.9548
434,MDC 07M,Cirrhosis & alcoholic hepatitis w/o CC/MCC	0.6152
435,MDC 07M,Malignancy of hepatobiliary system or pancreas w MCC	1.8018
436,MDC 07M,Malignancy of hepatobiliary system or pancreas w CC	1.2215
437,MDC 07M,Malignancy of hepatobiliary system or pancreas w/o CC/MCC	0.9004
438,MDC 07M,Disorders of pancreas except malignancy w MCC	1.8342
439,MDC 07M,Disorders of pancreas except malignancy w CC	1.0089
440,MDC 07M,Disorders of pancreas except malignancy w/o CC/MCC	0.6890
441,MDC 07M,Disorders of liver except malig,cirr,alc hepa w MCC	1.8242
442,MDC 07M,Disorders of liver except malig,cirr,alc hepa w CC	0.9857
443,MDC 07M,Disorders of liver except malig,cirr,alc hepa w/o CC/MCC	0.6615
444,MDC 07M,Disorders of the biliary tract w MCC	1.5586
445,MDC 07M,Disorders of the biliary tract w CC	1.0688
446,MDC 07M,Disorders of the biliary tract w/o CC/MCC	0.7411
453,MDC 08P,Combined anterior/posterior spinal fusion w MCC	10.2653
454,MDC 08P,Combined anterior/posterior spinal fusion w CC	7.2559
455,MDC 08P,Combined anterior/posterior spinal fusion w/o CC/MCC	5.4308
456,MDC 08P,Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	9.2885
457,MDC 08P,Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	6.2024
458,MDC 08P,Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	4.9379
459,MDC 08P,Spinal fusion except cervical w MCC	6.5065
460,MDC 08P,Spinal fusion except cervical w/o MCC	3.8713
461,MDC 08P,Bilateral or multiple major joint procs of lower extremity w MCC	4.9385
462,MDC 08P,Bilateral or multiple major joint procs of lower extremity w/o MCC	3.3425

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
463,MDC 08P,Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w MCC	4.9983
464,MDC 08P,Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w CC	2.8528
465,MDC 08P,Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w/o CC/MCC	1.7905
466,MDC 08P,Revision of hip or knee replacement w MCC	4.9144
467,MDC 08P,Revision of hip or knee replacement w CC	3.2321
468,MDC 08P,Revision of hip or knee replacement w/o CC/MCC	2.5728
469,MDC 08P,Major joint replacement or reattachment of lower extremity w MCC	3.4724
470,MDC 08P,Major joint replacement or reattachment of lower extremity w/o MCC	2.1039
471,MDC 08P,Cervical spinal fusion w MCC	4.7301
472,MDC 08P,Cervical spinal fusion w CC	2.7722
473,MDC 08P,Cervical spinal fusion w/o CC/MCC	2.0768
474,MDC 08P,Amputation for musculoskeletal sys & conn tissue dis w MCC	3.4905
475,MDC 08P,Amputation for musculoskeletal sys & conn tissue dis w CC	1.9594
476,MDC 08P,Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC	0.9920
477,MDC 08P,Biopsies of musculoskeletal system & connective tissue w MCC	3.3286
478,MDC 08P,Biopsies of musculoskeletal system & connective tissue w CC	2.2546
479,MDC 08P,Biopsies of musculoskeletal system & connective tissue w/o CC/MCC	1.6367
480,MDC 08P,Hip & femur procedures except major joint w MCC	3.0939
481,MDC 08P,Hip & femur procedures except major joint w CC	1.8886
482,MDC 08P,Hip & femur procedures except major joint w/o CC/MCC	1.5372
483,MDC 08P,Major joint & limb reattachment proc of upper extremity w CC/MCC	2.4019
484,MDC 08P,Major joint & limb reattachment proc of upper extremity w/o CC/MCC	1.9554
485,MDC 08P,Knee procedures w pdx of infection w MCC	3.2131
486,MDC 08P,Knee procedures w pdx of infection w CC	2.0339
487,MDC 08P,Knee procedures w pdx of infection w/o CC/MCC	1.4724
488,MDC 08P,Knee procedures w/o pdx of infection w CC/MCC	1.7217
489,MDC 08P,Knee procedures w/o pdx of infection w/o CC/MCC	1.2141
490,MDC 08P,Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim	1.7916
491,MDC 08P,Back & neck proc exc spinal fusion w/o CC/MCC	0.9914
492,MDC 08P,Lower extrem & humer proc except hip,foot,femur w MCC	3.0670
493,MDC 08P,Lower extrem & humer proc except hip,foot,femur w CC	1.8519
494,MDC 08P,Lower extrem & humer proc except hip,foot,femur w/o CC/MCC	1.3140
495,MDC 08P,Local excision & removal int fix devices exc hip & femur w MCC	2.8683
496,MDC 08P,Local excision & removal int fix devices exc hip & femur w CC	1.6207

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
497,MDC 08P,Local excision & removal int fix devices exc hip & femur w/o CC/MCC	1.0770
498,MDC 08P,Local excision & removal int fix devices of hip & femur w CC/MCC	1.9912
499,MDC 08P,Local excision & removal int fix devices of hip & femur w/o CC/MCC	0.9917
500,MDC 08P,Soft tissue procedures w MCC	3.0288
501,MDC 08P,Soft tissue procedures w CC	1.5846
502,MDC 08P,Soft tissue procedures w/o CC/MCC	1.0305
503,MDC 08P,Foot procedures w MCC	2.2809
504,MDC 08P,Foot procedures w CC	1.5685
505,MDC 08P,Foot procedures w/o CC/MCC	1.0770
506,MDC 08P,Major thumb or joint procedures	1.1815
507,MDC 08P,Major shoulder or elbow joint procedures w CC/MCC	1.8711
508,MDC 08P,Major shoulder or elbow joint procedures w/o CC/MCC	1.3956
509,MDC 08P,Arthroscopy	1.3148
510,MDC 08P,Shoulder,elbow or forearm proc,exc major joint proc w MCC	2.1704
511,MDC 08P,Shoulder,elbow or forearm proc,exc major joint proc w CC	1.4690
512,MDC 08P,Shoulder,elbow or forearm proc,exc major joint proc w/o CC/MCC	1.0461
513,MDC 08P,Hand or wrist proc, except major thumb or joint proc w CC/MCC	1.3007
514,MDC 08P,Hand or wrist proc, except major thumb or joint proc w/o CC/MCC	0.8209
515,MDC 08P,Other musculoskelet sys & conn tiss O.R. proc w MCC	3.1894
516,MDC 08P,Other musculoskelet sys & conn tiss O.R. proc w CC	1.9244
517,MDC 08P,Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC	1.4797
533,MDC 08M,Fractures of femur w MCC	1.5657
534,MDC 08M,Fractures of femur w/o MCC	0.7601
535,MDC 08M,Fractures of hip & pelvis w MCC	1.3527
536,MDC 08M,Fractures of hip & pelvis w/o MCC	0.7191
537,MDC 08M,Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC	0.8275
538,MDC 08M,Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC	0.6108
539,MDC 08M,Osteomyelitis w MCC	2.0467
540,MDC 08M,Osteomyelitis w CC	1.3126
541,MDC 08M,Osteomyelitis w/o CC/MCC	0.8713
542,MDC 08M,Pathological fractures & musculoskelet & conn tiss malig w MCC	1.9521
543,MDC 08M,Pathological fractures & musculoskelet & conn tiss malig w CC	1.1597
544,MDC 08M,Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC	0.7775
545,MDC 08M,Connective tissue disorders w MCC	2.5467

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
546,MDC 08M,Connective tissue disorders w CC	1.1712
547,MDC 08M,Connective tissue disorders w/o CC/MCC	0.7348
548,MDC 08M,Septic arthritis w MCC	1.9648
549,MDC 08M,Septic arthritis w CC	1.2035
550,MDC 08M,Septic arthritis w/o CC/MCC	0.8276
551,MDC 08M,Medical back problems w MCC	1.6398
552,MDC 08M,Medical back problems w/o MCC	0.8204
553,MDC 08M,Bone diseases & arthropathies w MCC	1.1355
554,MDC 08M,Bone diseases & arthropathies w/o MCC	0.6812
555,MDC 08M,Signs & symptoms of musculoskeletal system & conn tissue w MCC	1.0954
556,MDC 08M,Signs & symptoms of musculoskeletal system & conn tissue w/o MCC	0.6568
557,MDC 08M,Tendonitis, myositis & bursitis w MCC	1.6021
558,MDC 08M,Tendonitis, myositis & bursitis w/o MCC	0.8823
559,MDC 08M,Aftercare, musculoskeletal system & connective tissue w MCC	1.7717
560,MDC 08M,Aftercare, musculoskeletal system & connective tissue w CC	1.0022
561,MDC 08M,Aftercare, musculoskeletal system & connective tissue w/o CC/MCC	0.6211
562,MDC 08M,Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC	1.3944
563,MDC 08M,Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC	0.7153
564,MDC 08M,Other musculoskeletal sys & connective tissue diagnoses w MCC	1.4702
565,MDC 08M,Other musculoskeletal sys & connective tissue diagnoses w CC	0.9095
566,MDC 08M,Other musculoskeletal sys & connective tissue diagnoses w/o CC/MCC	0.6625
573,MDC 09P,Skin graft &/or debrid for skn ulcer or cellulitis w MCC	3.2461
574,MDC 09P,Skin graft &/or debrid for skn ulcer or cellulitis w CC	1.8675
575,MDC 09P,Skin graft &/or debrid for skn ulcer or cellulitis w/o CC/MCC	1.0899
576,MDC 09P,Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC	3.9248
577,MDC 09P,Skin graft &/or debrid exc for skin ulcer or cellulitis w CC	1.7035
578,MDC 09P,Skin graft &/or debrid exc for skin ulcer or cellulitis w/o CC/MCC	1.0416
579,MDC 09P,Other skin, subcut tiss & breast proc w MCC	2.9576
580,MDC 09P,Other skin, subcut tiss & breast proc w CC	1.4959
581,MDC 09P,Other skin, subcut tiss & breast proc w/o CC/MCC	0.9223
582,MDC 09P,Mastectomy for malignancy w CC/MCC	1.0567
583,MDC 09P,Mastectomy for malignancy w/o CC/MCC	0.8454
584,MDC 09P,Breast biopsy, local excision & other breast procedures w CC/MCC	1.5153
585,MDC 09P,Breast biopsy, local excision & other breast procedures w/o CC/MCC	1.0411

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
592,MDC 09M,Skin ulcers w MCC	1.7669
593,MDC 09M,Skin ulcers w CC	1.0709
594,MDC 09M,Skin ulcers w/o CC/MCC	0.7591
595,MDC 09M,Major skin disorders w MCC	1.8690
596,MDC 09M,Major skin disorders w/o MCC	0.8779
597,MDC 09M,Malignant breast disorders w MCC	1.5596
598,MDC 09M,Malignant breast disorders w CC	1.0611
599,MDC 09M,Malignant breast disorders w/o CC/MCC	0.6265
600,MDC 09M,Non-malignant breast disorders w CC/MCC	0.9602
601,MDC 09M,Non-malignant breast disorders w/o CC/MCC	0.6728
602,MDC 09M,Cellulitis w MCC	1.4748
603,MDC 09M,Cellulitis w/o MCC	0.8377
604,MDC 09M,Trauma to the skin, subcut tiss & breast w MCC	1.2361
605,MDC 09M,Trauma to the skin, subcut tiss & breast w/o MCC	0.7182
606,MDC 09M,Minor skin disorders w MCC	1.3082
607,MDC 09M,Minor skin disorders w/o MCC	0.6857
614,MDC 10P,Adrenal & pituitary procedures w CC/MCC	2.4554
615,MDC 10P,Adrenal & pituitary procedures w/o CC/MCC	1.3970
616,MDC 10P,Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	4.4934
617,MDC 10P,Amputat of lower limb for endocrine,nutrit,& metabol dis w CC	2.0006
618,MDC 10P,Amputat of lower limb for endocrine,nutrit,& metabol dis w/o CC/MCC	1.2006
619,MDC 10P,O.R. procedures for obesity w MCC	3.5214
620,MDC 10P,O.R. procedures for obesity w CC	1.8627
621,MDC 10P,O.R. procedures for obesity w/o CC/MCC	1.4747
622,MDC 10P,Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	3.4166
623,MDC 10P,Skin grafts & wound debrid for endoc, nutrit & metab dis w CC	1.8558
624,MDC 10P,Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC	1.0122
625,MDC 10P,Thyroid, parathyroid & thyroglossal procedures w MCC	2.2423
626,MDC 10P,Thyroid, parathyroid & thyroglossal procedures w CC	1.1701
627,MDC 10P,Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC	0.7821
628,MDC 10P,Other endocrine, nutrit & metab O.R. proc w MCC	3.3819
629,MDC 10P,Other endocrine, nutrit & metab O.R. proc w CC	2.2650
630,MDC 10P,Other endocrine, nutrit & metab O.R. proc w/o CC/MCC	1.4164
637,MDC 10M,Diabetes w MCC	1.4462

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
638,MDC 10M,Diabetes w CC	0.8306
639,MDC 10M,Diabetes w/o CC/MCC	0.5544
640,MDC 10M,Nutritional & misc metabolic disorders w MCC	1.1400
641,MDC 10M,Nutritional & misc metabolic disorders w/o MCC	0.6916
642,MDC 10M,Inborn errors of metabolism	1.0290
643,MDC 10M,Endocrine disorders w MCC	1.8159
644,MDC 10M,Endocrine disorders w CC	1.0655
645,MDC 10M,Endocrine disorders w/o CC/MCC	0.7198
652,MDC 11P,Kidney transplant	3.0442
653,MDC 11P,Major bladder procedures w MCC	6.0929
654,MDC 11P,Major bladder procedures w CC	3.0054
655,MDC 11P,Major bladder procedures w/o CC/MCC	1.9567
656,MDC 11P,Kidney & ureter procedures for neoplasm w MCC	3.5713
657,MDC 11P,Kidney & ureter procedures for neoplasm w CC	2.0004
658,MDC 11P,Kidney & ureter procedures for neoplasm w/o CC/MCC	1.4224
659,MDC 11P,Kidney & ureter procedures for non-neoplasm w MCC	3.4988
660,MDC 11P,Kidney & ureter procedures for non-neoplasm w CC	1.9030
661,MDC 11P,Kidney & ureter procedures for non-neoplasm w/o CC/MCC	1.2641
662,MDC 11P,Minor bladder procedures w MCC	3.0158
663,MDC 11P,Minor bladder procedures w CC	1.4718
664,MDC 11P,Minor bladder procedures w/o CC/MCC	1.1074
665,MDC 11P,Prostatectomy w MCC	2.8653
666,MDC 11P,Prostatectomy w CC	1.6440
667,MDC 11P,Prostatectomy w/o CC/MCC	0.7919
668,MDC 11P,Transurethral procedures w MCC	2.5175
669,MDC 11P,Transurethral procedures w CC	1.2597
670,MDC 11P,Transurethral procedures w/o CC/MCC	0.7770
671,MDC 11P,Urethral procedures w CC/MCC	1.4400
672,MDC 11P,Urethral procedures w/o CC/MCC	0.7885
673,MDC 11P,Other kidney & urinary tract procedures w MCC	2.9260
674,MDC 11P,Other kidney & urinary tract procedures w CC	2.0934
675,MDC 11P,Other kidney & urinary tract procedures w/o CC/MCC	1.3379
682,MDC 11M,Renal failure w MCC	1.6407
683,MDC 11M,Renal failure w CC	1.0243

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
684,MDC 11M,Renal failure w/o CC/MCC	0.6587
685,MDC 11M,Admit for renal dialysis	0.8944
686,MDC 11M,Kidney & urinary tract neoplasms w MCC	1.8238
687,MDC 11M,Kidney & urinary tract neoplasms w CC	1.0838
688,MDC 11M,Kidney & urinary tract neoplasms w/o CC/MCC	0.6479
689,MDC 11M,Kidney & urinary tract infections w MCC	1.2185
690,MDC 11M,Kidney & urinary tract infections w/o MCC	0.7864
691,MDC 11M,Urinary stones w esw lithotripsy w CC/MCC	1.6156
692,MDC 11M,Urinary stones w esw lithotripsy w/o CC/MCC	1.1186
693,MDC 11M,Urinary stones w/o esw lithotripsy w MCC	1.3505
694,MDC 11M,Urinary stones w/o esw lithotripsy w/o MCC	0.7096
695,MDC 11M,Kidney & urinary tract signs & symptoms w MCC	1.2082
696,MDC 11M,Kidney & urinary tract signs & symptoms w/o MCC	0.6590
697,MDC 11M,Urethral stricture	0.7771
698,MDC 11M,Other kidney & urinary tract diagnoses w MCC	1.6098
699,MDC 11M,Other kidney & urinary tract diagnoses w CC	0.9999
700,MDC 11M,Other kidney & urinary tract diagnoses w/o CC/MCC	0.6757
707,MDC 12P,Major male pelvic procedures w CC/MCC	1.7747
708,MDC 12P,Major male pelvic procedures w/o CC/MCC	1.2581
709,MDC 12P,Penis procedures w CC/MCC	1.8630
710,MDC 12P,Penis procedures w/o CC/MCC	1.2712
711,MDC 12P,Testes procedures w CC/MCC	1.7639
712,MDC 12P,Testes procedures w/o CC/MCC	0.8084
713,MDC 12P,Transurethral prostatectomy w CC/MCC	1.1802
714,MDC 12P,Transurethral prostatectomy w/o CC/MCC	0.6544
715,MDC 12P,Other male reproductive system O.R. proc for malignancy w CC/MCC	1.7433
716,MDC 12P,Other male reproductive system O.R. proc for malignancy w/o CC/MCC	0.9974
717,MDC 12P,Other male reproductive system O.R. proc exc malignancy w CC/MCC	1.6138
718,MDC 12P,Other male reproductive system O.R. proc exc malignancy w/o CC/MCC	0.8044
722,MDC 12M,Malignancy, male reproductive system w MCC	1.6891
723,MDC 12M,Malignancy, male reproductive system w CC	1.0190
724,MDC 12M,Malignancy, male reproductive system w/o CC/MCC	0.6211
725,MDC 12M,Benign prostatic hypertrophy w MCC	1.2742
726,MDC 12M,Benign prostatic hypertrophy w/o MCC	0.7013

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
727,MDC 12M,Inflammation of the male reproductive system w MCC	1.3657
728,MDC 12M,Inflammation of the male reproductive system w/o MCC	0.7612
729,MDC 12M,Other male reproductive system diagnoses w CC/MCC	0.9892
730,MDC 12M,Other male reproductive system diagnoses w/o CC/MCC	0.6414
734,MDC 13P,Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC	2.4364
735,MDC 13P,Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC	1.1684
736,MDC 13P,Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	4.3943
737,MDC 13P,Uterine & adnexa proc for ovarian or adnexal malignancy w CC	2.0375
738,MDC 13P,Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC	1.2324
739,MDC 13P,Uterine,adnexa proc for non-ovarian/adnexal malig w MCC	3.4300
740,MDC 13P,Uterine,adnexa proc for non-ovarian/adnexal malig w CC	1.5280
741,MDC 13P,Uterine,adnexa proc for non-ovarian/adnexal malig w/o CC/MCC	1.0979
742,MDC 13P,Uterine & adnexa proc for non-malignancy w CC/MCC	1.3883
743,MDC 13P,Uterine & adnexa proc for non-malignancy w/o CC/MCC	0.9079
744,MDC 13P,D&C, conization, laparoscopy & tubal interruption w CC/MCC	1.5151
745,MDC 13P,D&C, conization, laparoscopy & tubal interruption w/o CC/MCC	0.8045
746,MDC 13P,Vagina, cervix & vulva procedures w CC/MCC	1.3373
747,MDC 13P,Vagina, cervix & vulva procedures w/o CC/MCC	0.8852
748,MDC 13P,Female reproductive system reconstructive procedures	0.9169
749,MDC 13P,Other female reproductive system O.R. procedures w CC/MCC	2.5275
750,MDC 13P,Other female reproductive system O.R. procedures w/o CC/MCC	0.9368
754,MDC 13M,Malignancy, female reproductive system w MCC	2.0295
755,MDC 13M,Malignancy, female reproductive system w CC	1.1444
756,MDC 13M,Malignancy, female reproductive system w/o CC/MCC	0.6361
757,MDC 13M,Infections, female reproductive system w MCC	1.6565
758,MDC 13M,Infections, female reproductive system w CC	1.0963
759,MDC 13M,Infections, female reproductive system w/o CC/MCC	0.7368
760,MDC 13M,Menstrual & other female reproductive system disorders w CC/MCC	0.8388
761,MDC 13M,Menstrual & other female reproductive system disorders w/o CC/MCC	0.5219
765,MDC 14P,Cesarean section w CC/MCC	1.1269
766,MDC 14P,Cesarean section w/o CC/MCC	0.7995
767,MDC 14P,Vaginal delivery w sterilization &/or D&C	0.9111
768,MDC 14P,Vaginal delivery w O.R. proc except steril &/or D&C	1.8112
769,MDC 14P,Postpartum & post abortion diagnoses w O.R. procedure	2.0631

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
770,MDC 14P,Abortion w D&C, aspiration curettage or hysterotomy	0.7017
774,MDC 14M,Vaginal delivery w complicating diagnoses	0.6848
775,MDC 14M,Vaginal delivery w/o complicating diagnoses	0.5256
776,MDC 14M,Postpartum & post abortion diagnoses w/o O.R. procedure	0.6513
777,MDC 14M,Ectopic pregnancy	0.7406
778,MDC 14M,Threatened abortion	0.4942
779,MDC 14M,Abortion w/o D&C	0.5311
780,MDC 14M,False labor	0.2284
781,MDC 14M,Other antepartum diagnoses w medical complications	0.6809
782,MDC 14M,Other antepartum diagnoses w/o medical complications	0.4744
789,MDC 15M,Neonates, died or transferred to another acute care facility	1.4877
790,MDC 15M,Extreme immaturity or respiratory distress syndrome, neonate	4.9058
791,MDC 15M,Prematurity w major problems	3.3505
792,MDC 15M,Prematurity w/o major problems	2.0216
793,MDC 15M,Full term neonate w major problems	3.4417
794,MDC 15M,Neonate w other significant problems	1.2181
795,MDC 15M,Normal newborn	0.1649
799,MDC 16P,Splenectomy w MCC	4.9434
800,MDC 16P,Splenectomy w CC	2.5874
801,MDC 16P,Splenectomy w/o CC/MCC	1.5586
802,MDC 16P,Other O.R. proc of the blood & blood forming organs w MCC	3.6171
803,MDC 16P,Other O.R. proc of the blood & blood forming organs w CC	1.8905
804,MDC 16P,Other O.R. proc of the blood & blood forming organs w/o CC/MCC	1.0446
808,MDC 16M,Major hematol/immun diag exc sickle cell crisis & coagul w MCC	2.1479
809,MDC 16M,Major hematol/immun diag exc sickle cell crisis & coagul w CC	1.1951
810,MDC 16M,Major hematol/immun diag exc sickle cell crisis & coagul w/o CC/MCC	0.9230
811,MDC 16M,Red blood cell disorders w MCC	1.2544
812,MDC 16M,Red blood cell disorders w/o MCC	0.7957
813,MDC 16M,Coagulation disorders	1.4372
814,MDC 16M,Reticuloendothelial & immunity disorders w MCC	1.6431
815,MDC 16M,Reticuloendothelial & immunity disorders w CC	1.0024
816,MDC 16M,Reticuloendothelial & immunity disorders w/o CC/MCC	0.6818
820,MDC 17P,Lymphoma & leukemia w major O.R. procedure w MCC	5.7112
821,MDC 17P,Lymphoma & leukemia w major O.R. procedure w CC	2.3998

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
822,MDC 17P,Lymphoma & leukemia w major O.R. procedure w/o CC/MCC	1.2253
823,MDC 17P,Lymphoma & non-acute leukemia w other O.R. proc w MCC	4.5640
824,MDC 17P,Lymphoma & non-acute leukemia w other O.R. proc w CC	2.3055
825,MDC 17P,Lymphoma & non-acute leukemia w other O.R. proc w/o CC/MCC	1.2418
826,MDC 17P,Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC	4.8666
827,MDC 17P,Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC	2.1459
828,MDC 17P,Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC	1.3861
829,MDC 17P,Myeloprolif disord or poorly diff neopl w other O.R. proc w CC/MCC	2.7093
830,MDC 17P,Myeloprolif disord or poorly diff neopl w other O.R. proc w/o CC/MCC	1.0976
834,MDC 17M,Acute leukemia w/o major O.R. procedure w MCC	4.9277
835,MDC 17M,Acute leukemia w/o major O.R. procedure w CC	2.4284
836,MDC 17M,Acute leukemia w/o major O.R. procedure w/o CC/MCC	1.1386
837,MDC 17M,Chemo w acute leukemia as sdx or w high dose chemo agent w MCC	6.6599
838,MDC 17M,Chemo w acute leukemia as sdx w CC or high dose chemo agent	3.1428
839,MDC 17M,Chemo w acute leukemia as sdx w/o CC/MCC	1.2823
840,MDC 17M,Lymphoma & non-acute leukemia w MCC	2.9317
841,MDC 17M,Lymphoma & non-acute leukemia w CC	1.6376
842,MDC 17M,Lymphoma & non-acute leukemia w/o CC/MCC	1.0389
843,MDC 17M,Other myeloprolif dis or poorly diff neopl diag w MCC	1.8363
844,MDC 17M,Other myeloprolif dis or poorly diff neopl diag w CC	1.1940
845,MDC 17M,Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC	0.8029
846,MDC 17M,Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	2.1961
847,MDC 17M,Chemotherapy w/o acute leukemia as secondary diagnosis w CC	0.9860
848,MDC 17M,Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC/MCC	0.8078
849,MDC 17M,Radiotherapy	1.2627
853,MDC 18P,Infectious & parasitic diseases w O.R. procedure w MCC	5.5237
854,MDC 18P,Infectious & parasitic diseases w O.R. procedure w CC	2.7883
855,MDC 18P,Infectious & parasitic diseases w O.R. procedure w/o CC/MCC	1.3797
856,MDC 18P,Postoperative or post-traumatic infections w O.R. proc w MCC	5.1296
857,MDC 18P,Postoperative or post-traumatic infections w O.R. proc w CC	2.0975
858,MDC 18P,Postoperative or post-traumatic infections w O.R. proc w/o CC/MCC	1.3050
862,MDC 18M,Postoperative & post-traumatic infections w MCC	1.9511
863,MDC 18M,Postoperative & post-traumatic infections w/o MCC	0.9790
864,MDC 18M,Fever	0.8276

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
865,MDC 18M,Viral illness w MCC	1.5651
866,MDC 18M,Viral illness w/o MCC	0.7462
867,MDC 18M,Other infectious & parasitic diseases diagnoses w MCC	2.4708
868,MDC 18M,Other infectious & parasitic diseases diagnoses w CC	1.1614
869,MDC 18M,Other infectious & parasitic diseases diagnoses w/o CC/MCC	0.7207
870,MDC 18M,Septicemia or severe sepsis w MV 96+ hours	5.8305
871,MDC 18M,Septicemia or severe sepsis w/o MV 96+ hours w MCC	1.9074
872,MDC 18M,Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	1.1545
876,MDC 19P,O.R. procedure w principal diagnoses of mental illness	2.8143
880,MDC 19M,Acute adjustment reaction & psychosocial dysfunction	0.6161
881,MDC 19M,Depressive neuroses	0.6178
882,MDC 19M,Neuroses except depressive	0.6276
883,MDC 19M,Disorders of personality & impulse control	1.0694
884,MDC 19M,Organic disturbances & mental retardation	0.9308
885,MDC 19M,Psychoses	0.9041
886,MDC 19M,Behavioral & developmental disorders	0.7903
887,MDC 19M,Other mental disorder diagnoses	0.7888
894,MDC 20M,Alcohol/drug abuse or dependence, left ama	0.4074
895,MDC 20M,Alcohol/drug abuse or dependence w rehabilitation therapy	1.0275
896,MDC 20M,Alcohol/drug abuse or dependence w/o rehabilitation therapy w MCC	1.4565
897,MDC 20M,Alcohol/drug abuse or dependence w/o rehabilitation therapy w/o MCC	0.6513
901,MDC 21P,Wound debridements for injuries w MCC	3.9042
902,MDC 21P,Wound debridements for injuries w CC	1.7922
903,MDC 21P,Wound debridements for injuries w/o CC/MCC	1.0624
904,MDC 21P,Skin grafts for injuries w CC/MCC	2.9335
905,MDC 21P,Skin grafts for injuries w/o CC/MCC	1.1714
906,MDC 21P,Hand procedures for injuries	1.0356
907,MDC 21P,Other O.R. procedures for injuries w MCC	3.8268
908,MDC 21P,Other O.R. procedures for injuries w CC	1.9251
909,MDC 21P,Other O.R. procedures for injuries w/o CC/MCC	1.1554
913,MDC 21M,Traumatic injury w MCC	1.3444
914,MDC 21M,Traumatic injury w/o MCC	0.6994
915,MDC 21M,Allergic reactions w MCC	1.4252
916,MDC 21M,Allergic reactions w/o MCC	0.4867

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
917,MDC 21M,Poisoning & toxic effects of drugs w MCC	1.4868
918,MDC 21M,Poisoning & toxic effects of drugs w/o MCC	0.6269
919,MDC 21M,Complications of treatment w MCC	1.5903
920,MDC 21M,Complications of treatment w CC	0.9785
921,MDC 21M,Complications of treatment w/o CC/MCC	0.6216
922,MDC 21M,Other injury, poisoning & toxic effect diag w MCC	1.3478
923,MDC 21M,Other injury, poisoning & toxic effect diag w/o MCC	0.6808
927,MDC 22P,Extensive burns or full thickness burns w MV 96+ hrs w skin graft	12.6651
928,MDC 22P,Full thickness burn w skin graft or inhal inj w CC/MCC	4.7724
929,MDC 22P,Full thickness burn w skin graft or inhal inj w/o CC/MCC	2.0557
933,MDC 22M,Extensive burns or full thickness burns w MV 96+ hrs w/o skin graft	2.1979
934,MDC 22M,Full thickness burn w/o skin grft or inhal inj	1.3556
935,MDC 22M,Non-extensive burns	1.2919
939,MDC 23P,O.R. proc w diagnoses of other contact w health services w MCC	2.8702
940,MDC 23P,O.R. proc w diagnoses of other contact w health services w CC	1.6797
941,MDC 23P,O.R. proc w diagnoses of other contact w health services w/o CC/MCC	1.1457
945,MDC 23M,Rehabilitation w CC/MCC	1.2795
946,MDC 23M,Rehabilitation w/o CC/MCC	1.1273
947,MDC 23M,Signs & symptoms w MCC	1.0952
948,MDC 23M,Signs & symptoms w/o MCC	0.6865
949,MDC 23M,Aftercare w CC/MCC	1.0006
950,MDC 23M,Aftercare w/o CC/MCC	0.5040
951,MDC 23M,Other factors influencing health status	0.6593
955,MDC 24P,Craniotomy for multiple significant trauma	5.5336
956,MDC 24P,Limb reattachment, hip & femur proc for multiple significant trauma	3.3704
957,MDC 24P,Other O.R. procedures for multiple significant trauma w MCC	6.2519
958,MDC 24P,Other O.R. procedures for multiple significant trauma w CC	3.7692
959,MDC 24P,Other O.R. procedures for multiple significant trauma w/o CC/MCC	2.3208
963,MDC 24M,Other multiple significant trauma w MCC	2.8123
964,MDC 24M,Other multiple significant trauma w CC	1.4901
965,MDC 24M,Other multiple significant trauma w/o CC/MCC	0.9386
969,MDC 25P,HIV w extensive O.R. procedure w MCC	5.5073
970,MDC 25P,HIV w extensive O.R. procedure w/o MCC	2.6755
974,MDC 25M,HIV w major related condition w MCC	2.5849

Table A-2. List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
975,MDC 25M,HIV w major related condition w CC	1.3640
976,MDC 25M,HIV w major related condition w/o CC/MCC	0.8975
977,MDC 25M,HIV w or w/o other related condition	1.0486
981,MDC P,Extensive O.R. procedure unrelated to principal diagnosis w MCC	5.0634
982,MDC P,Extensive O.R. procedure unrelated to principal diagnosis w CC	2.9402
983,MDC P,Extensive O.R. procedure unrelated to principal diagnosis w/o CC/MCC	1.7767
984,MDC P,Prostatic O.R. procedure unrelated to principal diagnosis w MCC	3.3242
985,MDC P,Prostatic O.R. procedure unrelated to principal diagnosis w CC	2.1508
986,MDC P,Prostatic O.R. procedure unrelated to principal diagnosis w/o CC/MCC	1.1140
987,MDC P,Non-extensive O.R. proc unrelated to principal diagnosis w MCC	3.4495
988,MDC P,Non-extensive O.R. proc unrelated to principal diagnosis w CC	1.8739
989,MDC P,Non-extensive O.R. proc unrelated to principal diagnosis w/o CC/MCC	1.0589
998,MDC ,Principal diagnosis invalid as discharge diagnosis	0.0000
999,MDC ,Ungroupable	0.0000

Index

A

About box, 3.4, 5.4
Accelerator keys
 data entry window, 3.11, 5.10
 interactive output, 3.21, 5.21
Accessing
 batch processing, 4.4
 interactive data entry, 3.4, 5.4
 MS-DOS prompt, 4.4
Add/Remove dialog, 2.9
Age conflict, 3.23, 5.23

B

Batch processing, 4.3
 accessing, 4.4
 command examples, 4.10
 entering a command line, 4.5
 error messages, 4.18
 flow chart overview, 4.4
 input file, 4.6
 log file, 4.20
 optional information, 4.8
 output files
 formatted reports, 4.11
 upload files, 4.11
 output files and formats, 4.11
 principal procedure edit return flag, 4.15
 printing output, 4.17
 processing options, 4.9

renaming a file, 4.17
viewing output, 4.17

Buttons

data entry, 3.11, 5.11
output report, 3.22, 5.22

C

Clear button, 3.11, 5.11
Close button, 3.22, 5.22
Code edits
 diagnoses, 3.23, 5.23
 procedures, 3.24, 5.24
Command buttons
 data entry window, 3.11, 5.11
 interactive output, 3.22, 5.22
Command line, 4.5
 examples, 4.10
 processing options, 4.9
Cost weights for DRGs, A.4

D

Data entry fields, 3.7, 5.6
Data entry window
 accelerator keys, 3.11, 5.10
 command buttons, 3.11, 5.11
 error messages, 3.12, 5.12

- fields, 3.7, 5.6
 - codes, 3.9, 5.8
 - patient information, 3.7, 5.6
 - patient stay information, 3.7, 5.6
- menu options, 3.11, 5.10
- Date format, 3.7, 3.8, 5.6, 5.7
- Default batch processing log filename, 4.20
- Default interactive output filename, 3.21, 5.21
- Default primary payer value, 3.7, 5.6
- Default program version used
 - interactive, 3.8, 3.18, 5.7, 5.18
- Description files, 2.7
- Discharge status values, 3.8, 5.8
- DRGs
 - cost weights, A.4
- Duplicate of principal diagnosis, 3.23, 5.23

E

- E-code as principal diagnosis, 5.23
- Edit
 - age conflict, 3.23, 5.23
 - duplicate of principal diagnosis, 3.23, 5.23
 - E-code as principal diagnosis, 5.23
 - invalid age, 3.24, 5.24
 - invalid discharge status, 3.24, 5.24
 - invalid ICD-9-CM code, 3.23, 3.24, 5.23, 5.24
 - invalid sex, 3.24, 5.24
 - limited coverage, 3.24, 5.24
 - manifestation code as principal diagnosis, 3.23, 5.23
 - non-covered procedure, 3.24, 5.24
 - questionable admission, 3.23, 5.23
 - sex conflict, 3.23, 3.24, 5.23, 5.24
 - unacceptable principal diagnosis, 3.23, 5.23
- Edit return flag in batch processing
 - principal procedure, 4.15
- Edits
 - batch processing, 4.14
 - description, 3.23, 5.23
 - pre- and post-payment errors, 3.20, 5.20
- Error messages
 - batch processing, 4.18
 - interactive, 3.12, 5.12
 - pre- and post-payment, 3.20, 5.20
- Example
 - batch processing commands, 4.10
 - interactive output report, 3.15, 5.15
 - log file, 4.20

F

- Fields
 - batch input, 4.6

- batch upload, 4.12
- interactive
 - data entry, 3.7, 5.6
 - output, 3.17, 5.17
- File
 - batch input, 4.4
 - record layout, 4.6
 - batch output, 4.11
 - interactive output, 3.21, 5.21
 - log, 4.20
 - upload, 4.11
 - record layout, 4.12
- Formatted
 - batch output, 4.11
 - interactive output, 3.16, 5.16
- Functions installed, 2.8

G

- Grouper selection, 3.4, 5.4

H

- Hardware requirements, 2.3
- How to
 - change data on the output report, 3.16, 5.16
 - clear the Code fields, 3.11, 5.11
 - close the output report window, 3.22, 5.22
 - copy text, 3.11, 3.21, 5.10, 5.22
 - cut text, 3.11, 5.10
 - delete text, 3.11, 5.10
 - display a new window for data entry, 3.11, 5.10
 - display the About box, 3.11, 5.10
 - display the interactive output report, 3.11, 5.11
 - enter data in batch processing, 4.4
 - enter data interactively, 3.4, 5.4
 - exit the output report window, 3.21, 5.21
 - exit the program, 3.11, 5.10
 - format a batch input file, 4.6
 - paste text, 3.11, 5.10
 - print a log file, 4.21
 - print an interactive output report, 3.21, 5.21
 - print batch output, 4.17
 - rename a file, 4.17, 4.21
 - run batch processing, 4.4
 - save an interactive output report, 3.21, 5.21
 - select all text, 3.21, 5.22
 - uninstall the software, 2.9
 - view a log file, 4.21
 - view batch output, 4.17
 - view interactive output, 3.16, 5.16
 - write a batch command, 4.10

I

- Input file
 - batch processing, 4.6
 - optional information, 4.8
- Installation procedure, 2.5
- Installed program functions, 2.8
- Interactive data entry, 3.4, 5.4
- Interactive data processing, 3.3
- Interactive output report, 3.16, 5.16
 - accelerator keys, 3.21, 5.21
 - command buttons, 3.22, 5.22
 - edits, 3.23, 5.23
 - example, 3.15, 5.15
 - fields, 3.17, 5.17
 - menu options, 3.21, 5.21
- Invalid age, 3.24, 5.24
- Invalid discharge status, 3.24, 5.24
- Invalid ICD-9-CM code, 3.23, 3.24, 5.23, 5.24
- Invalid sex, 3.24, 5.24

K

- Keys, accelerator
 - data entry window, 3.11, 5.10
 - output report, 3.21, 5.21

L

- Limited coverage, 3.24, 5.24
- Lists
 - DRGs
 - cost weights, A.4
 - MDCs, A.3
- Log files, 4.20
 - printing, 4.21
 - renaming, 4.21
 - viewing, 4.21

M

- Manifestation code as principal diagnosis, 3.23, 5.23
- MDCs, list of, A.3
- Menu options
 - data entry window, 3.11, 5.10
 - interactive output, 3.21, 5.21
- MS-DOS prompt, 4.4

N

- Non-covered procedure, 3.24, 5.24

O

- Optional information, batch processing, 4.8, 4.11
- Options in batch processing, 4.9
- Output files, batch processing, 4.11
 - formatted reports, 4.11
 - upload, 4.11
- Output report
 - batch processing, 4.11
 - example, 3.15, 5.15
 - interactive, 3.16, 5.16
 - accelerator keys, 3.21, 5.21
 - command buttons, 3.22, 5.22
 - edits, 3.23, 5.23
 - fields, 3.17, 5.17
 - menu options, 3.21, 5.21
- Overview of batch processing, 4.4

P

- Post-payment error, 3.20, 5.20
- Pre-payment error, 3.20, 5.20
- Primary payer values, 3.7, 5.6
 - default, 3.7, 5.6
- Printing
 - a log file, 4.21
 - batch output, 4.17
- Processing options in batch processing, 4.9
- Product description, 1.3
- Program functions, 2.8
- Program output
 - batch processing, 4.11
 - interactive, 3.16, 5.16

Q

- Questionable admission, 3.23, 5.23

R

- Record layout
 - batch input file, 4.6
 - batch upload file, 4.12
- Remove the product, 2.9
- Renaming
 - a log file, 4.21
 - the batch output file, 4.17
- Report button, 3.11, 5.11
- Requires secondary diagnosis, 3.23, 5.23

S

Sex conflict, 3.23, 3.24, 5.23, 5.24
System requirements, 2.3

U

Unacceptable principal diagnosis, 3.23, 5.23
Uninstall the product, 2.9
Uninstalling the software, 2.9
Upload file, 4.11
 record layout, 4.12

V

Versions of the program, 1.3
Viewing
 a log file, 4.21
 batch output, 4.17
 interactive output, 3.16, 5.16

W

Window
 interactive output report, 3.21, 5.21
 MS-DOS, 4.4