Medicare Severity Grouper with Medicare Code Editor Software

Installation and User's Manual ICD-10 Version

For personal computers
Software version 39.0 Test Grouper October 2021

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ICD-10

Version 39.0

This Medicare Severity (MS) Grouper with Medicare Code Editor (MCE) ICD-10 software contains both ICD-9-CM and ICD-10 codes (see "Program versions (page 9)"). This software is intended to give users the opportunity to group and edit claims using ICD-9-CM, ICD-10-CM and ICD-10 PCS codes based on discharge date. If the discharge date is out of range for this component, the program will default to the current version.

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 Microsoft® 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 the visually impaired 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.

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.

Chapter 1: 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, length of stay, sex, and discharge status for possible errors.

  Note: If some of these data items are missing, inaccurate results may occur.

- 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 Microsoft® Windows® environment.

Program versions

This v39.0 NPRM preliminary grouper test release of MS grouper with MCE software for Windows-based personal computers supports the versions shown in the following table. To process a claim using a CMS grouper prior to version 16.0, you must use the earlier version of CMS Grouper with MCE software.

Note: The purpose for the 39.0 release is for end users to evaluate the proposed changes to the MS DRG grouper. No changes were made to MCE edits and any new codes would not be recognized by the MCE software.

Please note: In order to be in synch with the MS Grouper version number, there is not a version 29 of the MCE.

Table 1.   Grouper versions in the program

MS grouper version	MCE version	Effective date range
39.0 (ICD-10)	39.0	10/01/2021–09/30/2022
38.1 (ICD-10)	38.1	01/01/2021–09/30/2021
38.0 (ICD-10)	38.0	10/01/2020–12/31/2020
37.2 (ICD-10)	37.2	08/01/2020–09/30/2020
37.1 (ICD-10)	37.1	04/01/2020–07/31/2020
37.0 (ICD-10)	37.0	10/01/2019–03/31/2020

MS grouper version	MCE version	Effective date range
36.0 (ICD-10)	36.0	10/01/2018–09/30/2019
35.0 (ICD-10)	35.0	10/01/2017–09/30/2018
34.0 (ICD-10)	34.0	10/01/2016–09/30/2017
33.0 (ICD-10)	33.0	10/01/2015–09/30/2016
32.0	32.0	10/01/2014–09/30/2015
31.0	31.0	10/01/2013–09/30/2014
30.0	30.0	10/01/2012–09/30/2013
29.0	28.0	10/01/2011–09/30/2012
28.0	27.0	10/01/2010–09/30/2011
27.0	26.0	10/01/2009–09/30/2010
26.0	25.0	10/01/2008–09/30/2009
25.1	24.1	04/01/2008–09/30/2008
25.0	24.0	10/01/2007–03/31/2008
24.0	23.0	10/01/2006–09/30/2007
23.0	22.0	10/01/2005–09/30/2006
22.0	21.0	10/01/2004–09/30/2005
21.0	20.0	10/01/2003–09/30/2004
20.0	19.0	10/01/2002–09/30/2003
19.0	18.0	10/01/2001–09/30/2002
18.0	17.0	10/01/2000–09/30/2001
17.0	16.0	10/01/1999–09/30/2000
16.0	15.1*	07/01/1999–09/30/1999
16.0	15.0	10/01/1998–06/30/1999

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 the "Data entry fields" table (page 19) for details.

Chapter 2: Installing the software

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 Microsoft® Windows® administrative status.

Hardware and system requirements

The hardware and system requirements for the software are shown in the following table.

Table 2.   Hardware requirements

Component	Requirement
Operating system	Microsoft® Windows® 8.1 Microsoft Windows 7 (32 bit or 64 bit)
RAM	1 GB
Available disk space	220 MB
Monitor	Super VGA color (1024x768) resolution)
Windows permissions	Administrative status

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

Pre-installation note

I10 version users do not need to uninstall previous MSG MCE software. This version will work in parallel with other MSG MCE versions.

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.

1. Close all unnecessary applications running on your computer.

2. Download the MSGMCE PC zip file to your desktop or a local drive.

3. Unzip the file that was downloaded.

4. Select the MSGMCE PC folder from the unzipped file.

5. Double-click on MSGMCEInstaller.exe to start the software installation.

    The installation process begins and you see the Welcome screen.

    Note: If you see a User Account Control or Security Policy warning message pop up, select Yes or Allow to continue with the install.

6. On the Welcome screen, read the setup information, then select Next to continue.

7. Review the information on the Read Me screen, then select Next to continue.

8. On the Choose Install Location screen, specify the folder where you want to install the product.

    The default folder is C:\Program Files\MSG MCE SOFTWARE I10.

    ▪ To choose a different folder, select Browse... and browse to the folder you want to use.

    ▪ If you want to restore the default folder after making a change, select Restore Default Folder.

9. After choosing an install folder, select Install.

10. On the Install Complete screen, select Finish.

    Note: Some PCs may display a Program Incompatibility Assistant screen to verify if the program installed correctly, you may close this screen.

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 the following table, are located in the Descriptions directory off the product directory. In the file names, xxx represents the current software version number.

Table 3.   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
icd9msdrg3.vxxx	ICD-9 3-digit DRGs
icd10msdrg3.vxxx	ICD-10 3-digit DRGs
icd9msdrg4.vxxx	ICD-9 4-digit DRGs

File name	Contains descriptions for...
icd10msdrg4.vxxx	ICD-10 4-digit DRGs
msmdc.vxxx	MDCs

Note: Effective with v26.0, the titles for the DRG and MDC files were renamed to msdrg3.vXXX, msdrg4.vXXX and msmdc.vXXX. The "ms" prefix replaced the "hf" prefix.

Installed program functions

The installation places the three functions, shown in the following table, in the MSG MCE SOFTWARE I10 folder of Programs in the Start menu on your PC.

Table 4.   **Installed program functions**

Function	When to select the function
MSGMCE Interactive	Select to display the MS Grouper with Medicare Code Editor Software interactive data entry window.
MS-DOS prompt	Select to display a window containing a MS-DOS prompt to process records with batch processing. **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.
Readme	Select to read product-specific information for the current release.

Accessing the functions

To access any of the functions in the previous table:

1. Go to the Start menu.

2. Select All Programs > MSG MCE SOFTWARE I10.

3. Select the appropriate function.

   ▪ For information on interactive claims processing, go to "Interactive data processing" (page)

     or

   ▪ For information on batch processing, go to "Batch processing" (page).

Uninstalling grouper versions

The following instructions explain how to uninstall this software.

1. Launch the uninstall process from the Windows Control Panel or from the product directory.

   a. To launch the uninstall process from the Control Panel

      1. Select Start > Control Panel > Programs > Programs and Features.
         (Windows 7 users, select Start > Control Panel > Programs and Features.)

      2. From the list of installed products, select MSG MCE SOFTWARE I10.

      3. Right-click, then select Uninstall/Change.

   b. To launch the uninstall process from the product directory

      1. Locate the product directory. The default directory is C:\Program Files\MSG MCE SOFTWARE I10.

      2. Double-click Uninstall.exe.

         Note: If you see a User Account Control warning message, select Yes to continue with the uninstall.

2. On the Welcome screen, read the uninstall information, then select Next to continue.

3. On the MSG MCE Software Uninstall screen, read the message summarizing the uninstall process, then select Uninstall.

4. On the Uninstall Complete screen, select Finish.

Chapter 3: 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 Microsoft® 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

This section provides 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. For example, a discharge date of 11/14/2010 will call MS grouper 28 with an effective date range of 10/01/2010–09/30/2011 to process the claim.

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. In that case, this message is displayed on the output report:

```
MS-DRG Grouper version xx.xx (October 1, 20xx) USED BY DEFAULT.
```

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:

1. From the Start menu, select All Programs > MSG MCE SOFTWARE I10 > MSGMCE Interactive.

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

   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.

Figure 1: Data entry window

2. Enter data into the appropriate fields.

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

Table 5.   Help for interactive data entry

What do you want to do?	Help
Find specific data entry field information	See the "Data entry fields" table (page 18).
Work with text on the window	Use standard Windows options (e.g., cut, copy, paste).
Make a menu selection	See the "Data entry menu items" table (page 25).
Correct an entry in the patient information or patient stay information section	Simply highlight and overwrite the entry with the correct information, or Tab to the field and use the 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 arrow key), then press Delete to remove the entry.
	For more information, see the Diagnoses and Procedures field descriptions in the "Data entry fields" table (page 23); also see the "Data entry menu items" table (page 25), and the "Data entry command buttons" table (page 26) for additional information on the Delete and Clear functions.
View/access a long field description or edit messages associated with a code	The column can be re-sized to view descriptions/edits that extend past the set column size. When using JAWS, the description and edits fields can be accessed using the right arrow while in a Code row.
Eliminate an error message	Select OK to close the dialog box and correct the problem. See the "Interactive error messages" table (page 26) for a list of error messages that can occur, with their descriptions.

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

    You can select Report by clicking on it, by tabbing to it and pressing Enter, or by pressing ALT+R.

    "Viewing interactive output" (page 30) contains output information, including printing of the report. An example of an output report is shown in the "Program output" section (page 27).

Data entry fields

The following tables describe the fields on the data entry window. An asterisk (*) indicates a required field.

Table 6.   **Data entry fields - patient information**

Field name	Length	Description
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, mmddyyyy, or mmddyy. A dash (-), slash (/), or period 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 01/01/1897 cannot 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. Calculated age (admit date minus birth date) takes precedence over entered age. For more information, see the Birth date field description.
Sex*	1	Patient gender. Select a value from the drop-down list: 0, u, U = Unknown 1, m. M = Male 2, f, F = Female

Table 7.   **Data entry fields - patient stay information**

Field name	Length	Description
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) 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
Admit date	10	Date of admission to the facility. Format: mm/dd/yy, mm/dd/yyyy, mmddyyyy, or mmddyy. A dash (-), slash (/), or period is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. An admit date prior to 01/01/1897 cannot be entered. The birth and admit dates are used to calculate the age of the patient; for more information, see the Birth date field description. The admit and discharge dates are used to calculate length of stay (LOS); calculated LOS overrides entered LOS. Calculated LOS must be in the range of 00000 to 45291 days.

Field name	Length	Description
Discharge date	10	Date of discharge from the facility. Format: mm/dd/yy, mm/dd/yyyy, mmddyyyy, or mmddyy. A dash (-), slash (/), or period is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. A discharge date prior to 01/01/1897 cannot be entered. 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. If there are no groupers available for the discharge date entered, the product automatically defaults to the latest grouper version available and the output report includes a USED BY DEFAULT notation *(see also Discharge status, below)*. The discharge and admit dates are used to calculate LOS; for more information, see the Admit date field description.
Discharge status*	2	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 *(see also Discharge date, above)*. When a discharge status is selected first, and is invalid for a discharge date entered, the Discharge Status selection is cleared. All available discharge status codes are listed below. 01 = Home or self-care 02 = Disch/trans to another short term hosp 03 = Disch/trans to SNF 04 = Disch/trans to ICF (valid until 09/30/09) 04 = Custodial/supportive care (revised 10/01/09) 05 = Disch/trans to another type of facility (valid until 03/31/08) 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

Field name	Length	Description
		08 = Home IV service (valid until 09/30/2005)
		20 = Died
		21 = Disch/trans to court/law enforcement (added 10/01/09)
		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)
		69 = Designated Disaster Alternative Care Site (added 10/01/13)
		70 = Disch/trans to another type of health care institution not defined elsewhere in the code list (added 04/01/08)
		71 = OP services-other facility (10/01/01–09/30/03 only)
		72 = OP services-this facility (10/01/01–09/30/03 only)
		81 = Home-Self care w Planned Readmission (added 10/01/13)
		82 = Short Term Hospital w Planned Readmission (added 10/01/13)

Field name	Length	Description
		83 = SNF w Planned Readmission (added 10/01/13)
		84 = Cust/supp care w Planned Readmission (added 10/01/13)
		85 = Canc/child hosp w Planned Readmission (added 10/01/13)
		86 = Home Health Service w Planned Readmission (added 10/01/13)
		87 = Court/law enfrc w Planned Readmission (added 10/01/13)
		88 = Federal Hospital w Planned Readmission (added 10/01/13)
		89 = Swing Bed w Planned Readmission (added 10/01/13)
		90 = Rehab Facility/ Unit w Planned Readmission (added 10/01/13)
		91 = LTCH w Planned Readmission (added 10/01/13)
		92 = Nursg Fac-Medicaid Cert w Planned Readmiss (added 10/01/13)
		93 = Psych Hosp/Unit w Planned Readmission (added 10/01/13)
		94 = Crit Acc Hosp w Planned Readmission (added 10/01/13)
		95 = Oth Institution w Planned Readmission (added 10/01/13)
LOS (length of stay)	5	Number of days the patient was in the facility. Valid entries: 00000–45291. LOS can be user-entered, or calculated when admit and discharge dates have been entered. For more information, see the Admit date field description.
Optional information	72	Comments or other user-specified information. Alphanumeric.

Table 8. **Data entry fields - codes**

Field name	Length	Description
Admit Dx*	7	Enter diagnosis codes 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, "No description found" 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.
Diagnoses: PDX (principal diagnosis)* Diagnoses 2–25	7	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. The Description and Edits fields are display only. A maximum of four edits per code can be displayed. See the "Program edits" table (page 35) for a list of code edits. 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. **Note**: The interactive program accepts only diagnosis codes of up to five digits for ICD–9 processing and seven digits for ICD–10 processing.

Field name	Length	Description
Present on Admission Indicators	1	Enter one of the following Present on Admission Indicators, required for a diagnosis other than the admit diagnosis: Y = Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission W = Clinically unable to determine if present at the time of admission U = Insufficient documentation to determine if present at the time of admission 1 = Exempt from POA reporting Blank = Exempt from POA reporting **Note**: With JAWS running, if a user enters a secondary diagnosis code and tabs to the POA field and it is blank, if a value has been entered in a previous POA cell, that previous POA value may be read.
Procedures: PP (principal procedure) Procedures 2–25	7	Enter procedure codes without decimals. 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. The Description and Edits fields are display only, but can be accessed using the right arrow. A maximum of four edits per code can be displayed. See "Program edits" table (page 37) for a list of code edits. If you enter a 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. **Note:** The interactive program accepts procedure codes of up to four digits for ICD-9 processing and seven digits for ICD-10 processing.

Data entry menu options

The following table 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 9.   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.	n/a	On Help menu (Alt + H), select About (key = A)

Data entry command buttons

The following table describes the command buttons on the data entry window. Use the Function column to locate the task you want to perform.

Table 10.   Data entry command buttons

Button	Function
Clear	Clears all diagnosis (including admit dx) and procedure code entries and their descriptions, and any associated edits.
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 in "Program output" (page 27).

Interactive error messages

The following table is an alphabetical list of the error messages that can occur during data entry. The messages help prevent invalid or incorrect entries.

Table 11.   Interactive error messages

Message	Description
[Admit date] [Birth date] [Discharge date] is invalid. Dates must be entered in this format: mm/dd/yyyy, mm/dd/yy, mmddyyyy, mmddyy, mm.dd.yyyy, mm.dd.yy, mm-dd-yyyy, or mm-dd-yy.	The value entered for the month, day or year is outside the valid range. See the "Data entry fields" table (page 19) for more information on date fields.
Admit date cannot be after Discharge date.	The program checks for logical sequencing of dates.
Admit date cannot precede 01/01/1897.	A valid date is on or after 01/01/1897.
Admit date cannot precede Birth date.	The program checks for logical sequencing of dates.
Age is invalid. Calculated age must be between 0 and 124 years.	The valid range for age in years is 0–124.

Message	Description
Birth date cannot be after Admit date.	The program checks for logical sequencing of dates.
Birth date cannot be after current date	The program checks for logical sequencing of dates
Birth date cannot be after Discharge date.	The program checks for logical sequencing of dates.
Birth date cannot precede 01/01/1897.	A valid date is on or after 01/01/1897.
Discharge date cannot precede 01/01/1897.	A valid date is on or after 01/01/1897.
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 00000 and 45291 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	You cannot 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

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, (page) select Report by clicking on it, by tabbing to it and then pressing Enter, or by pressing Alt+R. You can press Alt+C at any time to close the report.

When using JAWS, when the report first opens you are told the number of lines before the report is read.

A sample report is shown in the following figure 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.

- 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.

Title Line —————— MS-DRG Assignment with Medicare Code Editor vXX.X

Patient Information

Patient Name: Jane Smith   Medical Record Number: 1234567

Admit Date: 10/01/2016   Discharge Date: 10/06/2016   Birth Date: 09/09/1943
Optional Information:

Patient Account Number: 891011
Age in Years: 73   Sex: Female
Discharge Status: 01 Home or self-care

Grouping Information

MDC: 10 ENDOCRINE, NUTRITIONAL & METABOLIC DISEASES & DISORDERS
Final
DRG: 638 Diabetes w CC
Cost Weight: 00.8382
MS-DRG Grouper version 34.0 (October 1, 2016) used.
HAC Status: Not Applicable.

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 Indicator

          POA: Yes, present at the time of inpatient admission
          Edit: Duplicate of principal diagnosis (MCE)
N390   Urinary tract infection, site not specified (CC) (DRG)
          POA: No, not present at the time of inpatient admission
I10   Essential (primary) hypertension
          POA:
N469   Male infertility, unspecified
          POA: Yes, present at the time of inpatient admission

Edit —————— Edit: Sex conflict (MCE)

Principal Procedure:
No principal procedure.

Secondary Procedures:
No secondary procedures.

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

Actual LOS: 5

Patient Summary Edits:
MCE pre-payment errors only

Figure 2: Sample output report

Viewing interactive output

Output report fields are described in the "Interactive output report fields" table (page <u>30</u>).

Use the menu options described in the "Output report menu options" table. (page <u>34</u>)

- Print the output report

- Copy part or all of the report

- Save the report to a file

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 either

- 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

The following table describes the fields on the output report.

Table 12. **Interactive output report fields**

Name	Description
Patient name Medical record number Admit date Discharge date Birth date Optional information Patient account number Age in years Sex Discharge status Primary payer Length of stay (LOS)	These output fields carry over the data entry information. *See the "Data entry fields" table (page <u>18</u>) for information on these fields.*

Name	Description
Grouping information (MDC, final DRG, final cost weight, grouper version used, HAC status)	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), Present on Admission (POA) indicators, and codes entered from the record. The MS-designated DRG cost weight shows under the DRG line. *For a list of DRGs and associated cost weights in the "Current MDCs and DRGs (page 73)".*

Patient records assigned to DRGs 998 (Principal diagnosis invalid as discharge diagnosis) or 999 (Ungroupable) will not have an assigned valid MDC. In these cases, "MDC: No MDC Assigned" is displayed.

When DRG 999 is assigned, one of the following messages identifies the reason why the record is ungroupable:

- 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 (not applicable for ICD-10)
- Diagnosis code cannot 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

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,   the output states USED BY DEFAULT. See the "Data entry fields" table (page 19) for discharge date information.

Name	Description
Clinical information	Displayed codes include admit diagnosis, principal diagnosis, secondary diagnoses, and procedures. Descriptions follow the codes and, if applicable, the following indicators: **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. **HAC:** Indicates a code flagged as a Hospital Acquired Condition. **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. **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. **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. **MCC excluded**: Indicates a diagnosis is a MCC but not considered due to PDX/SDX exclusion. **CC excluded**: Indicates a diagnosis is a CC but not considered due to PDX/SDX exclusion.
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. *See the "Program edits (page 35)" table for a description of each edit and why they occur.*
Initial DRG	Initial Diagnosis Related Group (DRG) assignment prior to Hospital Acquired Condition logic grouper processing.

Name	Description
Patient summary edits	This section is where clinical edits and data entry error messages not pertaining to a specific code are displayed.
	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
	For this flag, edits are categorized as follows:
	Pre-payment
	Age conflict Duplicate of principal diagnosis E-code as principal diagnosis (ICD-9) V, W, X, or Y codes as principal diagnosis (ICD-10) Invalid ICD-9-CM code (ICD-9) Invalid ICD-10-CM code or Invalid ICD-10-PCS code (ICD-10) Manifestation code as principal diagnosis Non-covered procedure Questionable admission Questionable obstetric admission Sex conflict Unacceptable principal diagnosis/Requires secondary diagnosis Invalid age Invalid sex Invalid discharge status Limited coverage Wrong procedure performed Procedure inconsistent with LOS
	Post-payment
	Open biopsy check (discontinued 10/01/2010) Bilateral procedure (ICD-9) Non-specific diagnosis (discontinued 10/01/07) Non-specific O.R. procedure (discontinued 10/01/07) MSP Alert (discontinued 10/01/01)

Output report menu options

The following table 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 13.   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	Opens a Save As dialog box to save the currently displayed output report as a text file. Unless you specified otherwise, the filename will be report.txt and the file will be saved under My Documents folder. You can browse and save the file in any directory you choose. Records cannot 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	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)
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

The following table describes the command button on the output report window. Refer to the Function column to locate the task you want to perform.

Table 14.   **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. The following tables list 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 15.   **Program edits - diagnosis codes**

Message	Description
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: Perinatal/Newborn - age of 0 years Pediatric - age 0–17 years inclusive Maternity - age 9–64 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.
E-code as principal diagnosis	E-codes describe circumstances causing an injury and not the nature of the injury, and should not be used as a principal diagnosis (applicable in ICD-9).
Invalid ICD-9-CM code or Invalid ICD-10-CM code	The code is not in the list of valid codes 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. **Note**: Diagnoses presented as all blank or all zeros are ignored (i.e. are not marked as invalid) except for the principal diagnosis.
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.

Message	Description
Secondary payer alert (MSP alert)	Certain trauma-related codes may indicate that another type of liability insurance should be the primary payer rather than Medicare. **Note:** This edit was discontinued on 10/01/2001 and will be displayed in MSG/MCE software versions 16.0–18.0 only.
Non-specific principal diagnosis	Some codes, especially "not otherwise specified" (NOS) codes, are valid but are not suitably specific for a principal diagnosis. This edit applies only if the patient is discharged alive since a more complete diagnostic work-up might not have been possible for a patient who has died. **Note:** This edit was discontinued on 10/01/2007 and will be displayed in MSG/MCE software versions 16.0–24.0 only.
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 Requires secondary 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. However, some codes otherwise considered as unacceptable are accepted if any secondary diagnosis is present. If no secondary diagnosis is present for these codes, the Requires secondary diagnosis message will appear.
V, W, X or Y code as principal diagnosis	V, W, X or Y codes describe circumstances causing an injury and not the nature of the injury, and should not be used as a principal diagnosis (applicable in ICD-10).
Wrong procedure performed	Certain E-codes indicate that the wrong procedure was performed. This edit indicates that one of these E-codes is present.

Table 16. **Program edits - procedure codes**

Message	Description
Bilateral procedure	Codes may not accurately reflect procedures performed on two or more different bilateral joints of the lower extremities during the same admission. The software indicates that the coded bilateral procedure may actually have been two procedures done on a single joint (e.g., a total hip replacement with a partial hip replacement will generate the edit while two total hip replacements will not). (ICD-9 only)
Invalid ICD-9-CM code or Invalid ICD-10-PCS code	The code is not in the list of valid codes and is assumed to be invalid or have a missing digit. **Note**: Procedures presented as all blank or all zeros are ignored (i.e. are not marked as invalid).
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 volume reduction surgery (LVRS) (ICD-9 only) Lung transplant Combination heart/lung transplant (ICD-9 only) Heart transplant Implantable heart assist system Intest/multi-visceral transplant Liver transplant Kidney transplant Pancreas transplant Artificial heart transplant **Note:** The edit message indicates the type of limited coverage, for ICD-9 only (e.g., Heart transplant-Limited coverage, Lung transplant-Limited coverage, etc.). For ICD-10, the edit message will simply say "Limited coverage."
Non-covered procedure	Some procedures are not covered by Medicare payment.
Non-specific O.R. procedure	Some codes, especially NOS (not otherwise specified) codes, are valid but are not suitably specific. This edit applies only if all coded O.R. procedures are considered non-specific. **Note:** This edit was discontinued on 10/01/2007 and will be displayed in MSG/MCE software versions 16.0–24.0 only.

Message	Description
Open biopsy check (If not open biopsy, code XXXX)	Surgical biopsies are called open biopsies and are relatively infrequent. A different DRG is assigned depending on whether or not the biopsy was open. There are specific ICD-9-CM codes for open and non-open biopsies. The software identifies all open biopsy codes, suggesting an alternate code (XXXX) if the procedure was a closed biopsy. **Note:** This edit was discontinued on 10/01/2010 and will be displayed in MSG/MCE software versions 16.0–27.0 only.
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).
Procedure inconsistent with LOS	The code should only be coded on claims greater than four days.
Questionable obstetric admission	ICD-10-PCS procedure codes describing a cesarean section or vaginal delivery are considered to be a questionable admission except when reported with a corresponding secondary diagnosis code describing the outcome of delivery.

Table 17.   Program edits - invalid

Message	Description
Invalid age[a]	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]	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]	A patient's discharge status is sometimes necessary for appropriate DRG determination. Discharge status must be coded according to the UB–04 conventions. For a list of valid entries, see the "Data entry fields" table (page 19).

a. All three invalid edits will be shown as a DRG return code in the batch .up (upload) file.

Chapter 4: 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

The following figure is a flow chart that shows the steps in processing records in batch using the MSG/MCE software.
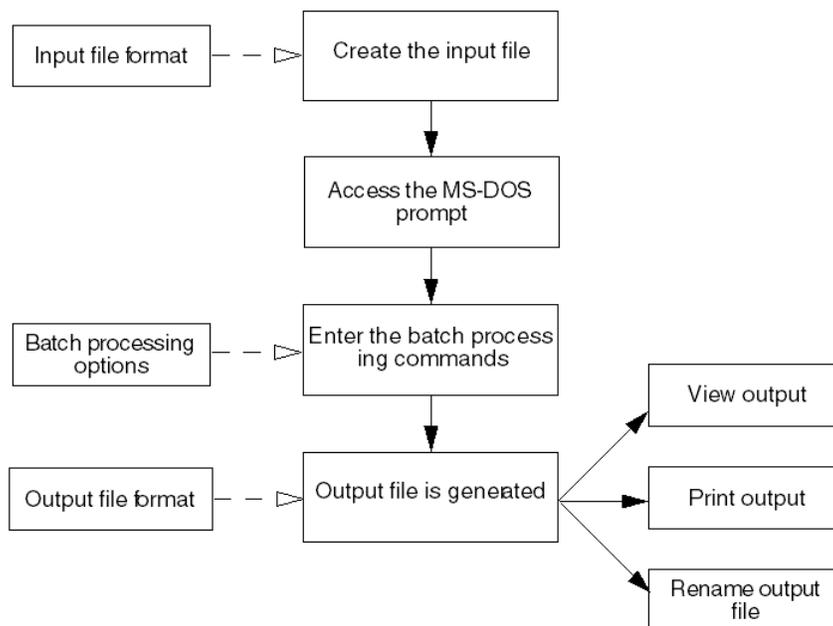
Figure 3: Batch processing overview

Follow these procedural steps to perform batch processing

1. Create the input file.

   See "Input file format" (page) for detailed information on formatting the input field information.

2. From the Start menu, select All Programs > MSG MCE SOFTWARE I10 > MS-DOS prompt.

   A window with the MS-DOS prompt is displayed.

> **Note:** If you see a message similar to the one below, click Yes to proceed to the MS-DOS prompt with Windows administrator status.
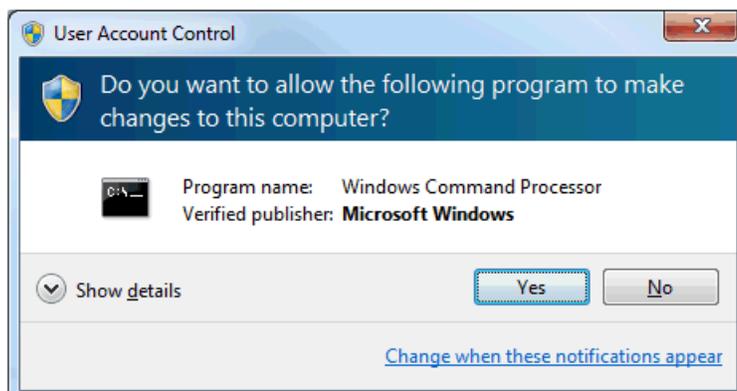
3. At the prompt in the DOS window, type the batch processing command line specifying the input file containing your claim information, the output that you want, then press Enter.

   The command line must contain:

   - The executable command mce

   - An input filename preceded by the -i identifier

   - An output filename preceded by the -o identifier and/or an upload filename preceded by the -u identifier

   See "Command line processing options" (page 47) for information on processing options and command lines, including examples.

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

   See "Batch processing error messages" (page 63) for information on error messages that can occur, with their descriptions.

5. View and/or print the output file.

   See "Working with batch output" (page 62) for more information, if necessary.

Input file format

The batch input file is a single-line, fixed format consisting of sequential 835 character input records. The following table defines the record layout for this format.

Table 18.   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 format. 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 = Disch/trans to ICF (valid until 09/30/09) 04 = Custodial/supportive care (revised 10/01/09) 05 = Disch/trans to another type of facility (valid until 03/31/08) 05 = Canc/child hosp (revised 04/01/08)

Field name	Position	Length	Occurrences	Description
				06 = Care of home health service
				07 = Left against medical advice
				08 = Home IV service (valid until 09/30/05)
				20 = Died
				21 = Disch/trans to court/law enforcement (added 10/01/09)
				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)
				69 = Designated Disaster Alternative Care Site
				70 = Oth institution (added 04/01/08)
				71 = OP services-other facility (10/01/01–09/30/03 only)
				72 = OP services-this facility (10/01/01–09/30/03 only)
				81 = Home-Self care w Planned Readmission
				82 = Short Term Hospital w Planned Readmission
				83 = SNF w Planned Readmission
				84 = Cust/supp care w Planned Readmission
				85 = Canc/child hosp w Planned Readmission
				86 = Home Health Service w Planned Readmission
				87 = Court/law enfrc w Planned Readmission

Field name	Position	Length	Occurrences	Description
				88 = Federal Hospital w Planned Readmission
				89 = Swing Bed w Planned Readmission
				90 = Rehab Facility/ Unit w Planned Readmission
				91 = LTCH w Planned Readmission
				92 = Nursg Fac-Medicaid Cert w Planned Readmiss
				93 = Psych Hosp/Unit w Planned Readmission
				94 = Crit Acc Hosp w Planned Readmission
				95 = Oth Institution w Planned Readmission
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	5	1	Length of stay. Right-justified, zero-filled. All blanks if no value is entered. Calculated LOS overrides entered LOS. Valid values=00000 through 45291
Birth date	91	10	1	Birth date. mm/dd/yyyy format. All blanks if no value is entered. Used in age calculation.
Age	101	3	1	Age. Right-justified, zero-filled. All blanks if no value is entered. Valid values: 0–124 years. Calculated age (admit date minus birth date) takes precedence over entered age.

Field name	Position	Length	Occurrences	Description
Sex	104	1	1	Sex. Numeric. Valid values: 0 = Unknown 1 = Male 2 = Female
Admit diagnosis	105	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 shorter than seven digits is entered, it will be blank filled through the seventh position.
Principal diagnosis	112	8	1	Principal diagnosis. First 7 bytes left-justified, blank-filled without decimals. Eighth byte represents POA indicator. Valid values: Y = Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission W = Clinically unable to determine if present at the time of admission U = Insufficient documentation to determine if present at the time of admission 1 = Exempt from POA reporting Blank = Exempt from POA reporting **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 shorter than seven digits is entered, it will be blank-filled through the seventh position.

Field name	Position	Length	Occurrences	Description
Secondary diagnoses	120	8	24	Diagnoses. First 7 bytes left-justified, blank-filled. Eighth byte represents POA indicator. Up to 24 diagnosis codes without decimals. Valid values: Y = Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission W = Clinically unable to determine if present at the time of admission U = Insufficient documentation to determine if present at the time of admission 1 = Exempt from POA reporting Blank = Exempt from POA reporting **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 shorter than seven digits is entered, it will be blank-filled through the seventh position.
Principal Procedure	312	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 shorter than seven digits is entered, it will be blank filled through the seventh position.
Secondary Procedures	319	7	24	Procedure codes. Seven left-justified characters, blank-filled. Up to 24 procedure codes without decimal. **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 shorter than seven digits is entered, it will be blank filled through the seventh position.

Field name	Position	Length	Occurrences	Description
Procedure date	487	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	737	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 **Note**: If value not X or Z an error code may result.
UNUSED	738	1	1	UNUSED
Optional information	739	72	1	Optional field. Left-justified, blank-filled. All blanks if no value is entered.
Filler	811	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. The following table 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 19.   Batch processing options

Option	Description
-i	Use with the input filename. Required for all batch runs. The name cannot 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 cannot 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 cannot 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

```
msgmce -i <input filename> -o <output filename>
```

Result

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

Example 2

```
msgmce -i <input filename> -u <upload filename>
```

Result

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

Example 3

```
msgmce -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. The following table describes the options.

Table 20.   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\MSG MCE SOFTWARE I10. See the "Program output" section (page 27) for 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. "Renaming a file" (page 63) 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\MSG MCE SOFTWARE I10.

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. "Renaming a file" (page 63) contains instructions, if you need them.

The upload file consists of fixed-format, sequential 1905 character output records. The following table defines the upload file record layout.

Note: In previous versions of the software some unused fields had zeros as placeholders. Starting with v26.0, please refer to the manual for field information, as a zero may have a different meaning.

Table 21.   Upload file record layout

Field name	Position	Length	Occur-rences	Description
n/a	001	835	1	Input record
MSG/MCE version used	836	3	1	Version of the software used to process the claim. Right-justified, blank-filled. Stored without decimal point. Valid values: 390, 381, 380, 372, 371, 370, 360, 350, 340, 330, 320, 310, 300, 290, 280, 270, 260, 251, 250, 240, 230, 220, 210, 200, 190, 180, 170, 160.
Initial DRG	839	3	1	Initial diagnosis related group. Right-justified, zero-filled.
Initial M/S indicator	842	1	1	Initial medical/surgical indicator. 0 = DRG return code was not zero 1 = Medical DRG 2 = Surgical DRG
Final MDC	843	2	1	Major diagnostic category. Right-justified, zero-filled.
Final DRG	845	3	1	Final diagnosis related group. Right-justified, zero-filled.
Final M/S indicator	848	1	1	Final medical/surgical indicator. 0 = DRG return code was not zero 1 = Medical DRG 2 = Surgical DRG

Field name	Position	Length	Occur-rences	Description
DRG return code	849	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 (not applicable for ICD-10) 11 = Invalid PDX 12 = POA logic nonexempt - HAC-POA(s) invalid, 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) Note: If return code 50- 54, 57 is returned, output blank value.
MSG/MCE edit return code	851	4	1	Four-character return code, 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 date (grouper defaults to current grouper if date out of range for versions in product) *See the "Output report fields (page [30])" table for information on which edits are classified as pre- and post-payment errors.*
Diagnosis code count	855	2	1	Number of diagnosis codes processed. Right-justified, zero-filled. This field does not include the admit diagnosis.
Procedure code count	857	2	1	Number of procedure codes processed. Right-justified, zero-filled.

Field name	Position	Length	Occur-rences	Description
Principal diagnosis edit return flag	859	8	1	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each diagnosis code. Valid values: 00 = Diagnosis not used to assign DRG 01 = Invalid diagnosis code 02 = Sex conflict 03 = Not applicable for principal diagnosis 04 = Age conflict 05 = V, W, X, or Y code as principal diagnosis (ICD-10) E-code as principal diagnosis (ICD-9) 06 = Non-specific principal diagnosis (MCE versions 15.0–23.0 only) 07 = Manifestation code as principal diagnosis 08 = Questionable admission 09 = Unacceptable principal diagnosis 10 = Secondary diagnosis required 11 = Principal diagnosis is its own CC 12 = Diagnosis affected both initial and final DRG assignment 13 = MSP alert (MCE versions 15.0–17.0 only) 14 = Principal diagnosis is its own MCC 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 21 = Diagnosis is a CC but not considered due to PDX/SDX exclusion 23 = Diagnosis is a MCC but not considered due to PDX/SDX exclusion 99 =　Principal diagnosis part of HAC assignment criteria

Field name	Position	Length	Occur-rences	Description
Principal diagnosis Hospital Acquired Condition assignment criteria #1	867	2	1	Hospital Acquired Condition (HAC) assignment criteria #1 00 = Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition assignment criteria #2	869	2	1	Hospital Acquired Condition (HAC) assignment criteria #2 00 = Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition assignment criteria #3	871	2	1	Hospital Acquired Condition (HAC) assignment criteria #3 00 = Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition assignment criteria #4	873	2	1	Hospital Acquired Condition (HAC) assignment criteria #4 00= Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition assignment criteria #5	875	2	1	Hospital Acquired Condition (HAC) assignment criteria #5 00 = Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper

Field name	Position	Length	Occur-rences	Description
Principal diagnosis Hospital Acquired Condition usage #1	877	1	1	Hospital Acquired Condition (HAC) usage #1 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition usage #2	878	1	1	Hospital Acquired Condition (HAC) usage #2 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition usage #3	879	1	1	Hospital Acquired Condition (HAC) usage #3 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper

Field name	Position	Length	Occur-rences	Description
Principal diagnosis Hospital Acquired Condition usage #4	880	1	1	Hospital Acquired Condition (HAC) usage #4 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition usage #5	881	1	1	Hospital Acquired Condition (HAC) usage #5 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper

Field name	Position	Length	Occur-rences	Description
Secondary diagnosis return flag	882	8	24	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each diagnosis code. These 2-byte flags are a combination of information concerning every diagnosis from the DRG assignment and the editor. **Note**: A maximum of four flags can be returned per diagnosis code. Always display the edit number before the zeros. Valid values: 00 = Diagnosis not used to assign DRG 01 = Invalid diagnosis code 02 = Sex conflict 03 = Duplicate of principal diagnosis 04 = Age conflict 05-10 = Not applicable for secondary diagnoses 11 = Secondary diagnosis is a CC 12 = Diagnosis affected both initial and final DRG assignment 13 = MSP alert (MCE versions 15.0-17.0 only) 14 = Secondary diagnosis is an MCC 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 21 = Diagnosis is a CC but not considered due to PDX/SDX exclusion 23 = Diagnosis is a MCC but not considered due to PDX/SDX exclusion 99 = Secondary diagnosis is a HAC

Field name	Position	Length	Occur-rences	Description
Secondary diagnosis Hospital Acquired Condition assignment criteria #1 through 5	1074	10	24	Hospital Acquired Condition (HAC) assigned #1-5. These 2-byte flags are a combination of information concerning every diagnosis from the DRG assignment and the editor. **Note**: A maximum of five flags can be returned per diagnosis code. Always display the edit number before the zeros. 00 = Criteria to be assigned as a 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 13 = Surgical site infection (SSI) following cardiac implantable electronic device (CIED) procedures 14 = Iatrogenic Pneumothorax w/ Venous Catheterization Blank = Diagnosis was not considered by grouper

Field name	Position	Length	Occur-rences	Description
Secondary diagnosis Hospital Acquired Condition usage #1 through 5	1314	5	24	Hospital Acquired Condition (HAC) usage #1-5. This 1-byte flag is a combination of information concerning every diagnosis from the DRG assignment and the editor. **Note**: A maximum of five flags can be returned per diagnosis code. Always display the edit number before the zeros. 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper
Procedure edit return flag*	1434	8	25	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each procedure code. These 2-byte flags are a combination of information concerning every procedure from the DRG assignment and the editor. **Note**: A maximum of four flags can be returned per procedure code. Always display the edit number before the zeros. Valid values: 00 = Procedure did not affect DRG assignment 01 = Invalid procedure code 02 = Sex conflict 12* = Procedure affected both initial and final DRG assignment

Field name	Position	Length	Occur-rences	Description
				15* = Procedure affected the final DRG assignment only
				16* = Procedure affected the initial DRG assignment only
				20 = Procedure is an OR procedure
				21 = Non-specific OR procedure (MCE versions 15.0 - 23.0 only)
				22 = Open biopsy check (MCE versions 2.0 - 27.0 only)
				23 = Non-covered procedure
				24 = Bilateral procedure (ICD-9 only)
				30 = Limited coverage (ICD-10 only)
				30 = Lung volume reduction surgery (LVRS) - limited coverage (ICD-9 only)
				31 = Questionable Obstetric Admission (ICD-10 only)
				31 = Lung transplant - limited coverage (ICD-9 only)
				32 = Combo heart/lung transplant - limited coverage (ICD-9 only)
				33 = Heart transplant - limited coverage (ICD-9 only)
				34 = Implantable hrt assist - limited coverage (ICD-9 only)
				35 = Intest/multi-visceral transplant - limited coverage (ICD-9 only)

Field name	Position	Length	Occur-rences	Description
				36 = Liver transplant - limited coverage (ICD-9 only)
				37 = Kidney transplant - limited coverage (ICD-9 only)
				38 = Pancreas transplant - limited coverage (ICD-9 only)
				39 = Artificial Heart Transplant-Limit Coverage (ICD-9 only)
				40 = Procedure inconsistent with LOS
				99 = Procedure part of HAC assignment criteria
				* When there are two or more procedures on the record that could impact either the initial, final or both DRG assignments: ▪ If one of these procedures is in the first procedure position, that procedure will be flagged as 12,15 or 16 as appropriate in the "Procedure edit return" field with the following exceptions: a. If a single procedure designating a complete system is tied with a combination pair that also designated a complete system, the single procedure will be flagged regardless of position. b. If multiple combinations of lead/device pairs are tied then only one pair will be flagged regardless of position. c. If the two procedures tied are an OR and non-OR, the OR will be flagged regardless of position. ▪ If none of the tied procedures is in the first procedure position, then the procedure with the lowest ascii/index value will be flagged.

Field name	Position	Length	Occur-rences	Description
Procedure Hospital Acquired Condition assignment criteria # 1 through 5	1634	10	25	Hospital Acquired Condition (HAC) assignment criteria #1-5. These 2-byte flags are a combination of information concerning every procedure from the DRG assignment and the editor. **Note**: A maximum of five flags can be returned per procedure code. Always display the edit number before the zeros. 00 = Criteria to be assigned as a 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 13 = Surgical site infection (SSI) following cardiac implantable electronic device (CIED) procedures 14 = Iatrogenic Pneumothorax w/ Venous Catheterization Blank = Procedure not considered by grouper
Initial 4-digit DRG	1884	4	1	Initial 4-digit DRG. Right-justified, zero-filled.
Final 4-digit DRG	1888	4	1	Final 4-digit DRG. Right-justified, zero-filled.
Final DRG CC/MCC usage	1892	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	1893	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

Field name	Position	Length	Occur-rences	Description
Number of Unique Hospital Acquired Conditions Met	1894	2	1	The number of Unique Hospital Acquired Conditions that have been met.
Hospital Acquired Condition Status	1897	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	1897	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	1904	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>
```

Batch processing error messages

The following table is 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: msgmce -i -i inputfile -o outputfile [Error: Invalid option or its value: -i is missing or has an invalid option.]

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

Table 22.   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 cannot precede 01/01/1897	Occurs when the admit date precedes 01/01/1897	A valid date is on or after 01/01/1897
Admit date cannot precede Birth date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.

Message	Why it's generated	What happens
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 cannot be after current 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 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.
Birth date cannot precede 01/01/1897	Occurs when the birth date precedes 01/01/1897	A valid date is on or after 01/01/1897
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	Issue with installation.	The message is displayed on the screen and in the log file, and the program ends.
Discharge date cannot precede 01/01/1897	Occurs when the discharge date precedes 01/01/1897	A valid date is on or after 01/01/1897
Discharge date cannot precede 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.
Discharge date cannot precede Birth date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
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.

Message	Why it's generated	What happens
Discharge status is invalid	The discharge status field entry is invalid. For a list of valid discharge status values, see "Input file format" (page [42](#)).	The input record is processed and an error message is written in the log file.
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 entered or calculated age is less than 0 or greater than 124.	The input record is processed and an error message is written in the log file.
Invalid length of stay	The entered or calculated LOS is less than 0 or greater than 45291.	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 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 cannot be more or less than 835 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.

Message	Why it's generated	What happens
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.

Log files

The software generates a log file for every batch run and saves it where the product was installed.

By default, the log file is named msgmce.log, and will be located in the <Product install directory> folder, 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

  Date format = mm/dd/yyyy (e.g., 03/18/2014)

- Patient ID: <value> Acct# :<value> followed by error

  This line is repeated for however many error messages occur for the same patient record.

- Run end time

A sample log file is shown in the following figure.

```
MS Grouper with Medicare Code Editor Software vxx.x

Input file: test.in

Output file: test.out

Upload file: test.up

Start time: 05/29/2014 11:28:34

Patient ID 1          : Age is invalid. Calculated age must be between 0 and 124 years.
Patient ID 2          : Birth date cannot be after Discharge date.
Patient ID 2          : Discharge date cannot precede Birth date.
Patient ID 3          : LOS is invalid. Calculated LOS must be between 0 and 45291 days.
Patient ID 4          : Admit date is invalid.


End time: 05/29/2014 11:28:40
```

The log file can be viewed on your computer screen, saved, 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

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 Microsoft® Windows® environment to enter data and view the output.

Users should have adequate training to use the MSG MCE product. The tab, arrow keys, and enter keys should be utilized to move within the product and when making selections. Prior knowledge of JAWS functionality is required.

Please refer to Chapter 3, "Interactive data processing (page 15)" for details on the functionality and use of the interactive method of claim processing.

System requirements

The following are system requirements for accessibility:

- Windows-based Assistive Technology software

- JAVA® Access Bridge

- PATH environment variable having path to JRE folder

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

Effective with MSG MCE version 31, accessibility users must enable JAVA Access Bridge as follows:

To enable the JAVA Access Bridge

Note: These steps assume you have already downloaded and installed MSG MCE.

1. Press **WINDOWS Key+R** to open the run dialog box.

2. Type "cmd" and press **ENTER**.

3. Type the following command and press **ENTER** (assuming you have installed MSGMCE to the default location):

   ```
   cd C:\Program Files\MSG MCE SOFTWARE I10\jre\bin
   ```

4. Type "jabswitch -enable" and press **ENTER**.

   A message will be displayed on the next line that tells you that the JAVA Access Bridge is enabled.

5. Type "exit" and press **ENTER** to return to the desktop.

6. Quit and restart JAWS. JAVA applications can now be used with JAWS.

Warning: Consult with your IT department if you are unsure as to how to go about making these changes. Altering the system's PATH to an alternative version of Java may affect your other software/programs that rely/relies on Java.

To set up PATH environment

1. Open the Control Panel.

2. Click System and Security, then System.

3. On the left panel, click Advanced system settings.

4. In the pop-up System Properties window, click Environment Variables.
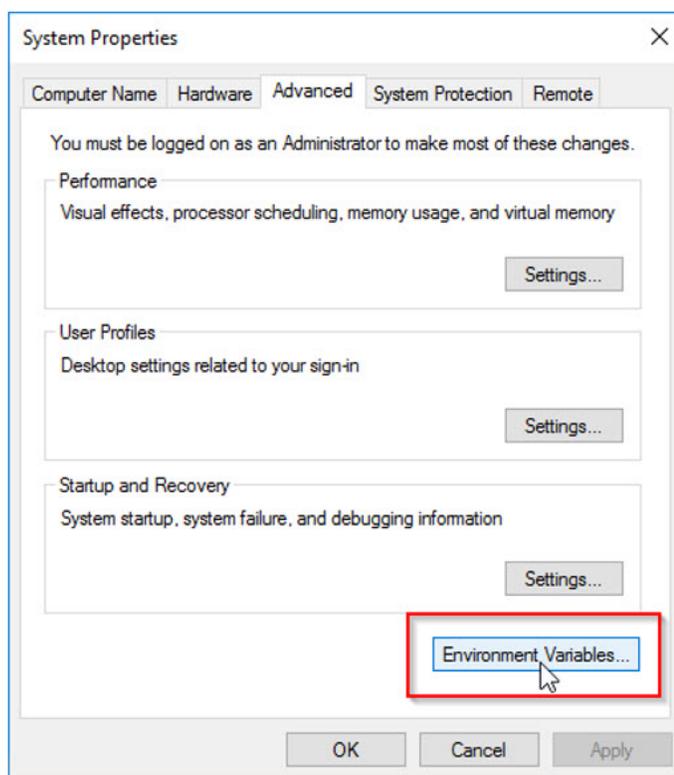
Figure 4: System properties window

5. Under System variables section, click Edit.
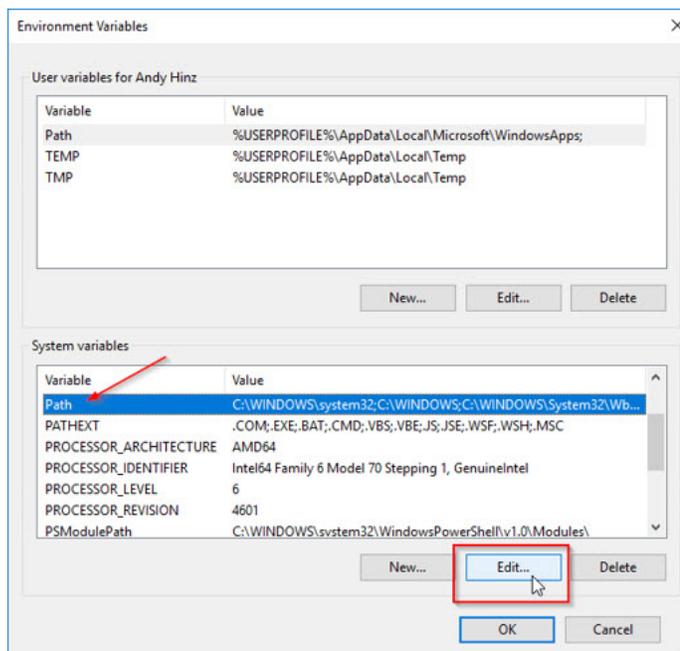
Figure 5: Environment variables window

6. In the pop-up Edit environment variable window, click New.

7. In the text field, paste the absolute path to where your Java JRE folder is located

   or

   Click on the Browse button to navigate to that folder.

Use your locally installed JRE, if you have one. Otherwise, you can use the path to the embedded JRE within the MSGMCE install folder. By default, this should be: C:\Program Files\MSG MCE SOFTWARE I10\jre\bin.
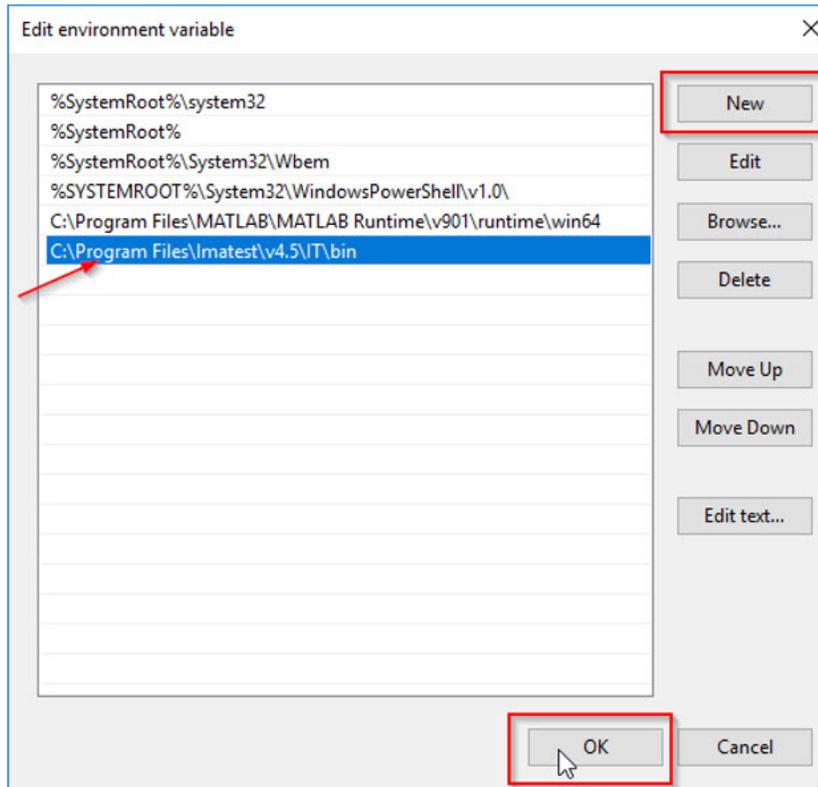
Figure 6: Edit environment variable window

8. Click OK.

   The PATH environment should be set up.

Appendix A: Current MDCs and DRGs

The following table lists the Major Diagnostic Categories (MDCs) for version 39.0 of the Medicare Severity (MS) grouper. The following tables list the Diagnosis Related Groups (DRGs) for version 39.0 of the grouper and their CMS-designated cost weights. The DRG cost weight is shown on the software output report (page).

Table 23.   List of MDCs

| 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 & Connective 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
15	Newborns & Other Neonates with Conditions Originating in Perinatal Period
16	Diseases & Disorders of Blood, Blood Forming Organs, Immunologic Disorders
17	Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasms
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 Health Status & Other Contacts with Health Services
24	Multiple Significant Trauma

MDC	Description
25	Human Immunodeficiency Virus Infections

List of DRGs with cost weights

Table 24.   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 with MCC	28.9111
002,MDC P,Heart transplant or implant of heart assist system without MCC	14.9684
003,MDC P,ECMO or tracheostomy with MV >96 hours or principal diagnosis except face, mouth and neck with major O.R. procedures	19.1006
004,MDC P,Tracheostomy with MV >96 hours or principal diagnosis except face, mouth and neck without major O.R. procedures	11.8787
005,MDC P,Liver transplant with MCC or intestinal transplant	10.2354
006,MDC P,Liver transplant without MCC	4.6989
007,MDC P,Lung transplant	11.5797
008,MDC P,Simultaneous pancreas and kidney transplant	5.4335
010,MDC P,Pancreas transplant	3.6202
011,MDC P,Tracheostomy for face, mouth and neck diagnoses or laryngectomy with MCC	5.0205
012,MDC P,Tracheostomy for face, mouth and neck diagnoses or laryngectomy with CC	3.8322
013,MDC P,Tracheostomy for face, mouth and neck diagnoses or laryngectomy without CC/MCC	2.7247
014,MDC M,Allogeneic bone marrow transplant	10.6726
016,MDC M,Autologous bone marrow transplant with CC/MCC	6.7350
017,MDC M,Autologous bone marrow transplant without CC/MCC	4.8535
018,MDC M,Chimeric antigen receptor (CAR) T-cell and other immunotherapies	37.4436
019,MDC P,Simultaneous pancreas and kidney transplant with hemodialysis	6.6783
020,MDC 01P,Intracranial vascular procedures with principal diagnosis hemorrhage with MCC	10.3287
021,MDC 01P,Intracranial vascular procedures with principal diagnosis hemorrhage with CC	7.5428
022,MDC 01P,Intracranial vascular procedures with principal diagnosis hemorrhage without CC/MCC	4.8411

DRG, MDC, and DRG description	DRG cost weight
023,MDC 01P,Craniotomy with major device implant or acute complex CNS principal diagnosis with MCC or chemotherapy implant or epilepsy with neurostimulator	5.6696
024,MDC 01P,Craniotomy with major device implant or acute complex CNS principal diagnosis without MCC	3.9390
025,MDC 01P,Craniotomy and endovascular intracranial procedures with MCC	4.4961
026,MDC 01P,Craniotomy and endovascular intracranial procedures with CC	3.0612
027,MDC 01P,Craniotomy and endovascular intracranial procedures without CC/MCC	2.5162
028,MDC 01P,Spinal procedures with MCC	5.8230
029,MDC 01P,Spinal procedures with CC or spinal neurostimulators	3.2974
030,MDC 01P,Spinal procedures without CC/MCC	2.3577
031,MDC 01P,Ventricular shunt procedures with MCC	4.3697
032,MDC 01P,Ventricular shunt procedures with CC	2.2172
033,MDC 01P,Ventricular shunt procedures without CC/MCC	1.7225
034,MDC 01P,Carotid artery stent procedures with MCC	3.9798
035,MDC 01P,Carotid artery stent procedures with CC	2.3408
036,MDC 01P,Carotid artery stent procedures without CC/MCC	1.8538
037,MDC 01P,Extracranial procedures with MCC	3.2763
038,MDC 01P,Extracranial procedures with CC	1.6584
039,MDC 01P,Extracranial procedures without CC/MCC	1.1392
040,MDC 01P,Peripheral, cranial nerve and other nervous system procedures with MCC	3.8667
041,MDC 01P,Peripheral, cranial nerve and other nervous system procedures with CC or peripheral neurostimulator	2.3480
042,MDC 01P,Peripheral, cranial nerve and other nervous system procedures without CC/MCC	1.8888
052,MDC 01M,Spinal disorders and injuries with CC/MCC	1.8519
053,MDC 01M,Spinal disorders and injuries without CC/MCC	1.1367
054,MDC 01M,Nervous system neoplasms with MCC	1.3674
055,MDC 01M,Nervous system neoplasms without MCC	1.0441
056,MDC 01M,Degenerative nervous system disorders with MCC	2.1943
057,MDC 01M,Degenerative nervous system disorders without MCC	1.2668
058,MDC 01M,Multiple sclerosis and cerebellar ataxia with MCC	1.7376

DRG, MDC, and DRG description	DRG cost weight
059,MDC 01M,Multiple sclerosis and cerebellar ataxia with CC	1.1268
060,MDC 01M,Multiple sclerosis and cerebellar ataxia without CC/MCC	0.9175
061,MDC 01M,Ischemic stroke, precerebral occlusion or transient ischemia with thrombolytic agent with MCC	2.8909
062,MDC 01M,Ischemic stroke, precerebral occlusion or transient ischemia with thrombolytic agent with CC	1.9883
063,MDC 01M,Ischemic stroke, precerebral occlusion or transient ischemia with thrombolytic agent without CC/MCC	1.7104
064,MDC 01M,Intracranial hemorrhage or cerebral infarction with MCC	1.9180
065,MDC 01M,Intracranial hemorrhage or cerebral infarction with CC or tPA in 24 hours	1.0197
066,MDC 01M,Intracranial hemorrhage or cerebral infarction without CC/MCC	0.7114
067,MDC 01M,Nonspecific CVA and precerebral occlusion without infarction with MCC	1.4261
068,MDC 01M,Nonspecific CVA and precerebral occlusion without infarction without MCC	0.8888
069,MDC 01M,Transient ischemia without thrombolytic	0.7869
070,MDC 01M,Nonspecific cerebrovascular disorders with MCC	1.6792
071,MDC 01M,Nonspecific cerebrovascular disorders with CC	1.0116
072,MDC 01M,Nonspecific cerebrovascular disorders without CC/MCC	0.7715
073,MDC 01M,Cranial and peripheral nerve disorders with MCC	1.4522
074,MDC 01M,Cranial and peripheral nerve disorders without MCC	1.0193
075,MDC 01M,Viral meningitis with CC/MCC	1.6277
076,MDC 01M,Viral meningitis without CC/MCC	0.9860
077,MDC 01M,Hypertensive encephalopathy with MCC	1.5328
078,MDC 01M,Hypertensive encephalopathy with CC	0.9498
079,MDC 01M,Hypertensive encephalopathy without CC/MCC	0.7281
080,MDC 01M,Nontraumatic stupor and coma with MCC	2.0944
081,MDC 01M,Nontraumatic stupor and coma without MCC	0.7721
082,MDC 01M,Traumatic stupor and coma >1 hour with MCC	2.2618
083,MDC 01M,Traumatic stupor and coma >1 hour with CC	1.3426
084,MDC 01M,Traumatic stupor and coma >1 hour without CC/MCC	0.9049
085,MDC 01M,Traumatic stupor and coma <1 hour with MCC	2.3103

DRG, MDC, and DRG description	DRG cost weight
086,MDC 01M,Traumatic stupor and coma <1 hour with CC	1.2733
087,MDC 01M,Traumatic stupor and coma <1 hour without CC/MCC	0.8625
088,MDC 01M,Concussion with MCC	1.4542
089,MDC 01M,Concussion with CC	1.0626
090,MDC 01M,Concussion without CC/MCC	0.8531
091,MDC 01M,Other disorders of nervous system with MCC	1.6506
092,MDC 01M,Other disorders of nervous system with CC	0.9884
093,MDC 01M,Other disorders of nervous system without CC/MCC	0.7827
094,MDC 01M,Bacterial and tuberculous infections of nervous system with MCC	3.6369
095,MDC 01M,Bacterial and tuberculous infections of nervous system with CC	2.5086
096,MDC 01M,Bacterial and tuberculous infections of nervous system without CC/MCC	2.3333
097,MDC 01M,Non-bacterial infection of nervous system except viral meningitis with MCC	3.7424
098,MDC 01M,Non-bacterial infection of nervous system except viral meningitis with CC	2.1144
099,MDC 01M,Non-bacterial infection of nervous system except viral meningitis without CC/MCC	1.4026
100,MDC 01M,Seizures with MCC	1.8764
101,MDC 01M,Seizures without MCC	0.8885
102,MDC 01M,Headaches with MCC	1.1525
103,MDC 01M,Headaches without MCC	0.8291
113,MDC 02P,Orbital procedures with CC/MCC	2.1943
114,MDC 02P,Orbital procedures without CC/MCC	1.4468
115,MDC 02P,Extraocular procedures except orbit	1.4564
116,MDC 02P,Intraocular procedures with CC/MCC	1.8831
117,MDC 02P,Intraocular procedures without CC/MCC	1.0409
121,MDC 02M,Acute major eye infections with CC/MCC	1.1903
122,MDC 02M,Acute major eye infections without CC/MCC	0.6454
123,MDC 02M,Neurological eye disorders	0.7663
124,MDC 02M,Other disorders of the eye with MCC	1.4012
125,MDC 02M,Other disorders of the eye without MCC	0.8369

DRG, MDC, and DRG description	DRG cost weight
135,MDC 03P,Sinus and mastoid procedures with CC/MCC	2.1424
136,MDC 03P,Sinus and mastoid procedures without CC/MCC	1.2560
137,MDC 03P,Mouth procedures with CC/MCC	1.5094
138,MDC 03P,Mouth procedures without CC/MCC	0.8568
139,MDC 03P,Salivary gland procedures	1.2348
140,MDC 03P,Major head and neck procedures with MCC	3.9755
141,MDC 03P,Major head and neck procedures with CC	2.2059
142,MDC 03P,Major head and neck procedures without CC/MCC	1.6058
143,MDC 03P,Other ear, nose, mouth and throat O.R. procedures with MCC	2.9800
144,MDC 03P,Other ear, nose, mouth and throat O.R. procedures with CC	1.7616
145,MDC 03P,Other ear, nose, mouth and throat O.R. procedures without CC/MCC	1.2248
146,MDC 03M,Ear, nose, mouth and throat malignancy with MCC	2.0403
147,MDC 03M,Ear, nose, mouth and throat malignancy with CC	1.3011
148,MDC 03M,Ear, nose, mouth and throat malignancy without CC/MCC	0.7876
149,MDC 03M,Dysequilibrium	0.7367
150,MDC 03M,Epistaxis with MCC	1.3270
151,MDC 03M,Epistaxis without MCC	0.7382
152,MDC 03M,Otitis media and URI with MCC	1.0804
153,MDC 03M,Otitis media and URI without MCC	0.7132
154,MDC 03M,Other ear, nose, mouth and throat diagnoses with MCC	1.5460
155,MDC 03M,Other ear, nose, mouth and throat diagnoses with CC	0.9093
156,MDC 03M,Other ear, nose, mouth and throat diagnoses without CC/MCC	0.6584
157,MDC 03M,Dental and oral diseases with MCC	1.5747
158,MDC 03M,Dental and oral diseases with CC	0.9001
159,MDC 03M,Dental and oral diseases without CC/MCC	0.6634
163,MDC 04P,Major chest procedures with MCC	5.0064
164,MDC 04P,Major chest procedures with CC	2.6558
165,MDC 04P,Major chest procedures without CC/MCC	1.9174
166,MDC 04P,Other respiratory system O.R. procedures with MCC	3.7236
167,MDC 04P,Other respiratory system O.R. procedures with CC	1.8191
168,MDC 04P,Other respiratory system O.R. procedures without CC/MCC	1.3550

DRG, MDC, and DRG description	DRG cost weight
175,MDC 04M,Pulmonary embolism with MCC or acute cor pulmonale	1.5457
176,MDC 04M,Pulmonary embolism without MCC	0.8873
177,MDC 04M,Respiratory infections and inflammations with MCC	1.8487
178,MDC 04M,Respiratory infections and inflammations with CC	1.2075
179,MDC 04M,Respiratory infections and inflammations without CC/MCC	0.8729
180,MDC 04M,Respiratory neoplasms with MCC	1.7395
181,MDC 04M,Respiratory neoplasms with CC	1.1201
182,MDC 04M,Respiratory neoplasms without CC/MCC	0.7923
183,MDC 04M,Major chest trauma with MCC	1.5575
184,MDC 04M,Major chest trauma with CC	1.0398
185,MDC 04M,Major chest trauma without CC/MCC	0.7740
186,MDC 04M,Pleural effusion with MCC	1.5441
187,MDC 04M,Pleural effusion with CC	1.0328
188,MDC 04M,Pleural effusion without CC/MCC	0.7297
189,MDC 04M,Pulmonary edema and respiratory failure	1.2258
190,MDC 04M,Chronic obstructive pulmonary disease with MCC	1.1249
191,MDC 04M,Chronic obstructive pulmonary disease with CC	0.8842
192,MDC 04M,Chronic obstructive pulmonary disease without CC/MCC	0.6956
193,MDC 04M,Simple pneumonia and pleurisy with MCC	1.3117
194,MDC 04M,Simple pneumonia and pleurisy with CC	0.8638
195,MDC 04M,Simple pneumonia and pleurisy without CC/MCC	0.6657
196,MDC 04M,Interstitial lung disease with MCC	1.7376
197,MDC 04M,Interstitial lung disease with CC	1.0066
198,MDC 04M,Interstitial lung disease without CC/MCC	0.7434
199,MDC 04M,Pneumothorax with MCC	1.7889
200,MDC 04M,Pneumothorax with CC	1.0759
201,MDC 04M,Pneumothorax without CC/MCC	0.7094
202,MDC 04M,Bronchitis and asthma with CC/MCC	0.9669
203,MDC 04M,Bronchitis and asthma without CC/MCC	0.7069
204,MDC 04M,Respiratory signs and symptoms	0.7937
205,MDC 04M,Other respiratory system diagnoses with MCC	1.6838

DRG, MDC, and DRG description	DRG cost weight
206,MDC 04M,Other respiratory system diagnoses without MCC	0.8857
207,MDC 04M,Respiratory system diagnosis with ventilator support >96 hours	5.7329
208,MDC 04M,Respiratory system diagnosis with ventilator support <=96 hours	2.5444
215,MDC 05P,Other heart assist system implant	10.5614
216,MDC 05P,Cardiac valve and other major cardiothoracic procedures with cardiac catheterization with MCC	10.0426
217,MDC 05P,Cardiac valve and other major cardiothoracic procedures with cardiac catheterization with CC	6.4853
218,MDC 05P,Cardiac valve and other major cardiothoracic procedures with cardiac catheterization without CC/MCC	6.1165
219,MDC 05P,Cardiac valve and other major cardiothoracic procedures without cardiac catheterization with MCC	8.0591
220,MDC 05P,Cardiac valve and other major cardiothoracic procedures without cardiac catheterization with CC	5.4068
221,MDC 05P,Cardiac valve and other major cardiothoracic procedures without cardiac catheterization without CC/MCC	4.5823
222,MDC 05P,Cardiac defibrillator implant with cardiac catheterization with AMI, HF or shock with MCC	7.9546
223,MDC 05P,Cardiac defibrillator implant with cardiac catheterization with AMI, HF or shock without MCC	5.8025
224,MDC 05P,Cardiac defibrillator implant with cardiac catheterization without AMI, HF or shock with MCC	7.5198
225,MDC 05P,Cardiac defibrillator implant with cardiac catheterization without AMI, HF or shock without MCC	5.6203
226,MDC 05P,Cardiac defibrillator implant without cardiac catheterization with MCC	6.5664
227,MDC 05P,Cardiac defibrillator implant without cardiac catheterization without MCC	5.2140
228,MDC 05P,Other cardiothoracic procedures with MCC	5.3326
229,MDC 05P,Other cardiothoracic procedures without MCC	3.4422
231,MDC 05P,Coronary bypass with PTCA with MCC	8.7192
232,MDC 05P,Coronary bypass with PTCA without MCC	5.9538
233,MDC 05P,Coronary bypass with cardiac catheterization with MCC	7.9389
234,MDC 05P,Coronary bypass with cardiac catheterization without MCC	5.3596
235,MDC 05P,Coronary bypass without cardiac catheterization with MCC	6.1743

DRG, MDC, and DRG description	DRG cost weight
236,MDC 05P,Coronary bypass without cardiac catheterization without MCC	4.1286
239,MDC 05P,Amputation for circulatory system disorders except upper limb and toe with MCC	4.8155
240,MDC 05P,Amputation for circulatory system disorders except upper limb and toe with CC	2.7890
241,MDC 05P,Amputation for circulatory system disorders except upper limb and toe without CC/MCC	1.5919
242,MDC 05P,Permanent cardiac pacemaker implant with MCC	3.7273
243,MDC 05P,Permanent cardiac pacemaker implant with CC	2.5189
244,MDC 05P,Permanent cardiac pacemaker implant without CC/MCC	2.0639
245,MDC 05P,AICD generator procedures	5.4202
246,MDC 05P,Percutaneous cardiovascular procedures with drug-eluting stent with MCC or 4+ arteries or stents	3.1250
247,MDC 05P,Percutaneous cardiovascular procedures with drug-eluting stent without MCC	1.9858
248,MDC 05P,Percutaneous cardiovascular procedures with non-drug-eluting stent with MCC or 4+ arteries or stents	3.1698
249,MDC 05P,Percutaneous cardiovascular procedures with non-drug-eluting stent without MCC	1.8813
250,MDC 05P,Percutaneous cardiovascular procedures without coronary artery stent with MCC	2.5228
251,MDC 05P,Percutaneous cardiovascular procedures without coronary artery stent without MCC	1.6588
252,MDC 05P,Other vascular procedures with MCC	3.3249
253,MDC 05P,Other vascular procedures with CC	2.6540
254,MDC 05P,Other vascular procedures without CC/MCC	1.8163
255,MDC 05P,Upper limb and toe amputation for circulatory system disorders with MCC	2.5351
256,MDC 05P,Upper limb and toe amputation for circulatory system disorders with CC	1.6440
257,MDC 05P,Upper limb and toe amputation for circulatory system disorders without CC/MCC	1.1625
258,MDC 05P,Cardiac pacemaker device replacement with MCC	3.1685
259,MDC 05P,Cardiac pacemaker device replacement without MCC	2.0895
260,MDC 05P,Cardiac pacemaker revision except device replacement with MCC	3.5669

DRG, MDC, and DRG description	DRG cost weight
261,MDC 05P,Cardiac pacemaker revision except device replacement with CC	1.9939
262,MDC 05P,Cardiac pacemaker revision except device replacement without CC/MCC	1.7070
263,MDC 05P,Vein ligation and stripping	2.3135
264,MDC 05P,Other circulatory system O.R. procedures	3.2526
265,MDC 05P,AICD lead procedures	3.3650
266,MDC 05P,Endovascular cardiac valve replacement and supplement procedures with MCC	7.0489
267,MDC 05P,Endovascular cardiac valve replacement and supplement procedures without MCC	5.6003
268,MDC 05P,Aortic and heart assist procedures except pulsation balloon with MCC	6.9654
269,MDC 05P,Aortic and heart assist procedures except pulsation balloon without MCC	4.3177
270,MDC 05P,Other major cardiovascular procedures with MCC	5.1876
271,MDC 05P,Other major cardiovascular procedures with CC	3.5664
272,MDC 05P,Other major cardiovascular procedures without CC/MCC	2.6898
273,MDC 05P,Percutaneous and other intracardiac procedures with MCC	3.8270
274,MDC 05P,Percutaneous and other intracardiac procedures without MCC	3.2887
280,MDC 05M,Acute myocardial infarction, discharged alive with MCC	1.6063
281,MDC 05M,Acute myocardial infarction, discharged alive with CC	0.9303
282,MDC 05M,Acute myocardial infarction, discharged alive without CC/MCC	0.7262
283,MDC 05M,Acute myocardial infarction, expired with MCC	1.8650
284,MDC 05M,Acute myocardial infarction, expired with CC	0.7227
285,MDC 05M,Acute myocardial infarction, expired without CC/MCC	0.4945
286,MDC 05M,Circulatory disorders except AMI, with cardiac catheterization with MCC	2.1357
287,MDC 05M,Circulatory disorders except AMI, with cardiac catheterization without MCC	1.1151
288,MDC 05M,Acute and subacute endocarditis with MCC	2.6848
289,MDC 05M,Acute and subacute endocarditis with CC	1.6435
290,MDC 05M,Acute and subacute endocarditis without CC/MCC	1.0258
291,MDC 05M,Heart failure and shock with MCC	1.2678
292,MDC 05M,Heart failure and shock with CC	0.8632

DRG, MDC, and DRG description	DRG cost weight
293,MDC 05M,Heart failure and shock without CC/MCC	0.5900
294,MDC 05M,Deep vein thrombophlebitis with CC/MCC	1.2834
295,MDC 05M,Deep vein thrombophlebitis without CC/MCC	0.9837
296,MDC 05M,Cardiac arrest, unexplained with MCC	1.5958
297,MDC 05M,Cardiac arrest, unexplained with CC	0.7066
298,MDC 05M,Cardiac arrest, unexplained without CC/MCC	0.4889
299,MDC 05M,Peripheral vascular disorders with MCC	1.5318
300,MDC 05M,Peripheral vascular disorders with CC	1.0433
301,MDC 05M,Peripheral vascular disorders without CC/MCC	0.7422
302,MDC 05M,Atherosclerosis with MCC	1.0944
303,MDC 05M,Atherosclerosis without MCC	0.6775
304,MDC 05M,Hypertension with MCC	1.0969
305,MDC 05M,Hypertension without MCC	0.7398
306,MDC 05M,Cardiac congenital and valvular disorders with MCC	1.5066
307,MDC 05M,Cardiac congenital and valvular disorders without MCC	0.8700
308,MDC 05M,Cardiac arrhythmia and conduction disorders with MCC	1.2006
309,MDC 05M,Cardiac arrhythmia and conduction disorders with CC	0.7502
310,MDC 05M,Cardiac arrhythmia and conduction disorders without CC/MCC	0.5590
311,MDC 05M,Angina pectoris	0.6987
312,MDC 05M,Syncope and collapse	0.8385
313,MDC 05M,Chest pain	0.7214
314,MDC 05M,Other circulatory system diagnoses with MCC	2.0844
315,MDC 05M,Other circulatory system diagnoses with CC	0.9730
316,MDC 05M,Other circulatory system diagnoses without CC/MCC	0.7232
319,MDC 05P,Other endovascular cardiac valve procedures with MCC	4.3169
320,MDC 05P,Other endovascular cardiac valve procedures without MCC	2.4053
326,MDC 06P,Stomach, esophageal and duodenal procedures with MCC	5.3162
327,MDC 06P,Stomach, esophageal and duodenal procedures with CC	2.5649
328,MDC 06P,Stomach, esophageal and duodenal procedures without CC/MCC	1.6672
329,MDC 06P,Major small and large bowel procedures with MCC	4.8863
330,MDC 06P,Major small and large bowel procedures with CC	2.5497

DRG, MDC, and DRG description	DRG cost weight
331,MDC 06P,Major small and large bowel procedures without CC/MCC	1.7113
332,MDC 06P,Rectal resection with MCC	4.1641
333,MDC 06P,Rectal resection with CC	2.1422
334,MDC 06P,Rectal resection without CC/MCC	1.6093
335,MDC 06P,Peritoneal adhesiolysis with MCC	3.9116
336,MDC 06P,Peritoneal adhesiolysis with CC	2.2915
337,MDC 06P,Peritoneal adhesiolysis without CC/MCC	1.6373
338,MDC 06P,Appendectomy with complicated principal diagnosis with MCC	2.7976
339,MDC 06P,Appendectomy with complicated principal diagnosis with CC	1.6974
340,MDC 06P,Appendectomy with complicated principal diagnosis without CC/MCC	1.2288
341,MDC 06P,Appendectomy without complicated principal diagnosis with MCC	2.3232
342,MDC 06P,Appendectomy without complicated principal diagnosis with CC	1.4333
343,MDC 06P,Appendectomy without complicated principal diagnosis without CC/MCC	1.1096
344,MDC 06P,Minor small and large bowel procedures with MCC	2.8184
345,MDC 06P,Minor small and large bowel procedures with CC	1.5789
346,MDC 06P,Minor small and large bowel procedures without CC/MCC	1.2760
347,MDC 06P,Anal and stomal procedures with MCC	2.4646
348,MDC 06P,Anal and stomal procedures with CC	1.3484
349,MDC 06P,Anal and stomal procedures without CC/MCC	0.9797
350,MDC 06P,Inguinal and femoral hernia procedures with MCC	2.4541
351,MDC 06P,Inguinal and femoral hernia procedures with CC	1.4929
352,MDC 06P,Inguinal and femoral hernia procedures without CC/MCC	1.1045
353,MDC 06P,Hernia procedures except inguinal and femoral with MCC	3.0243
354,MDC 06P,Hernia procedures except inguinal and femoral with CC	1.7848
355,MDC 06P,Hernia procedures except inguinal and femoral without CC/MCC	1.3606
356,MDC 06P,Other digestive system O.R. procedures with MCC	4.3087
357,MDC 06P,Other digestive system O.R. procedures with CC	2.2691
358,MDC 06P,Other digestive system O.R. procedures without CC/MCC	1.3498
368,MDC 06M,Major esophageal disorders with MCC	1.9505
369,MDC 06M,Major esophageal disorders with CC	1.0780

DRG, MDC, and DRG description	DRG cost weight
370,MDC 06M,Major esophageal disorders without CC/MCC	0.7484
371,MDC 06M,Major gastrointestinal disorders and peritoneal infections with MCC	1.7297
372,MDC 06M,Major gastrointestinal disorders and peritoneal infections with CC	1.0290
373,MDC 06M,Major gastrointestinal disorders and peritoneal infections without CC/MCC	0.7446
374,MDC 06M,Digestive malignancy with MCC	2.0736
375,MDC 06M,Digestive malignancy with CC	1.2078
376,MDC 06M,Digestive malignancy without CC/MCC	0.8993
377,MDC 06M,Gastrointestinal hemorrhage with MCC	1.8017
378,MDC 06M,Gastrointestinal hemorrhage with CC	0.9942
379,MDC 06M,Gastrointestinal hemorrhage without CC/MCC	0.6377
380,MDC 06M,Complicated peptic ulcer with MCC	1.8866
381,MDC 06M,Complicated peptic ulcer with CC	1.0596
382,MDC 06M,Complicated peptic ulcer without CC/MCC	0.7689
383,MDC 06M,Uncomplicated peptic ulcer with MCC	1.3130
384,MDC 06M,Uncomplicated peptic ulcer without MCC	0.8932
385,MDC 06M,Inflammatory bowel disease with MCC	1.6222
386,MDC 06M,Inflammatory bowel disease with CC	0.9949
387,MDC 06M,Inflammatory bowel disease without CC/MCC	0.7148
388,MDC 06M,Gastrointestinal obstruction with MCC	1.5141
389,MDC 06M,Gastrointestinal obstruction with CC	0.8230
390,MDC 06M,Gastrointestinal obstruction without CC/MCC	0.5829
391,MDC 06M,Esophagitis, gastroenteritis and miscellaneous digestive disorders with MCC	1.2489
392,MDC 06M,Esophagitis, gastroenteritis and miscellaneous digestive disorders without MCC	0.7658
393,MDC 06M,Other digestive system diagnoses with MCC	1.6609
394,MDC 06M,Other digestive system diagnoses with CC	0.9408
395,MDC 06M,Other digestive system diagnoses without CC/MCC	0.6515
405,MDC 07P,Pancreas, liver and shunt procedures with MCC	5.7383
406,MDC 07P,Pancreas, liver and shunt procedures with CC	2.8811
407,MDC 07P,Pancreas, liver and shunt procedures without CC/MCC	2.1180

DRG, MDC, and DRG description	DRG cost weight
408,MDC 07P,Biliary tract procedures except only cholecystectomy with or without C.D.E. with MCC	3.7516
409,MDC 07P,Biliary tract procedures except only cholecystectomy with or without C.D.E. with CC	2.1165
410,MDC 07P,Biliary tract procedures except only cholecystectomy with or without C.D.E. without CC/MCC	1.5699
411,MDC 07P,Cholecystectomy with C.D.E. with MCC	3.7545
412,MDC 07P,Cholecystectomy with C.D.E. with CC	2.2777
413,MDC 07P,Cholecystectomy with C.D.E. without CC/MCC	1.7337
414,MDC 07P,Cholecystectomy except by laparoscope without C.D.E. with MCC	3.6272
415,MDC 07P,Cholecystectomy except by laparoscope without C.D.E. with CC	2.0320
416,MDC 07P,Cholecystectomy except by laparoscope without C.D.E. without CC/MCC	1.4226
417,MDC 07P,Laparoscopic cholecystectomy without C.D.E. with MCC	2.4253
418,MDC 07P,Laparoscopic cholecystectomy without C.D.E. with CC	1.6894
419,MDC 07P,Laparoscopic cholecystectomy without C.D.E. without CC/MCC	1.3162
420,MDC 07P,Hepatobiliary diagnostic procedures with MCC	3.5155
421,MDC 07P,Hepatobiliary diagnostic procedures with CC	1.9077
422,MDC 07P,Hepatobiliary diagnostic procedures without CC/MCC	1.4544
423,MDC 07P,Other hepatobiliary or pancreas O.R. procedures with MCC	4.1852
424,MDC 07P,Other hepatobiliary or pancreas O.R. procedures with CC	2.2847
425,MDC 07P,Other hepatobiliary or pancreas O.R. procedures without CC/MCC	1.5437
432,MDC 07M,Cirrhosis and alcoholic hepatitis with MCC	1.8809
433,MDC 07M,Cirrhosis and alcoholic hepatitis with CC	1.0300
434,MDC 07M,Cirrhosis and alcoholic hepatitis without CC/MCC	0.6207
435,MDC 07M,Malignancy of hepatobiliary system or pancreas with MCC	1.7539
436,MDC 07M,Malignancy of hepatobiliary system or pancreas with CC	1.1217
437,MDC 07M,Malignancy of hepatobiliary system or pancreas without CC/MCC	0.8962
438,MDC 07M,Disorders of pancreas except malignancy with MCC	1.5980
439,MDC 07M,Disorders of pancreas except malignancy with CC	0.8453
440,MDC 07M,Disorders of pancreas except malignancy without CC/MCC	0.6064

DRG, MDC, and DRG description	DRG cost weight
441,MDC 07M,Disorders of liver except malignancy, cirrhosis or alcoholic hepatitis with MCC	1.8796
442,MDC 07M,Disorders of liver except malignancy, cirrhosis or alcoholic hepatitis with CC	0.9298
443,MDC 07M,Disorders of liver except malignancy, cirrhosis or alcoholic hepatitis without CC/MCC	0.6634
444,MDC 07M,Disorders of the biliary tract with MCC	1.6717
445,MDC 07M,Disorders of the biliary tract with CC	1.0780
446,MDC 07M,Disorders of the biliary tract without CC/MCC	0.8169
453,MDC 08P,Combined anterior and posterior spinal fusion with MCC	9.1907
454,MDC 08P,Combined anterior and posterior spinal fusion with CC	6.0950
455,MDC 08P,Combined anterior and posterior spinal fusion without CC/MCC	4.7846
456,MDC 08P,Spinal fusion except cervical with spinal curvature, malignancy, infection or extensive fusions with MCC	8.5997
457,MDC 08P,Spinal fusion except cervical with spinal curvature, malignancy, infection or extensive fusions with CC	6.4975
458,MDC 08P,Spinal fusion except cervical with spinal curvature, malignancy, infection or extensive fusions without CC/MCC	5.0085
459,MDC 08P,Spinal fusion except cervical with MCC	6.7344
460,MDC 08P,Spinal fusion except cervical without MCC	3.9324
461,MDC 08P,Bilateral or multiple major joint procedures of lower extremity with MCC	6.0810
462,MDC 08P,Bilateral or multiple major joint procedures of lower extremity without MCC	3.1459
463,MDC 08P,Wound debridement and skin graft except hand for musculoskeletal and connective tissue disorders with MCC	5.3715
464,MDC 08P,Wound debridement and skin graft except hand for musculoskeletal and connective tissue disorders with CC	2.9757
465,MDC 08P,Wound debridement and skin graft except hand for musculoskeletal and connective tissue disorders without CC/MCC	1.8443
466,MDC 08P,Revision of hip or knee replacement with MCC	5.3468
467,MDC 08P,Revision of hip or knee replacement with CC	3.5790
468,MDC 08P,Revision of hip or knee replacement without CC/MCC	2.8042
469,MDC 08P,Major hip and knee joint replacement or reattachment of lower extremity with MCC or total ankle replacement	3.0866

DRG, MDC, and DRG description	DRG cost weight
470,MDC 08P,Major hip and knee joint replacement or reattachment of lower extremity without MCC	1.9015
471,MDC 08P,Cervical spinal fusion with MCC	5.0199
472,MDC 08P,Cervical spinal fusion with CC	3.0543
473,MDC 08P,Cervical spinal fusion without CC/MCC	2.5400
474,MDC 08P,Amputation for musculoskeletal system and connective tissue disorders with MCC	4.0765
475,MDC 08P,Amputation for musculoskeletal system and connective tissue disorders with CC	2.1964
476,MDC 08P,Amputation for musculoskeletal system and connective tissue disorders without CC/MCC	1.1606
477,MDC 08P,Biopsies of musculoskeletal system and connective tissue with MCC	3.3589
478,MDC 08P,Biopsies of musculoskeletal system and connective tissue with CC	2.3585
479,MDC 08P,Biopsies of musculoskeletal system and connective tissue without CC/MCC	1.8097
480,MDC 08P,Hip and femur procedures except major joint with MCC	3.0261
481,MDC 08P,Hip and femur procedures except major joint with CC	2.0965
482,MDC 08P,Hip and femur procedures except major joint without CC/MCC	1.6461
483,MDC 08P,Major joint or limb reattachment procedures of upper extremities	2.3869
485,MDC 08P,Knee procedures with principal diagnosis of infection with MCC	3.4089
486,MDC 08P,Knee procedures with principal diagnosis of infection with CC	2.1496
487,MDC 08P,Knee procedures with principal diagnosis of infection without CC/MCC	1.6413
488,MDC 08P,Knee procedures without principal diagnosis of infection with CC/MCC	1.9762
489,MDC 08P,Knee procedures without principal diagnosis of infection without CC/MCC	1.2986
492,MDC 08P,Lower extremity and humerus procedures except hip, foot and femur with MCC	3.4705
493,MDC 08P,Lower extremity and humerus procedures except hip, foot and femur with CC	2.3263
494,MDC 08P,Lower extremity and humerus procedures except hip, foot and femur without CC/MCC	1.8526
495,MDC 08P,Local excision and removal of internal fixation devices except hip and femur with MCC	3.6421

DRG, MDC, and DRG description	DRG cost weight
496,MDC 08P,Local excision and removal of internal fixation devices except hip and femur with CC	1.9860
497,MDC 08P,Local excision and removal of internal fixation devices except hip and femur without CC/MCC	1.4522
498,MDC 08P,Local excision and removal of internal fixation devices of hip and femur with CC/MCC	2.5854
499,MDC 08P,Local excision and removal of internal fixation devices of hip and femur without CC/MCC	1.2002
500,MDC 08P,Soft tissue procedures with MCC	3.1894
501,MDC 08P,Soft tissue procedures with CC	1.7541
502,MDC 08P,Soft tissue procedures without CC/MCC	1.3330
503,MDC 08P,Foot procedures with MCC	2.6392
504,MDC 08P,Foot procedures with CC	1.7749
505,MDC 08P,Foot procedures without CC/MCC	1.7749
506,MDC 08P,Major thumb or joint procedures	1.4838
507,MDC 08P,Major shoulder or elbow joint procedures with CC/MCC	2.0601
508,MDC 08P,Major shoulder or elbow joint procedures without CC/MCC	1.4101
509,MDC 08P,Arthroscopy	1.6893
510,MDC 08P,Shoulder, elbow or forearm procedures, except major joint procedures with MCC	2.7445
511,MDC 08P,Shoulder, elbow or forearm procedures, except major joint procedures with CC	1.9672
512,MDC 08P,Shoulder, elbow or forearm procedures, except major joint procedures without CC/MCC	1.5550
513,MDC 08P,Hand or wrist procedures, except major thumb or joint procedures with CC/MCC	1.5722
514,MDC 08P,Hand or wrist procedures, except major thumb or joint procedures without CC/MCC	0.9991
515,MDC 08P,Other musculoskeletal system and connective tissue O.R. procedures with MCC	3.1401
516,MDC 08P,Other musculoskeletal system and connective tissue O.R. procedures with CC	1.9625
517,MDC 08P,Other musculoskeletal system and connective tissue O.R. procedures without CC/MCC	1.3980

DRG, MDC, and DRG description	DRG cost weight
518,MDC 08P,Back and neck procedures except spinal fusion with MCC or disc device or neurostimulator	3.5870
519,MDC 08P,Back and neck procedures except spinal fusion with CC	1.9597
520,MDC 08P,Back and neck procedures except spinal fusion without CC/MCC	1.4186
521,MDC 08P,Hip replacement with principal diagnosis of hip fracture with MCC	3.0663
522,MDC 08P,Hip replacement with principal diagnosis of hip fracture without MCC	2.1903
533,MDC 08M,Fractures of femur with MCC	1.4157
534,MDC 08M,Fractures of femur without MCC	0.7891
535,MDC 08M,Fractures of hip and pelvis with MCC	1.2322
536,MDC 08M,Fractures of hip and pelvis without MCC	0.7713
537,MDC 08M,Sprains, strains, and dislocations of hip, pelvis and thigh with CC/MCC	0.9342
538,MDC 08M,Sprains, strains, and dislocations of hip, pelvis and thigh without CC/MCC	0.7228
539,MDC 08M,Osteomyelitis with MCC	1.9471
540,MDC 08M,Osteomyelitis with CC	1.3009
541,MDC 08M,Osteomyelitis without CC/MCC	0.8432
542,MDC 08M,Pathological fractures and musculoskeletal and connective tissue malignancy with MCC	1.8083
543,MDC 08M,Pathological fractures and musculoskeletal and connective tissue malignancy with CC	1.0443
544,MDC 08M,Pathological fractures and musculoskeletal and connective tissue malignancy without CC/MCC	0.7772
545,MDC 08M,Connective tissue disorders with MCC	2.5036
546,MDC 08M,Connective tissue disorders with CC	1.2080
547,MDC 08M,Connective tissue disorders without CC/MCC	0.8339
548,MDC 08M,Septic arthritis with MCC	2.0501
549,MDC 08M,Septic arthritis with CC	1.2501
550,MDC 08M,Septic arthritis without CC/MCC	0.8788
551,MDC 08M,Medical back problems with MCC	1.6264
552,MDC 08M,Medical back problems without MCC	0.9427
553,MDC 08M,Bone diseases and arthropathies with MCC	1.2710
554,MDC 08M,Bone diseases and arthropathies without MCC	0.7923

DRG, MDC, and DRG description	DRG cost weight
555,MDC 08M,Signs and symptoms of musculoskeletal system and connective tissue with MCC	1.3679
556,MDC 08M,Signs and symptoms of musculoskeletal system and connective tissue without MCC	0.8085
557,MDC 08M,Tendonitis, myositis and bursitis with MCC	1.3985
558,MDC 08M,Tendonitis, myositis and bursitis without MCC	0.8611
559,MDC 08M,Aftercare, musculoskeletal system and connective tissue with MCC	1.8644
560,MDC 08M,Aftercare, musculoskeletal system and connective tissue with CC	1.0753
561,MDC 08M,Aftercare, musculoskeletal system and connective tissue without CC/MCC	0.7919
562,MDC 08M,Fracture, sprain, strain and dislocation except femur, hip, pelvis and thigh with MCC	1.4111
563,MDC 08M,Fracture, sprain, strain and dislocation except femur, hip, pelvis and thigh without MCC	0.8716
564,MDC 08M,Other musculoskeletal system and connective tissue diagnoses with MCC	1.5225
565,MDC 08M,Other musculoskeletal system and connective tissue diagnoses with CC	1.0087
566,MDC 08M,Other musculoskeletal system and connective tissue diagnoses without CC/MCC	0.7517
570,MDC 09P,Skin debridement with MCC	2.8412
571,MDC 09P,Skin debridement with CC	1.6350
572,MDC 09P,Skin debridement without CC/MCC	1.1048
573,MDC 09P,Skin graft for skin ulcer or cellulitis with MCC	5.5393
574,MDC 09P,Skin graft for skin ulcer or cellulitis with CC	3.2464
575,MDC 09P,Skin graft for skin ulcer or cellulitis without CC/MCC	1.7629
576,MDC 09P,Skin graft except for skin ulcer or cellulitis with MCC	5.0631
577,MDC 09P,Skin graft except for skin ulcer or cellulitis with CC	2.5498
578,MDC 09P,Skin graft except for skin ulcer or cellulitis without CC/MCC	1.5957
579,MDC 09P,Other skin, subcutaneous tissue and breast procedures with MCC	3.1442
580,MDC 09P,Other skin, subcutaneous tissue and breast procedures with CC	1.7290
581,MDC 09P,Other skin, subcutaneous tissue and breast procedures without CC/MCC	1.3774
582,MDC 09P,Mastectomy for malignancy with CC/MCC	1.6436

DRG, MDC, and DRG description	DRG cost weight
583,MDC 09P,Mastectomy for malignancy without CC/MCC	1.5421
584,MDC 09P,Breast biopsy, local excision and other breast procedures with CC/MCC	1.8369
585,MDC 09P,Breast biopsy, local excision and other breast procedures without CC/MCC	1.7403
592,MDC 09M,Skin ulcers with MCC	1.6935
593,MDC 09M,Skin ulcers with CC	1.1489
594,MDC 09M,Skin ulcers without CC/MCC	0.8149
595,MDC 09M,Major skin disorders with MCC	2.0157
596,MDC 09M,Major skin disorders without MCC	0.9939
597,MDC 09M,Malignant breast disorders with MCC	1.6441
598,MDC 09M,Malignant breast disorders with CC	1.1128
599,MDC 09M,Malignant breast disorders without CC/MCC	0.6711
600,MDC 09M,Non-malignant breast disorders with CC/MCC	0.9970
601,MDC 09M,Non-malignant breast disorders without CC/MCC	0.6869
602,MDC 09M,Cellulitis with MCC	1.4492
603,MDC 09M,Cellulitis without MCC	0.8532
604,MDC 09M,Trauma to the skin, subcutaneous tissue and breast with MCC	1.4770
605,MDC 09M,Trauma to the skin, subcutaneous tissue and breast without MCC	0.9035
606,MDC 09M,Minor skin disorders with MCC	1.5119
607,MDC 09M,Minor skin disorders without MCC	0.8281
614,MDC 10P,Adrenal and pituitary procedures with CC/MCC	2.3896
615,MDC 10P,Adrenal and pituitary procedures without CC/MCC	1.5758
616,MDC 10P,Amputation of lower limb for endocrine, nutritional and metabolic disorders with MCC	3.9924
617,MDC 10P,Amputation of lower limb for endocrine, nutritional and metabolic disorders with CC	2.0343
618,MDC 10P,Amputation of lower limb for endocrine, nutritional and metabolic disorders without CC/MCC	1.3014
619,MDC 10P,O.R. procedures for obesity with MCC	3.0619
620,MDC 10P,O.R. procedures for obesity with CC	1.7633
621,MDC 10P,O.R. procedures for obesity without CC/MCC	1.5979

DRG, MDC, and DRG description	DRG cost weight
622,MDC 10P,Skin grafts and wound debridement for endocrine, nutritional and metabolic disorders with MCC	3.6184
623,MDC 10P,Skin grafts and wound debridement for endocrine, nutritional and metabolic disorders with CC	1.8752
624,MDC 10P,Skin grafts and wound debridement for endocrine, nutritional and metabolic disorders without CC/MCC	1.0988
625,MDC 10P,Thyroid, parathyroid and thyroglossal procedures with MCC	2.8402
626,MDC 10P,Thyroid, parathyroid and thyroglossal procedures with CC	1.6531
627,MDC 10P,Thyroid, parathyroid and thyroglossal procedures without CC/MCC	1.1832
628,MDC 10P,Other endocrine, nutritional and metabolic O.R. procedures with MCC	3.6794
629,MDC 10P,Other endocrine, nutritional and metabolic O.R. procedures with CC	2.3507
630,MDC 10P,Other endocrine, nutritional and metabolic O.R. procedures without CC/MCC	1.4088
637,MDC 10M,Diabetes with MCC	1.3777
638,MDC 10M,Diabetes with CC	0.8821
639,MDC 10M,Diabetes without CC/MCC	0.6103
640,MDC 10M,Miscellaneous disorders of nutrition, metabolism, fluids and electrolytes with MCC	1.2304
641,MDC 10M,Miscellaneous disorders of nutrition, metabolism, fluids and electrolytes without MCC	0.7541
642,MDC 10M,Inborn and other disorders of metabolism	1.2898
643,MDC 10M,Endocrine disorders with MCC	1.6672
644,MDC 10M,Endocrine disorders with CC	1.0194
645,MDC 10M,Endocrine disorders without CC/MCC	0.7686
650,MDC 11P,Kidney transplant with hemodialysis with MCC	4.5205
651,MDC 11P,Kidney transplant with hemodialysis without MCC	3.6979
652,MDC 11P,Kidney transplant	3.1857
653,MDC 11P,Major bladder procedures with MCC	5.4587
654,MDC 11P,Major bladder procedures with CC	2.9028
655,MDC 11P,Major bladder procedures without CC/MCC	2.0807
656,MDC 11P,Kidney and ureter procedures for neoplasm with MCC	3.2850
657,MDC 11P,Kidney and ureter procedures for neoplasm with CC	1.9353
658,MDC 11P,Kidney and ureter procedures for neoplasm without CC/MCC	1.5787

DRG, MDC, and DRG description	DRG cost weight
659,MDC 11P,Kidney and ureter procedures for non-neoplasm with MCC	2.6657
660,MDC 11P,Kidney and ureter procedures for non-neoplasm with CC	1.4430
661,MDC 11P,Kidney and ureter procedures for non-neoplasm without CC/MCC	1.0640
662,MDC 11P,Minor bladder procedures with MCC	2.9340
663,MDC 11P,Minor bladder procedures with CC	1.5977
664,MDC 11P,Minor bladder procedures without CC/MCC	1.1837
665,MDC 11P,Prostatectomy with MCC	3.0425
666,MDC 11P,Prostatectomy with CC	1.7398
667,MDC 11P,Prostatectomy without CC/MCC	0.9974
668,MDC 11P,Transurethral procedures with MCC	2.8070
669,MDC 11P,Transurethral procedures with CC	1.5633
670,MDC 11P,Transurethral procedures without CC/MCC	0.9786
671,MDC 11P,Urethral procedures with CC/MCC	1.7813
672,MDC 11P,Urethral procedures without CC/MCC	1.1506
673,MDC 11P,Other kidney and urinary tract procedures with MCC	3.4683
674,MDC 11P,Other kidney and urinary tract procedures with CC	2.3830
675,MDC 11P,Other kidney and urinary tract procedures without CC/MCC	1.7558
682,MDC 11M,Renal failure with MCC	1.4725
683,MDC 11M,Renal failure with CC	0.8791
684,MDC 11M,Renal failure without CC/MCC	0.6080
686,MDC 11M,Kidney and urinary tract neoplasms with MCC	1.8746
687,MDC 11M,Kidney and urinary tract neoplasms with CC	1.0499
688,MDC 11M,Kidney and urinary tract neoplasms without CC/MCC	0.6858
689,MDC 11M,Kidney and urinary tract infections with MCC	1.1139
690,MDC 11M,Kidney and urinary tract infections without MCC	0.7938
693,MDC 11M,Urinary stones with MCC	1.3346
694,MDC 11M,Urinary stones without MCC	0.7712
695,MDC 11M,Kidney and urinary tract signs and symptoms with MCC	1.1374
696,MDC 11M,Kidney and urinary tract signs and symptoms without MCC	0.6917
697,MDC 11M,Urethral stricture	0.9984
698,MDC 11M,Other kidney and urinary tract diagnoses with MCC	1.6103

DRG, MDC, and DRG description	DRG cost weight
699,MDC 11M,Other kidney and urinary tract diagnoses with CC	1.0269
700,MDC 11M,Other kidney and urinary tract diagnoses without CC/MCC	0.7463
707,MDC 12P,Major male pelvic procedures with CC/MCC	1.9234
708,MDC 12P,Major male pelvic procedures without CC/MCC	1.4923
709,MDC 12P,Penis procedures with CC/MCC	2.3164
710,MDC 12P,Penis procedures without CC/MCC	1.6026
711,MDC 12P,Testes procedures with CC/MCC	2.1306
712,MDC 12P,Testes procedures without CC/MCC	1.0603
713,MDC 12P,Transurethral prostatectomy with CC/MCC	1.4934
714,MDC 12P,Transurethral prostatectomy without CC/MCC	0.9291
715,MDC 12P,Other male reproductive system O.R. procedures for malignancy with CC/MCC	2.0217
716,MDC 12P,Other male reproductive system O.R. procedures for malignancy without CC/MCC	1.2772
717,MDC 12P,Other male reproductive system O.R. procedures except malignancy with CC/MCC	1.7999
718,MDC 12P,Other male reproductive system O.R. procedures except malignancy without CC/MCC	1.2349
722,MDC 12M,Malignancy, male reproductive system with MCC	1.7120
723,MDC 12M,Malignancy, male reproductive system with CC	1.0919
724,MDC 12M,Malignancy, male reproductive system without CC/MCC	0.6480
725,MDC 12M,Benign prostatic hypertrophy with MCC	1.2846
726,MDC 12M,Benign prostatic hypertrophy without MCC	0.7447
727,MDC 12M,Inflammation of the male reproductive system with MCC	1.4195
728,MDC 12M,Inflammation of the male reproductive system without MCC	0.8056
729,MDC 12M,Other male reproductive system diagnoses with CC/MCC	1.0066
730,MDC 12M,Other male reproductive system diagnoses without CC/MCC	0.5686
734,MDC 13P,Pelvic evisceration, radical hysterectomy and radical vulvectomy with CC/MCC	2.2252
735,MDC 13P,Pelvic evisceration, radical hysterectomy and radical vulvectomy without CC/MCC	1.4143
736,MDC 13P,Uterine and adnexa procedures for ovarian or adnexal malignancy with MCC	4.2616

DRG, MDC, and DRG description	DRG cost weight
737,MDC 13P,Uterine and adnexa procedures for ovarian or adnexal malignancy with CC	2.0587
738,MDC 13P,Uterine and adnexa procedures for ovarian or adnexal malignancy without CC/MCC	1.4771
739,MDC 13P,Uterine and adnexa procedures for non-ovarian and non-adnexal malignancy with MCC	3.8247
740,MDC 13P,Uterine and adnexa procedures for non-ovarian and non-adnexal malignancy with CC	1.8024
741,MDC 13P,Uterine and adnexa procedures for non-ovarian and non-adnexal malignancy without CC/MCC	1.2810
742,MDC 13P,Uterine and adnexa procedures for non-malignancy with CC/MCC	1.7183
743,MDC 13P,Uterine and adnexa procedures for non-malignancy without CC/MCC	1.1330
744,MDC 13P,D&C, conization, laparoscopy and tubal interruption with CC/MCC	1.7954
745,MDC 13P,D&C, conization, laparoscopy and tubal interruption without CC/MCC	1.1697
746,MDC 13P,Vagina, cervix and vulva procedures with CC/MCC	1.6113
747,MDC 13P,Vagina, cervix and vulva procedures without CC/MCC	0.9396
748,MDC 13P,Female reproductive system reconstructive procedures	1.3480
749,MDC 13P,Other female reproductive system O.R. procedures with CC/MCC	2.7112
750,MDC 13P,Other female reproductive system O.R. procedures without CC/MCC	1.4642
754,MDC 13M,Malignancy, female reproductive system with MCC	1.8264
755,MDC 13M,Malignancy, female reproductive system with CC	1.1291
756,MDC 13M,Malignancy, female reproductive system without CC/MCC	0.9178
757,MDC 13M,Infections, female reproductive system with MCC	1.5226
758,MDC 13M,Infections, female reproductive system with CC	0.9694
759,MDC 13M,Infections, female reproductive system without CC/MCC	0.6833
760,MDC 13M,Menstrual and other female reproductive system disorders with CC/MCC	0.9200
761,MDC 13M,Menstrual and other female reproductive system disorders without CC/MCC	0.5906
768,MDC 14P,Vaginal delivery with O.R. procedures except sterilization and/or D&C	1.1698
769,MDC 14P,Postpartum and post abortion diagnoses with O.R. procedures	1.6185
770,MDC 14P,Abortion with D&C, aspiration curettage or hysterotomy	0.8904
776,MDC 14M,Postpartum and post abortion diagnoses without O.R. procedures	0.7737

DRG, MDC, and DRG description	DRG cost weight
779,MDC 14M,Abortion without D&C	1.0597
783,MDC 14P,Cesarean section with sterilization with MCC	1.8745
784,MDC 14P,Cesarean section with sterilization with CC	1.0958
785,MDC 14P,Cesarean section with sterilization without CC/MCC	0.9172
786,MDC 14P,Cesarean section without sterilization with MCC	1.5936
787,MDC 14P,Cesarean section without sterilization with CC	1.0641
788,MDC 14P,Cesarean section without sterilization without CC/MCC	0.8875
789,MDC 15M,Neonates, died or transferred to another acute care facility	1.7200
790,MDC 15M,Extreme immaturity or respiratory distress syndrome, neonate	5.6719
791,MDC 15M,Prematurity with major problems	3.8737
792,MDC 15M,Prematurity without major problems	2.3373
793,MDC 15M,Full term neonate with major problems	3.9791
794,MDC 15M,Neonate with other significant problems	1.4084
795,MDC 15M,Normal newborn	0.1907
796,MDC 14P,Vaginal delivery with sterilization and/or D&C with MCC	1.0697
797,MDC 14P,Vaginal delivery with sterilization and/or D&C with CC	0.9203
798,MDC 14P,Vaginal delivery with sterilization and/or D&C without CC/MCC	0.8276
799,MDC 16P,Splenectomy with MCC	5.1484
800,MDC 16P,Splenectomy with CC	2.9566
801,MDC 16P,Splenectomy without CC/MCC	1.6850
802,MDC 16P,Other O.R. procedures of the blood and blood forming organs with MCC	3.7138
803,MDC 16P,Other O.R. procedures of the blood and blood forming organs with CC	1.8873
804,MDC 16P,Other O.R. procedures of the blood and blood forming organs without CC/MCC	1.3664
805,MDC 14M,Vaginal delivery without sterilization or D&C with MCC	1.0299
806,MDC 14M,Vaginal delivery without sterilization or D&C with CC	0.7347
807,MDC 14M,Vaginal delivery without sterilization or D&C without CC/MCC	0.6423
808,MDC 16M,Major hematological and immunological diagnoses except sickle cell crisis and coagulation disorders with MCC	2.1868
809,MDC 16M,Major hematological and immunological diagnoses except sickle cell crisis and coagulation disorders with CC	1.2240

DRG, MDC, and DRG description	DRG cost weight
810,MDC 16M,Major hematological and immunological diagnoses except sickle cell crisis and coagulation disorders without CC/MCC	0.9626
811,MDC 16M,Red blood cell disorders with MCC	1.3799
812,MDC 16M,Red blood cell disorders without MCC	0.8809
813,MDC 16M,Coagulation disorders	1.5451
814,MDC 16M,Reticuloendothelial and immunity disorders with MCC	1.8918
815,MDC 16M,Reticuloendothelial and immunity disorders with CC	0.9931
816,MDC 16M,Reticuloendothelial and immunity disorders without CC/MCC	0.6613
817,MDC 14P,Other antepartum diagnoses with O.R. procedures with MCC	2.3056
818,MDC 14P,Other antepartum diagnoses with O.R. procedures with CC	1.3609
819,MDC 14P,Other antepartum diagnoses with O.R. procedures without CC/MCC	0.9895
820,MDC 17P,Lymphoma and leukemia with major O.R. procedures with MCC	5.6909
821,MDC 17P,Lymphoma and leukemia with major O.R. procedures with CC	2.1557
822,MDC 17P,Lymphoma and leukemia with major O.R. procedures without CC/MCC	1.2520
823,MDC 17P,Lymphoma and non-acute leukemia with other procedures with MCC	4.5043
824,MDC 17P,Lymphoma and non-acute leukemia with other procedures with CC	2.3650
825,MDC 17P,Lymphoma and non-acute leukemia with other procedures without CC/MCC	1.4023
826,MDC 17P,Myeloproliferative disorders or poorly differentiated neoplasms with major O.R. procedures with MCC	5.0442
827,MDC 17P,Myeloproliferative disorders or poorly differentiated neoplasms with major O.R. procedures with CC	2.5004
828,MDC 17P,Myeloproliferative disorders or poorly differentiated neoplasms with major O.R. procedures without CC/MCC	1.6741
829,MDC 17P,Myeloproliferative disorders or poorly differentiated neoplasms with other procedures with CC/MCC	3.2086
830,MDC 17P,Myeloproliferative disorders or poorly differentiated neoplasms with other procedures without CC/MCC	1.4826
831,MDC 14M,Other antepartum diagnoses without O.R. procedures with MCC	1.1223
832,MDC 14M,Other antepartum diagnoses without O.R. procedures with CC	0.7781
833,MDC 14M,Other antepartum diagnoses without O.R. procedures without CC/MCC	0.5365
834,MDC 17M,Acute leukemia without major O.R. procedures with MCC	6.0563

DRG, MDC, and DRG description	DRG cost weight
835,MDC 17M,Acute leukemia without major O.R. procedures with CC	2.1162
836,MDC 17M,Acute leukemia without major O.R. procedures without CC/MCC	1.1755
837,MDC 17M,Chemotherapy with acute leukemia as secondary diagnosis or with high dose chemotherapy agent with MCC	5.7018
838,MDC 17M,Chemotherapy with acute leukemia as secondary diagnosis with CC or high dose chemotherapy agent	2.2616
839,MDC 17M,Chemotherapy with acute leukemia as secondary diagnosis without CC/MCC	1.4875
840,MDC 17M,Lymphoma and non-acute leukemia with MCC	3.2211
841,MDC 17M,Lymphoma and non-acute leukemia with CC	1.6221
842,MDC 17M,Lymphoma and non-acute leukemia without CC/MCC	1.0976
843,MDC 17M,Other myeloproliferative disorders or poorly differentiated neoplastic diagnoses with MCC	1.9070
844,MDC 17M,Other myeloproliferative disorders or poorly differentiated neoplastic diagnoses with CC	1.1835
845,MDC 17M,Other myeloproliferative disorders or poorly differentiated neoplastic diagnoses without CC/MCC	0.8487
846,MDC 17M,Chemotherapy without acute leukemia as secondary diagnosis with MCC	2.6734
847,MDC 17M,Chemotherapy without acute leukemia as secondary diagnosis with CC	1.3364
848,MDC 17M,Chemotherapy without acute leukemia as secondary diagnosis without CC/MCC	1.0327
849,MDC 17M,Radiotherapy	2.4941
853,MDC 18P,Infectious and parasitic diseases with O.R. procedures with MCC	4.9681
854,MDC 18P,Infectious and parasitic diseases with O.R. procedures with CC	2.1226
855,MDC 18P,Infectious and parasitic diseases with O.R. procedures without CC/MCC	1.5176
856,MDC 18P,Postoperative or post-traumatic infections with O.R. procedures with MCC	4.6632
857,MDC 18P,Postoperative or post-traumatic infections with O.R. procedures with CC	2.1025
858,MDC 18P,Postoperative or post-traumatic infections with O.R. procedures without CC/MCC	1.3603
862,MDC 18M,Postoperative and post-traumatic infections with MCC	1.8963

DRG, MDC, and DRG description	DRG cost weight
863,MDC 18M,Postoperative and post-traumatic infections without MCC	1.0111
864,MDC 18M,Fever and inflammatory conditions	0.8766
865,MDC 18M,Viral illness with MCC	1.4802
866,MDC 18M,Viral illness without MCC	0.8389
867,MDC 18M,Other infectious and parasitic diseases diagnoses with MCC	2.2377
868,MDC 18M,Other infectious and parasitic diseases diagnoses with CC	1.0661
869,MDC 18M,Other infectious and parasitic diseases diagnoses without CC/MCC	0.7283
870,MDC 18M,Septicemia or severe sepsis with MV >96 hours	6.4396
871,MDC 18M,Septicemia or severe sepsis without MV >96 hours with MCC	1.8721
872,MDC 18M,Septicemia or severe sepsis without MV >96 hours without MCC	1.0262
876,MDC 19P,O.R. procedures with principal diagnosis of mental illness	3.2659
880,MDC 19M,Acute adjustment reaction and psychosocial dysfunction	0.8644
881,MDC 19M,Depressive neuroses	0.8015
882,MDC 19M,Neuroses except depressive	0.8234
883,MDC 19M,Disorders of personality and impulse control	1.5789
884,MDC 19M,Organic disturbances and intellectual disability	1.4463
885,MDC 19M,Psychoses	1.2375
886,MDC 19M,Behavioral and developmental disorders	1.2220
887,MDC 19M,Other mental disorder diagnoses	1.0789
894,MDC 20M,Alcohol, drug abuse or dependence, left AMA	0.5490
895,MDC 20M,Alcohol, drug abuse or dependence with rehabilitation therapy	1.5981
896,MDC 20M,Alcohol, drug abuse or dependence without rehabilitation therapy with MCC	1.7797
897,MDC 20M,Alcohol, drug abuse or dependence without rehabilitation therapy without MCC	0.8266
901,MDC 21P,Wound debridements for injuries with MCC	4.2688
902,MDC 21P,Wound debridements for injuries with CC	1.9649
903,MDC 21P,Wound debridements for injuries without CC/MCC	1.1353
904,MDC 21P,Skin grafts for injuries with CC/MCC	3.7271
905,MDC 21P,Skin grafts for injuries without CC/MCC	1.6502
906,MDC 21P,Hand procedures for injuries	1.8035

DRG, MDC, and DRG description	DRG cost weight
907,MDC 21P,Other O.R. procedures for injuries with MCC	3.9484
908,MDC 21P,Other O.R. procedures for injuries with CC	2.0507
909,MDC 21P,Other O.R. procedures for injuries without CC/MCC	1.3714
913,MDC 21M,Traumatic injury with MCC	1.6374
914,MDC 21M,Traumatic injury without MCC	0.8864
915,MDC 21M,Allergic reactions with MCC	1.6992
916,MDC 21M,Allergic reactions without MCC	0.6583
917,MDC 21M,Poisoning and toxic effects of drugs with MCC	1.4785
918,MDC 21M,Poisoning and toxic effects of drugs without MCC	0.7920
919,MDC 21M,Complications of treatment with MCC	1.8439
920,MDC 21M,Complications of treatment with CC	1.0244
921,MDC 21M,Complications of treatment without CC/MCC	0.6979
922,MDC 21M,Other injury, poisoning and toxic effect diagnoses with MCC	1.5880
923,MDC 21M,Other injury, poisoning and toxic effect diagnoses without MCC	0.9403
927,MDC 22P,Extensive burns or full thickness burns with MV >96 hours with skin graft	21.0931
928,MDC 22P,Full thickness burn with skin graft or inhalation injury with CC/MCC	6.5299
929,MDC 22P,Full thickness burn with skin graft or inhalation injury without CC/MCC	3.0143
933,MDC 22M,Extensive burns or full thickness burns with MV >96 hours without skin graft	2.2629
934,MDC 22M,Full thickness burn without skin graft or inhalation injury	1.9404
935,MDC 22M,Non-extensive burns	1.9333
939,MDC 23P,O.R. procedures with diagnoses of other contact with health services with MCC	3.3750
940,MDC 23P,O.R. procedures with diagnoses of other contact with health services with CC	2.2222
941,MDC 23P,O.R. procedures with diagnoses of other contact with health services without CC/MCC	1.9241
945,MDC 23M,Rehabilitation with CC/MCC	1.4814
946,MDC 23M,Rehabilitation without CC/MCC	1.1259
947,MDC 23M,Signs and symptoms with MCC	1.1934
948,MDC 23M,Signs and symptoms without MCC	0.7870

DRG, MDC, and DRG description	DRG cost weight
949,MDC 23M,Aftercare with CC/MCC	1.1106
950,MDC 23M,Aftercare without CC/MCC	0.7396
951,MDC 23M,Other factors influencing health status	0.5593
955,MDC 24P,Craniotomy for multiple significant trauma	6.2906
956,MDC 24P,Limb reattachment, hip and femur procedures for multiple significant trauma	3.8509
957,MDC 24P,Other O.R. procedures for multiple significant trauma with MCC	7.4194
958,MDC 24P,Other O.R. procedures for multiple significant trauma with CC	4.2049
959,MDC 24P,Other O.R. procedures for multiple significant trauma without CC/MCC	2.7359
963,MDC 24M,Other multiple significant trauma with MCC	2.7278
964,MDC 24M,Other multiple significant trauma with CC	1.4905
965,MDC 24M,Other multiple significant trauma without CC/MCC	0.9118
969,MDC 25P,HIV with extensive O.R. procedures with MCC	5.8005
970,MDC 25P,HIV with extensive O.R. procedures without MCC	2.9876
974,MDC 25M,HIV with major related condition with MCC	2.6890
975,MDC 25M,HIV with major related condition with CC	1.2826
976,MDC 25M,HIV with major related condition without CC/MCC	0.9499
977,MDC 25M,HIV with or without other related condition	1.3234
981,MDC P,Extensive O.R. procedures unrelated to principal diagnosis with MCC	4.6135
982,MDC P,Extensive O.R. procedures unrelated to principal diagnosis with CC	2.5386
983,MDC P,Extensive O.R. procedures unrelated to principal diagnosis without CC/MCC	1.6525
987,MDC P,Non-extensive O.R. procedures unrelated to principal diagnosis with MCC	3.2726
988,MDC P,Non-extensive O.R. procedures unrelated to principal diagnosis with CC	1.7067
989,MDC P,Non-extensive O.R. procedures unrelated to principal diagnosis without CC/MCC	1.1231
998,MDC ,Principal diagnosis invalid as discharge diagnosis	0.0000
999,MDC ,Ungroupable	0.0000

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