



Critical Access Hospital  
Program for Evaluating Payment  
Patterns Electronic Report

User's Guide  
Tenth Edition



**Critical Access Hospital  
Program for Evaluating Payment Patterns Electronic Report User’s Guide**  
Tenth Edition, effective with the Q4FY20 release

**Table of Contents**

Introduction..... 3

    What Is PEPPER? ..... 3

    CAH PEPPER CMS Target Areas..... 5

    How Hospitals Can Use PEPPER Data ..... 10

Using PEPPER..... 16

    Compare Targets Report..... 16

    Target Area Reports..... 17

    Hospital Top DRGs Report..... 18

    Jurisdiction-Wide Top DRGs Report..... 18

    System Requirements, Customer Support and Technical Assistance ..... 18

Glossary ..... 19

Acronyms and Abbreviations ..... 20

    Appendix 1: DRG Listing for the Medical DRGs with CC or MCC Target Area (FY 2020) ..... 22

    Appendix 2: DRG Listing for the Surgical DRGs with CC or MCC Target Area (FY 2020)..... 29

    Appendix 3: Rehabilitation and Primary Psychiatric CCS Diagnosis Categories ..... 36

## Introduction

### What Is PEPPER?

The Office of Inspector General (OIG) encourages hospitals to develop and implement a compliance program to protect their operations from fraud and abuse.<sup>1,2</sup> As part of its compliance program, a hospital should conduct regular audits to ensure charges for Medicare services are correctly documented and billed. The Program for Evaluating Payment Patterns Electronic Report (PEPPER) can help guide hospitals' auditing and monitoring activities.

PEPPER is an electronic data report that contains a single hospital's claims data statistics for Medicare-Severity Diagnosis-Related Groups (MS-DRGs) and discharges at high risk for improper payment due to billing, coding, and/or admission necessity issues. Each PEPPER contains statistics for each area at risk for improper payments, which are referred to in the report as target areas. Data in PEPPER is presented in tabular form and in graphs that depict the hospital's target area percentages over time. PEPPER also includes reports on the hospital's top diagnosis-related groups (DRGs) by volume of discharges. PEPPER is developed and distributed by the RELI Group, along with its partners TMF® Health Quality Institute and CGS, under contract with the Centers for Medicare & Medicaid Services (CMS).

All of the data tables, graphs, and reports in PEPPER were designed to assist hospitals with the identification of potential overpayments and underpayments.

PEPPER is available for critical access hospitals (CAHs). PEPPERs are also available for short- and long-term acute care inpatient prospective payment system (IPPS) hospitals, inpatient psychiatric facilities, inpatient rehabilitation facilities, hospices, partial hospitalization programs, skilled nursing facilities (SNFs), and home health agencies. The *CAH PEPPER* is the version of PEPPER specifically for CAHs.

**PEPPER does not identify the presence of improper payments, but it can be used as a guide for auditing and monitoring efforts.** A hospital can use PEPPER to compare its claims data over time to identify areas of potential concern:

- Significant changes in billing practices
- Possible over- or under-coding
- Increasing length of stays (LOSs)

CAHs, in general, are defined as hospitals that are located in a rural area, maintain no more than 25 inpatient beds, and maintain an annual average length of stay (ALOS) of 96 hours per patient for acute inpatient care. Although

CAHs are reimbursed through a different payment methodology (based on cost rather than DRG) than short-term acute care hospitals, they provide many of the same services; therefore, the PEPPER for CAHs has many of the same target areas as the PEPPER for short-term acute care hospitals. Based on ongoing analysis, these target areas may change over time.

<sup>1</sup> Department of Health and Human Services/Office of Inspector General. 1998. "Compliance Program Guidance for Hospitals," *Federal Register* 63, no. 35, Feb. 23, 1998, 8987–8998. Available at: <http://oig.hhs.gov/authorities/docs/cpghosp.pdf>

<sup>2</sup> Department of Health and Human Services/Office of Inspector General. 2005. "Supplementing the Compliance Program Guidance for Hospitals," *Federal Register* 70, no. 19, Jan. 31, 2005, 4858–4876. Available at: <http://oig.hhs.gov/fraud/docs/complianceguidance/012705HospSupplementalGuidance.pdf>

Each *CAH PEPPER* summarizes statistics for the most recent twelve federal fiscal quarters, aggregated in three fiscal years. A CAH is compared to other CAHs in three comparison groups: the nation, Medicare Administrative Contractor (MAC) jurisdiction, and state. These comparisons enable a hospital to determine whether it is an outlier, differing from other CAHs.

PEPPER determines outliers based on preset control limits. The upper control limit for all target areas is the national 80<sup>th</sup> percentile. Coding-focused target areas also have a lower control limit, which is the national 20<sup>th</sup> percentile. PEPPER draws attention to any findings that are at or above the upper control limit or at or below the lower control limit.

Note that, in PEPPER, the term “outlier” is used when a hospital’s target area percent is in the top 20% of all hospital target area percents in the respective comparison group (i.e., is at/above the 80<sup>th</sup> percentile) or is in the bottom 20% of all hospital target area percents in the respective comparison group (i.e., is at/below the 20<sup>th</sup> percentile for coding-focused target areas). Formal tests of significance are not used to determine outlier status in PEPPER.

Specifications for claims included in *CAH PEPPER* are shown in the table below.

INCLUSION/EXCLUSION CRITERIA	DATA SPECIFICATIONS
CAH providers only Claim with valid medical record number	Third and fourth positions of the CMS Certification Number = “13” UB-04 FL 03a or 03b is not null (blank)
Services provided during the time periods included in the report	Claim “Through Date” (discharge date) falls within the three fiscal years included in the report
Medicare claim payment amount greater than zero	The hospital received a payment amount greater than zero on the claim (Note that Medicare Secondary Payer claims are included)
Final action claim	The patient was discharged; exclude claim status code “still a patient” (30) in UB-04 FL 17
Exclude Health Maintenance Organization claims	Exclude claims submitted to a Medicare Health Maintenance Organization
Exclude cancelled claims	Exclude claims cancelled by the MAC

The *CAH PEPPER* is available to the CAH’s Chief Executive Officer, Administrator, President, Quality Assurance and Performance Improvement Officer, or Compliance Officer through a secure portal on the [PEPPER.CBRPEPPER.org](http://PEPPER.CBRPEPPER.org) website. Each CAH receives only its PEPPER. The PEPPER Team does not provide PEPPERs to other contractors, although the PEPPER Team does provide a Microsoft Access database (the First-Look Analysis Tool for Hospital Outlier Monitoring [FATHOM]) to MACs and Recovery Auditors. FATHOM can be used to produce a PEPPER.

Each CAH receives only its PEPPER. The PEPPER Team does not provide PEPPERS to other contractors, although the PEPPER Team does provide a Microsoft Access database (the First-Look Analysis Tool for Hospital Outlier Monitoring [FATHOM]) to MACs and Recovery Auditors. FATHOM can be used to produce a PEPPER.

### CAH PEPPER CMS Target Areas

In general, the target areas are constructed as ratios and expressed as percents; the numerator represents discharges that have been identified as problematic, and the denominator represents discharges of a larger comparison group. For example, admission necessity-focused target areas generally include in the numerator the DRG(s) that have been identified as prone to unnecessary admissions, and the denominator generally includes all discharges for the DRG(s) (i.e., all discharges). Target areas related to DRG-coding generally include in the numerator the DRG(s) that have been identified as prone to DRG coding errors, and the denominator includes these DRGs in addition to the DRGs to which the original DRG is frequently changed.

The CAH PEPPER target areas are defined in the table on the following pages.

TARGET AREA	TARGET AREA DEFINITION
<b><i>Stroke Intracranial Hemorrhage</i></b>	<p><i>Numerator (N):</i> count of discharges for DRGs 061 (acute ischemic stroke with use of thrombolytic agent with major complication or comorbidity [MCC]), 062 (acute ischemic stroke with use of thrombolytic agent with complication or comorbidity [CC]), 063 (acute ischemic stroke with use of thrombolytic agent without CC/MCC), 064 (intracranial hemorrhage or cerebral infarction with MCC), 065 (intracranial hemorrhage or cerebral infarction with CC or tPA in 24 hours), 066 (intracranial hemorrhage or cerebral infarction without CC/MCC)</p> <p><i>Denominator (D):</i> count of discharges for DRGs 061, 062, or 063, 064, 065, 066, 067 (nonspecific cerebrovascular accident [CVA] and precerebral occlusion without infarct with MCC), 068 (nonspecific CVA and precerebral occlusion without infarct without MCC), 069 (transient ischemia)</p>

TARGET AREA	TARGET AREA DEFINITION
<b><i>Respiratory Infections</i></b>	<p><i>N</i>: count of discharges for DRGs 177 (respiratory infections and inflammations with MCC), 178 (respiratory infections and inflammations with CC)</p> <p><i>D</i>: count of discharges for DRGs 177, 178, 179 (respiratory infections and inflammations w/o CC/MCC), 193 (simple pneumonia and pleurisy with MCC), 194 (simple pneumonia and pleurisy with CC), 195 (simple pneumonia and pleurisy without CC/MCC)</p> <p>Note: As of the release of the Q4FY18 PEPPER, some hospitals may see increases in the numerator and denominator counts for <i>Simple Pneumonia</i> and in the denominator counts for <i>Respiratory Infection</i>, due to a coding guideline change that came into effect for discharges on Oct. 1, 2017. The note associated with International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) code J44.0 (chronic obstructive pulmonary disease with acute lower respiratory infection) changed from a "Use additional code" note to a "Code also" note, meaning there is no sequencing mandated, allowing coders to assign the principal diagnosis based on the circumstances of the admission (reference ICD-10-CM Official Guidelines for Coding and Reporting FY2018) (I.A.17).</p>
<b><i>Simple Pneumonia</i></b>	<p><i>N</i>: count of discharges for DRGs 193, 194</p> <p><i>D</i>: count of discharges for DRGs 190 (chronic obstructive pulmonary disease with MCC), 191 (chronic obstructive pulmonary disease with CC), 192 (chronic obstructive pulmonary disease without CC/MCC), 193, 194, 195</p> <p>Note: As of the release of the Q4FY18 PEPPER, some hospitals may see increases in the numerator and denominator counts for <i>Simple Pneumonia</i> and in the denominator counts for <i>Respiratory Infection</i>, due to a coding guideline change that came into effect for discharges on Oct. 1, 2017. The note associated with ICD-10-CM code J44.0 (chronic obstructive pulmonary disease with acute lower respiratory infection) changed from a "Use additional code" note to a "Code also" note, meaning there is no sequencing mandated, allowing coders to assign the principal diagnosis based on the circumstances of the admission (reference ICD-10-CM Official Guidelines for Coding and Reporting FY2018) (I.A.17).</p>

TARGET AREA	TARGET AREA DEFINITION
<b>Septicemia</b>	<p><i>N:</i> count of discharges for DRGs 870 (septicemia or severe sepsis with mechanical ventilation &gt;96 hours), 871 (septicemia or severe sepsis without mechanical ventilation &gt;96 hours with MCC), 872 (septicemia or severe sepsis without mechanical ventilation &gt;96 hours without MCC)</p> <p><i>D:</i> count of discharges for DRGs 193 (simple pneumonia and pleurisy with MCC), 194 (simple pneumonia and pleurisy with CC), 195 (simple pneumonia and pleurisy without CC/MCC), 207 (respiratory system diagnosis with ventilator support 96+ hours), 208 (respiratory system diagnosis with ventilator support &lt; 96 hours), 689 (kidney and urinary tract infections with MCC), 690 (kidney and urinary tract infections without MCC), 870, 871, 872</p>
<b>Medical DRGs with CC or MCC</b>	<p><i>N:</i> count of discharges for medical DRGs with “w CC,” “w MCC,” or “w CC/MCC” in the DRG description, excluding those DRGs that can be assigned on the basis of a CC, MCC, or medication administration (DRGs 065 [intracranial hemorrhage or cerebral infarction with CC or tPA in 24 hrs.], 291 [heart failure &amp; shock w MCC or peripheral extracorporeal membrane oxygenation (ECMO)], 296 [cardiac arrest, unexplained w MCC or ECMO], 838 [chemo with acute leukemia as SDX with CC or high dose chemo agent]; See Appendix 1)</p> <p><i>D:</i> count of discharges for medical DRGs with “w CC,” “w MCC,” “w CC/MCC,” “wo CC,” “wo MCC,” or “wo CC/MCC” in the DRG description, excluding those DRGs that can be assigned on the basis of a CC, MCC, or medication administration (DRGs 065, 291, 296, 838; See Appendix 1)</p>
<b>Surgical DRGs with CC or MCC</b>	<p><i>N:</i> count of discharges for surgical DRGs with “w CC,” “w MCC,” or “w CC/MCC” in the DRG description, excluding those DRGs that can be assigned on the basis of a CC, MCC, or a procedure (DRGs 005 [liver transplant with MCC or intestinal implant], 016 [autologous bone marrow transplant w CC/MCC or t-cell immunotherapy], 023 [craniotomy with major device implant or acute complex central nervous system (CNS) principal diagnosis with MCC or chemo implant or epilepsy with neurostimulator], 029 [spinal procedures with CC or spinal neurostimulators], 041 [peripheral/cranial nerve and other nervous system procedure with CC or peripheral neurostimulator], 129 [major head and neck procedures with CC/MCC or major device], 246 [percutaneous cardiovascular procedures with drug-eluting stent with MCC or 4+ arteries/stents], 248 [percutaneous cardiovascular procedures with non-drug-eluting stent with MCC or 4+ arteries/stents], 469 [major hip and knee joint replacement or reattachment of lower extremity w MCC or total ankle replacement], 518 [Back and neck procedures except spinal fusion with MCC or disc/neurostimulator]; See Appendix 2)</p> <p><i>D:</i> count of discharges for surgical DRGs with “w CC,” “w MCC,” “w CC/MCC,” “wo CC,” “wo MCC,” or “wo CC/MCC” in the DRG description, excluding those DRGs that can be assigned on the basis of a CC, MCC, or a procedure (DRGs 005, 016, 023, 029, 041, 129, 246, 248, 469, 518; See Appendix 2)</p>

TARGET AREA	TARGET AREA DEFINITION
<b>Single CC or MCC</b> <i>*revised as of the Q4FY19 release</i>	<p><i>N</i>: count of discharges for DRGs assigned on the basis of a CC or MCC with only one CC or MCC coded on the claim, excluding DRGs that can be assigned on the basis of a CC, MCC or a procedure</p> <p><i>D</i>: count of discharges for DRGs assigned on the basis of a CC or MCC, excluding DRGs that can be assigned on the basis of a CC, MCC or a procedure</p>
<b>Chronic Obstructive Pulmonary Disease</b>	<p><i>N</i>: count of discharges for DRGs 190 (chronic obstructive pulmonary disease with MCC) 191 (chronic obstructive pulmonary disease with CC), 192 (chronic obstructive pulmonary disease without CC/MCC)</p> <p><i>D</i>: count of all discharges for medical DRGs in MDC 04 (respiratory system) (DRGs 175 through 208)</p>
<b>Three-Day Skilled Nursing Facility-Qualifying Admissions</b>	<p><i>N</i>: count of discharges to a SNF with a three-day LOS</p> <p><i>D</i>: count of all discharges to a SNF (identified by patient discharge status code of 03 [discharged or transferred to a SNF], 83 [discharged or transferred to a SNF with a planned acute care hospital inpatient readmission], 61 [discharged or transferred to a swing bed], or 89 [discharged or transferred to a swing bed with a planned acute care hospital inpatient readmission])</p>
<b>Swing Bed Transfers</b>	<p><i>N</i>: count of discharges with a LOS equal to three or four days with patient discharge status code 61 or 89</p> <p><i>D</i>: count of discharges with a LOS equal to three or four days</p>
<b>30-Day Readmissions to Same Hospital or Elsewhere</b>	<p><i>N</i>: count of index (first) admissions during the 12-month time period for which a readmission occurred within 30 days to the same CAH, to another CAH or to another short-term acute care prospective payment system (PPS) hospital for the same beneficiary (identified using the Health Insurance Claim number); patient discharge status of the index admission is not equal to 02 (discharged/transferred to a short-term general hospital for inpatient care), 82 (discharged/transferred to a short-term general hospital for inpatient care with a planned acute care hospital inpatient readmission), 07 (left against medical advice); excluding rehabilitation and primary psychiatric Clinical Classification Software (CCS)<sup>3</sup> diagnosis categories (See Appendix 3)</p> <p><i>D</i>: count of all discharges excluding patient discharge status codes 02, 82, 07, 20 and excluding rehabilitation and primary psychiatric CCS diagnosis categories</p>

<sup>3</sup> ICD-10 diagnoses and procedures have been collapsed into general categories using CCS. More information on CCS can be found at <http://www.hcup-us.ahrq.gov/toolsoftware/ccs/ccs.jsp>.



TARGET AREA	TARGET AREA DEFINITION
<b>30-Day Readmissions to Same Hospital</b>	<p><i>N</i>: count of index (first) admissions during the 12-month time period for which a readmission occurred within 30 days to the same CAH for the same beneficiary (identified using the Health Insurance Claim number); patient discharge status of the index admission is not equal to 02, 82, 07; excluding rehabilitation and primary psychiatric CCS diagnosis categories (see Appendix 3)</p> <p><i>D</i>: count of all discharges excluding patient discharge status codes 02, 82, 07, 20 and excluding rehabilitation and primary psychiatric CCS diagnosis categories</p>
<b>Two-Day Stays for Medical DRGs</b>	<p><i>N</i>: count of discharges for medical DRGs with a LOS equal to two days (“through” date minus “admission” date = 2 days), excluding patient discharge status codes 02, 82, 07, 20, excluding claims with occurrence span code 72 (identifying outpatient time associated with an inpatient admission) with “through” date on or day prior to inpatient admission</p> <p><i>D</i>: count of discharges for medical DRGs, excluding claims with patient discharge status codes 02, 82, 07, 20; excluding claims with occurrence span code 72 with “through” date on or day prior to inpatient admission</p>
<b>Two-Day Stays for Surgical DRGs</b>	<p><i>N</i>: count of discharges for surgical DRGs with a LOS equal to two days (“through” date minus “admission” date = 2 days), excluding patient discharge status codes 02, 82, 07, 20, excluding claims with occurrence span code 72 with “through” date on or day prior to inpatient admission</p> <p><i>D</i>: count of discharges for surgical DRGs, excluding claims with patient discharge status codes 02, 82, 07, 20; excluding claims with occurrence span code 72 with “through” date on or day prior to inpatient admission</p>
<b>One-Day Stays for Medical DRGs</b>	<p><i>N</i>: count of discharges for medical DRGs with a LOS equal to one day (“through” date minus “admission” date = 1 day, or “admission” date equal to “through” date), excluding patient discharge status codes 02, 82, 07, 20, excluding claims with occurrence span code 72 with “through” date on or day prior to inpatient admission</p> <p><i>D</i>: count of discharges for medical DRGs, excluding claims with patient discharge status codes 02, 82, 07, 20; excluding claims with occurrence span code 72 with “through” date on or day prior to inpatient admission</p>
<b>One-Day Stays for Surgical DRGs</b>	<p><i>N</i>: count of discharges for surgical DRGs with a LOS equal to one day (“through” date minus “admission” date = 1 day, or “admission” date equal to “through” date), excluding patient discharge status codes 02, 82, 07, 20, excluding claims with occurrence span code 72 with “through” date on or day prior to inpatient admission</p> <p><i>D</i>: count of discharges for surgical DRGs, excluding claims with patient discharge status codes 02, 82, 07, 20; excluding claims with occurrence span code 72 with “through” date on or day prior to inpatient admission</p>

These PEPPER target areas were approved by CMS because they have been identified as prone to improper Medicare payments in short-term acute care hospitals. Historically, many of these target areas were the focus of OIG audits, while others were identified through the former Payment Error Prevention

Program and former Hospital Payment Monitoring Program, which were implemented by state Medicare Quality Improvement Organizations in 1999 through 2008. The Recovery Audit Contractor (RAC) demonstration project and the RAC permanent program have identified additional areas prone to improper payments.

Although it is recognized that CAHs are limited to lengths of stay of 96 hours, short inpatient hospital admissions — one- and two-day stays, in particular — have had high rates of unnecessary admissions. Several target areas in PEPPER focus on one- and two-day stays. These target areas can assist hospitals with focusing on potentially unnecessary admissions.

Readmissions have been associated with billing errors, premature discharge, incomplete care, and inappropriate readmission. There are two target areas relating to readmissions within 30 days of discharge: one includes statistics for patients who were readmitted to the same CAH, to another CAH, or to a short-term acute care PPS hospital, and the other includes statistics for patients who were readmitted to the same CAH.

Three-day SNF-qualifying admissions have been found to be problematic in terms of admission necessity, and historical data indicate that three-day SNF-qualifying admissions have a higher incidence of unnecessary admissions than other three-day admissions (in the short-term acute care setting). Two target areas (*Three-Day Skilled Nursing Facility-Qualifying Admissions* and *Swing Bed Transfers*) are included to focus on this issue.

The coding of CCs and, more recently, MCCs has been found to be problematic. Oversight agencies have identified coding errors related to the addition of a CC or MCC that was not substantiated by documentation in the medical record. The target areas relating to medical and surgical DRGs with a CC or MCC focus on this issue.

Please note there are changes in DRGs and DRG definitions from one fiscal year (FY) to the next that should be considered:

- Changes for FY 2020 are documented in the Federal Register, Volume 84, number 159, Aug. 16, 2019, pages 42044-42701.
- Changes for FY 2019 are documented in the *Federal Register*, Volume 83, number 160, Aug. 16, 2018, pages 41144 – 41784.
- Changes for FY 2018 are documented in the *Federal Register*, Volume 82, number 155, Aug. 14, 2017, pages 37990 – 38589.
- Changes for FY 2017 are documented in the Federal Register, Volume 81, number 162, Aug. 22, 2016, pages 56761 – 57438.

### **How Hospitals Can Use PEPPER Data**

The *CAH PEPPER* allows CAHs to compare their billing statistics with national, jurisdiction and state percentile values for each target area with reportable data for the most recent three fiscal years included in PEPPER.

To calculate percentiles, the target area percents for all CAHs with reportable data for each target area and each time period are ordered from highest to lowest. The target area percent below which 80% of all CAHs’ target area percents fall is identified as the 80<sup>th</sup> percentile. CAHs whose target percents are at or above the 80<sup>th</sup> percentile (i.e., in the top 20%) are considered at risk for improper Medicare payments. Similarly, for areas at risk for under-coding, CAHs whose target percents are at or below the 20<sup>th</sup> percentile (i.e., in the bottom 20%) are considered at risk for improper Medicare payments. Percentiles are calculated for each of the three comparison groups (i.e., nation, jurisdiction, and state).

“Reportable data” in PEPPER means there are 11 or more numerator discharges for a given target area for a given time period. When there are fewer than 11 numerator discharges for a target area for a time period, statistics are not displayed in PEPPER due to CMS data restrictions.

The PEPPER Team has developed suggested interventions in the following table for CAHs to consider when assessing their risk for improper Medicare payments. Please note that these are generalized suggestions and will not apply to all situations. For all areas, assess whether there is sufficient volume (i.e., 10 to 30 cases for the fiscal year, depending on the hospital’s total discharges for the fiscal year) to warrant a review of cases. The following table can assist CAHs with interpreting their percentile values, which are indications of possible risk of improper Medicare payments.

TARGET AREA	SUGGESTED INTERVENTIONS FOR HIGH OUTLIERS (IF AT/ABOVE 80 <sup>TH</sup> PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20 <sup>TH</sup> PERCENTILE)
<b><i>Stroke Intracranial Hemorrhage</i></b>	This could indicate potential over-coding. A sample of medical records for DRGs 061, 062, 063, 064, 065, and 066 should be reviewed to determine whether coding errors exist.	This could indicate that there are coding or billing errors related to under-coding of DRGs 061, 062, 063, 064, 065, and 066. A sample of medical records for other DRGs, such as DRGs 067, 068, and 069 should be reviewed to determine whether coding errors exist. Remember to ensure that the documentation supports the principal diagnosis. A coder should not code based on radiological findings without seeking clarification from the physician.
<b><i>Respiratory Infections</i></b>	This could indicate that there are coding or billing errors related to over-coding for DRGs 177 or 178. A sample of medical records for these DRGs should be reviewed to determine whether coding errors exist. Hospitals may generate data profiles to identify cases with principal diagnosis codes of 507.x (aspiration pneumonia), 482.83 (pneumonia due to other gram negative pneumonia), or 482.89 (pneumonia due to other specified bacteria) to ensure that documentation supports the principal diagnosis.	This could indicate that there are coding or billing errors related to under-coding for DRGs 177 or 178. A sample of medical records for other DRGs, such as DRGs 179, 193, 194 or 195 should be reviewed to determine whether coding errors exist. Remember that a diagnosis of pneumonia must be determined by the physician. A coder should not code based on a laboratory or radiological finding without seeking clarification from the physician.

TARGET AREA	SUGGESTED INTERVENTIONS FOR HIGH OUTLIERS (IF AT/ABOVE 80 <sup>TH</sup> PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20 <sup>TH</sup> PERCENTILE)
<b><i>Simple Pneumonia</i></b>	This could indicate that there are coding or billing errors related to DRGs 193 or 194. A sample of medical records for these DRGs should be reviewed to determine whether coding errors exist. Hospitals should ensure documentation supports the principal diagnosis.	This could indicate that there are coding or billing errors related to under-coding for DRGs 193 or 194. A sample of medical records for other DRGs, such as DRGs 177, 178, and 189 (pulmonary edema and respiratory failure) should be reviewed to determine whether coding errors exist. Remember that a diagnosis of pneumonia must be determined by the physician. A coder should not code based on a laboratory or radiological finding without seeking clarification from the physician.
<b><i>Septicemia</i></b>	This could indicate that there are coding or billing errors related to over-coding of DRGs 870, 871, or 872. A sample of medical records for these DRGs should be reviewed to determine whether coding errors exist. Hospitals may generate data profiles to identify cases with a principal ICD-10-CM code A41.9 (unspecified septicemia) to ensure documentation supports the principal diagnosis.	This could indicate that there are coding or billing errors related to under-coding of DRGs 870, 871, or 872. A sample of medical records for other DRGs, such as DRGs 689, 690, 193, 194, 195, 207, and 208 should be reviewed to determine whether coding errors exist. Remember that a diagnosis of septicemia/sepsis must be determined by the physician. A coder should not code based on a laboratory finding without seeking clarification from the physician. Note: There is no ICD-10-CM code for urosepsis.
<b><i>Medical DRGs with CC or MCC</i></b>  <b><i>Surgical DRGs with CC or MCC</i></b>  <b><i>Single CC or MCC</i></b>	This could indicate that there are coding or billing errors related to over-coding due to unsubstantiated CCs or MCCs. A sample of medical records for medical and/or surgical DRGs with CCs or MCCs should be reviewed to determine whether coding errors exist. Hospitals may generate data profiles to identify proportions of their CCs or MCCs to determine if there are any particular medical and/or surgical DRGs on which to focus. Remember that a diagnosis of a CC or MCC must be determined by the physician. A coder should not code based on laboratory or radiological findings without seeking physician determination of the clinical significance of the abnormal finding. If particular diagnoses are found to be problematic, provide education. Note: As of Oct. 1, 2015, a principal diagnosis can also be a CC or MCC. Principal and secondary diagnosis codes should be reviewed to determine whether they are a CC/MCC.	This could indicate that there are coding or billing errors related to under-coding for CCs or MCCs. A sample of medical records for medical and/or surgical DRGs without a CC or MCC should be reviewed to determine whether coding errors exist. Remember that in order for a diagnosis to be coded as a CC or MCC, it must be substantiated by documentation. A coder should not code based on laboratory or radiological findings without seeking physician determination of the clinical significance of the abnormal finding. Consider whether the use of a physician query would have substantiated a CC or MCC. Note: As of Oct. 1, 2015, a principal diagnosis can also be a CC or MCC. Principal and secondary diagnosis codes should be reviewed to determine whether they are a CC/MCC.

TARGET AREA	SUGGESTED INTERVENTIONS FOR HIGH OUTLIERS (IF AT/ABOVE 80 <sup>TH</sup> PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20 <sup>TH</sup> PERCENTILE)
<b><i>Chronic Obstructive Pulmonary Disease</i></b>	This could indicate that there are unnecessary admissions related to failure to use outpatient observation or inappropriate use of admission screening criteria associated with DRGs 190, 191, or 192. A sample of medical records for these DRGs should be reviewed to determine whether inpatient admission was necessary or if care could have been provided more efficiently on an outpatient basis (e.g., outpatient observation). Note: These DRGs are also vulnerable to coding errors.	Not applicable; this is an admission-necessity focused target area.
<b><i>Three-Day Skilled Nursing Facility-Qualifying Admissions</i></b>	This could indicate that there are admission necessity issues related to unnecessary admissions to qualify patients for a SNF admission. A sample of medical records with three-day lengths of stay and patient discharge status codes of “03,” “83,” “61” or “89” should be reviewed to determine whether the admission was necessary.	Not applicable; this is an admission-necessity focused target area.
<b><i>Swing Bed Transfers</i></b>	This could indicate there are admission necessity issues related to unnecessary admissions to qualify patients for a swing bed admission. A sample of medical records with three- or four-day lengths of stay and patient discharge status code of “61” or “89” should be reviewed to determine whether the admission was necessary.	Not applicable; this is an admission-necessity focused target area.

TARGET AREA	SUGGESTED INTERVENTIONS FOR HIGH OUTLIERS (IF AT/ABOVE 80 <sup>TH</sup> PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20 <sup>TH</sup> PERCENTILE)
<p><b><i>30-Day Readmissions to Same Hospital or Elsewhere</i></b></p> <p><b><i>30-Day Readmissions to Same Hospital</i></b></p>	<p>A sample of readmission cases should be reviewed to identify appropriateness of admission, discharge, quality of care, DRG assignment, or identify billing errors. The hospital is encouraged to generate data profiles for readmissions, such as patients readmitted the same day or next day after discharge. Suggested data elements to include in these profiles are as follows: patient identifier, date of admission, date of discharge, patient discharge status code, principal and secondary diagnoses, procedure code(s), and DRG. Evaluate these profiles for the following indications of potential improper payments:</p> <ul style="list-style-type: none"> <li>• Patients discharged home (patient discharge status code 01) and readmitted the same or next day may indicate a potential premature discharge or incomplete care.</li> <li>• Patients readmitted for the same principal diagnosis as the first admission may indicate a potential premature discharge or incomplete care.</li> </ul> <p>Hospitals that have exempt units (i.e., swing beds, rehabilitation units, or psychiatric units) should verify that the correct provider number was billed (exempt unit number vs. acute care number) for same-day readmissions. The second admission to an exempt unit should be billed to the exempt unit number, whereas a readmission for acute care should be billed to the acute care number. There is a high probability of billing error when the following patient discharge status codes are billed on the first admission of a same-day readmission to the same hospital: 03, 83, 61, or 89.</p>	<p>Not applicable; these are admission-necessity focused target areas.</p>

TARGET AREA	SUGGESTED INTERVENTIONS FOR HIGH OUTLIERS (IF AT/ABOVE 80 <sup>TH</sup> PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20 <sup>TH</sup> PERCENTILE)
<p><i>Both two-day stay target areas:</i></p> <p><b><i>Two-Day Stays for Medical DRGs</i></b></p> <p><b><i>Two-Day Stays for Surgical DRGs</i></b></p>	<p>This could indicate that there are unnecessary admissions related to inappropriate use of admission screening criteria or outpatient observation. A sample of two-day stay cases should be reviewed to determine whether inpatient admission was necessary or if care could have been provided more efficiently on an outpatient basis (e.g., outpatient observation). Hospitals may generate data profiles to identify two-day stays sorted by DRG, physician, or admission source to assist in identification of any patterns related to increasing two-day stays.</p>	<p>Not applicable; these are admission-necessity focused target areas.</p>
<p><i>Both one-day stay target areas:</i></p> <p><b><i>One-Day Stays for Medical DRGs</i></b></p> <p><b><i>One-Day Stays for Surgical DRGs</i></b></p>	<p>This could indicate that there are unnecessary admissions related to inappropriate use of admission screening criteria or outpatient observation. A sample of one-day stay cases should be reviewed to determine whether inpatient admission was necessary or if care could have been provided more efficiently on an outpatient basis (e.g., outpatient observation). Hospitals may generate data profiles to identify one-day stays sorted by DRG, physician, or admission source to assist in identification of any patterns related to one-day stays. Hospitals may also wish to identify whether patients admitted for one-day stays were treated in outpatient, outpatient observation, or the emergency department for one or more nights prior to the inpatient admission. Hospitals should not review one-day stays that are associated with procedures designated by CMS as “inpatient only.”</p>	<p>Not applicable; these are admission-necessity focused target areas.</p>

Comparative data for several consecutive fiscal years can be used to help identify whether the hospital’s target area percents changed significantly in either direction from one year to the next. This could be an indication of a procedural change in admitting, coding or billing practices, staff turnover, or a change in medical staff.

## Using PEPPER

### Compare Targets Report

Hospitals can use the Compare Targets Report to help prioritize areas for auditing and monitoring. The Compare Targets Report includes all target areas with reportable data for the most recent fiscal year included in PEPPER. For each target area, the Compare Targets Report displays the hospital's number of target discharges, percent, percentiles as compared to the nation, jurisdiction, and state, and the "Sum of Payments."

The hospital's outlier status is indicated by the color of the target area percent on the Compare Targets Report. When the hospital is a high outlier for a target area, the hospital percent is printed in **red bold**. When the hospital is a low outlier (for coding-focused target areas only), the hospital percent is printed in *green italics*. When the hospital is not an outlier, the hospital's percent is printed in black. *CAH PEPPER* identifies outliers as compared to all hospitals in the nation.

The Compare Targets Report provides the hospital's percentile value for the nation, jurisdiction, and state for all target areas with reportable data in the most recent year. The percentile value allows a hospital to judge how its target area percent compares to all hospitals in each respective comparison group.

The hospital's national percentile indicates the percentage of all other hospitals in the nation that have a target area percent less than the hospital's target area percent.

The hospital's jurisdiction percentile indicates the percentage of all other hospitals in the jurisdiction that have a target area percent less than the hospital's target area percent. The jurisdiction percentile will be blank if there are fewer than 11 hospitals with reportable data for the target area in the jurisdiction.

The hospital's state percentile indicates the percentage of all other hospitals in the state that have a target area percent less than the hospital's target area percent. The state percentile will be blank if there are fewer than 11 hospitals with reportable data for the target area in the state.

For more information about how percents differ from percentiles, see the CAH "Training and Resources" section on [PEPPER.CBRPEPPER.org](http://PEPPER.CBRPEPPER.org) for a short slide presentation with visuals to assist in the understanding of these terms.

When interpreting the Compare Targets Report findings, hospitals should consider their target area percentile values for the nation, jurisdiction, and state. Percentile values at or above the 80<sup>th</sup> percentile (for all target areas) or at or below the 20<sup>th</sup> percentile (for coding-focused target areas) indicate that the hospital is an outlier. Outlier status should be evaluated in the following priority order: 1) nation, 2) jurisdiction, and 3) state. If a hospital is an outlier for the nation (i.e., as compared to all hospitals in the nation), this should be interpreted as the highest priority. If a hospital is an outlier for its jurisdiction (i.e., as compared to all CAHs in its jurisdiction), this is somewhat of a lower priority. Lastly, if a hospital is an outlier for its state (i.e., as compared to all CAHs in its state), this would be the lowest priority; the state has the smallest comparison group.



The “Sum of Payments” can also be used to help prioritize areas for review. For example, the Compare Targets Report may show that the *Septicemia* target area has the highest “Sum of Payments,” but the hospital’s percent is at the 80<sup>th</sup> percentile as compared to the jurisdiction and at the 65<sup>th</sup> percentile as compared to the nation. The *Swing Bed Transfers* target area may have a smaller “Sum of Payments,” but it could still be at the 80<sup>th</sup> percentile for the jurisdiction and 90<sup>th</sup> percentile for the nation. In this scenario, the *Swing Bed Transfers* target area might be given priority.

## Target Area Reports

PEPPER Target Area Reports display a variety of statistics for each target area summarized over three fiscal years. Each report includes a target area graph, a target area data table, comparative data, interpretive guidance, and suggested interventions.

### Target Area Graph

Each report includes a target area graph, which provides a visual representation of the hospital’s target area percent over three fiscal years. The hospital’s data is represented on the graph in bar format; each bar

**Navigate through PEPPER by clicking on the worksheet tabs at the bottom of the screen.** Each tab is labeled to identify the contents of each worksheet (e.g., Target Area Reports, Compare Targets Report).

represents a fiscal year. Hospitals can identify significant changes from one year to the next, which could be a result of changes in the medical staff, coding staff, utilization review processes, or hospital services. Hospitals are encouraged to identify root causes of major changes to ensure that improper payments are prevented.

The graph includes trend lines for the percents that are at the 80<sup>th</sup> percentile (and the 20<sup>th</sup> percentile for coding-focused target areas) for the three comparison groups (i.e., nation, jurisdiction, and state) so the hospital can easily identify when it is an outlier as compared to any of these comparison groups. A table of these percents called “Comparative Data” is included under the hospital’s data table. For more information about how percents differ from percentiles, see the CAH “Training and Resources” section on [PEPPER.CBRPEPPER.org](http://PEPPER.CBRPEPPER.org) for a short slide presentation with visuals to assist in the understanding of these terms.

For each time period, a hospital’s data will not be displayed in the graph if the numerator for the target area is less than 11. This is due to data use restrictions established by CMS, which came into effect with the January 2010 release of PEPPER. If there are fewer than 11 hospitals with reportable data in a state, there will not be a trend line for the state comparison group in the graph. If there are fewer than 11 hospitals with reportable data in a jurisdiction, there will not be a trend line for the jurisdiction comparison group in the graph.

### Target Area Data Table

PEPPER Target Area Reports also include a data table. Statistics in each data table include the total numerator count of discharges for the target area (target area discharge count), the denominator count of discharges, the proportion of the numerator and denominator (percent), the ALOS, and Medicare payment data. The hospital’s percent will be shown in **red bold print** if it is at or above the national 80<sup>th</sup> percentile (high outlier); for coding-focused target areas, it will be shown in *green italics* if it is at or below the

national 20<sup>th</sup> percentile (low outlier) (see “Percentile” in the Glossary, page 18). For each time period, a hospital’s data will not be displayed if the numerator for the target area is less than 11.

### **Comparative Data Table**

The comparative data table provides the target area percents that are at the 80<sup>th</sup> and 20<sup>th</sup> percentiles (for coding-focused areas only) for the three comparison groups: the nation, jurisdiction, and state. These are the percent values that are graphed as trend lines on the target area graph. State percentiles are zero when there are fewer than 11 hospitals with reportable data in the state. Jurisdiction percentiles are zero when there are fewer than 11 hospitals with reportable data in the jurisdiction.

### **Interpretive Guidance and Suggested Interventions**

Interpretive guidance is included on the Target Area Report (below the graph) to assist hospitals in considering whether they should audit a sample of records. Suggested interventions tailored to each target area are also included at the bottom of each Target Area Report.

### **Hospital Top DRGs Report**

The Hospital Top DRGs Report lists the top DRGs by volume of discharges for your hospital in the most recent fiscal year. It includes the total hospital discharges for each of the top DRGs listed, the proportion of discharges for each DRG to total discharges, and the average hospital LOS for each DRG. Please note that this report is limited to the top DRGs (up to 20) for which there are a total of at least 11 discharges (for the respective DRG) during the most recent fiscal year.

### **Jurisdiction-Wide Top DRGs Report**

The Jurisdiction-Wide Top DRGs Report lists the top DRGs by volume of discharges for all hospitals in the jurisdiction in the most recent fiscal year. It includes the total jurisdiction-wide discharges for each of the top DRGs listed, the proportion of discharges for each DRG to total discharges, the jurisdiction ALOS for each DRG, and the national ALOS for each DRG. Please note that this report is limited to displaying the top DRGs (up to 20) for which there are a total of at least 11 discharges during the most recent fiscal year.

### **System Requirements, Customer Support, and Technical Assistance**

PEPPER is a Microsoft Excel workbook that can be opened and saved to a PC. It is not intended for use on a network, but it may be saved to as many PCs as necessary.

For help using PEPPER, please submit a request for assistance at [PEPPER.CBRPEPPER.org](http://PEPPER.CBRPEPPER.org) by clicking on the “Help/Contact Us” tab. This website also contains many educational resources to assist hospitals with PEPPER in the CAH “Training and Resources” section.

Please do **not** contact your Medicare Quality Improvement Organization or any other association for assistance with PEPPER, as these organizations are not involved in the production or distribution of PEPPER.

## Glossary

TERM	DESCRIPTION
<b>Average Length of Stay</b>	The average length of stay (ALOS) is calculated as an arithmetic mean. It is computed by dividing the total number of hospital (or inpatient) days by the total number of discharges within the time period. For the <i>30-Day Readmissions to Same Hospital or Elsewhere</i> and the <i>30-Day Readmissions to Same Hospital</i> target areas, the ALOS is calculated using the first (index) admission's LOS, not the second (readmission) admission's LOS.
<b>Data Table</b>	The statistical findings for a hospital are presented in tabular form, labeled by time period and indicator.
<b>Fiscal Year</b>	For Medicare data, the fiscal year starts on Oct. 1 and ends on Sept. 30.
<b>Graph</b>	In PEPPER, a graph shows a hospital's percentages for the previous three years. The hospital's percentages are compared to the 80 <sup>th</sup> percentiles for the nation, jurisdiction, and state or all target areas, in addition to the 20 <sup>th</sup> percentiles for the nation, jurisdiction, and state for coding-focused target areas. <i>See Percentile.</i>
<b>Length of Stay</b>	The length of stay (LOS) for an individual discharge is determined by subtracting the date of admission (i.e., admission date) from the date of discharge (i.e., through date). If the dates of admission and discharge fall on the same day, the LOS equals one day.
<b>Outlier</b>	In <i>CAH PEPPER</i> , hospitals are identified as an outlier if their target area percent is at or above the national 80 <sup>th</sup> percentile (high outlier) or at or below the national 20 <sup>th</sup> percentile (low outlier) for coding-focused target areas.
<b>Percentile</b>	<p>In PEPPER, the percentile represents the percent of hospitals in the comparison group below which a given hospital's percent value ranks. It is a number that corresponds to one of 100 equal divisions of a range of values in a group. The percentile represents the hospital's position in the group compared to all other hospitals in the comparison group for that target area and time period. For example, suppose a hospital has a target area percent of 2.3 and 80% of the hospitals in the comparison group have a percent for that target area that is less than 2.3. Then we can say the hospital is at the 80<sup>th</sup> percentile.</p> <p>Percentiles in PEPPER are calculated from the hospitals' percents so that each hospital percent can be compared to the statewide, jurisdiction-wide, or nationwide distribution of hospital percents.</p> <p>For more information about how percents differ from percentiles, please see the CAH "Training and Resources" page on <a href="http://PEPPER.CBRPEPPER.org">PEPPER.CBRPEPPER.org</a> for a short slide presentation with visuals to assist in the understanding of these terms.</p>

## Acronyms and Abbreviations

ACRONYM/ ABBREVIATION	ACRONYM/ABBREVIATION DEFINITION
ALOS	The average length of stay (ALOS) is calculated as an arithmetic average or mean. It is computed by dividing the total number of hospital (or inpatient) days by the total number of discharges within a given time period.
CAH	Critical access hospital (CAH)
CC	Complication or comorbidity (CC). Patients who are more seriously ill tend to require more hospital resources than patients who are less seriously ill, even though they are admitted to the hospital for the same reason. Recognizing this, the DRG manual splits certain DRGs based on the presence of secondary diagnoses for specific complications or comorbidities.
CMS	The Centers for Medicare & Medicaid Services (CMS) is the federal agency responsible for oversight of Medicare and Medicaid. CMS is a division of the U.S. Department of Health and Human Services.
CCS	Clinical Classification Software (CCS)
CVA	Cerebrovascular accident (CVA)
DRG	The diagnosis-related group (DRG) is a system that was developed for Medicare in 1980 (it became effective in 1983) as part of the PPS to classify hospital cases expected to have similar hospital resource use.
DS	Used in conjunction with <i>CAH PEPPER</i> one- and two-day stay (DS) target areas.
ECMO	Extracorporeal membrane oxygenation (ECMO)
FATHOM	First-Look Analysis Tool for Hospital Outlier Monitoring (FATHOM) is a Microsoft Access application. It was designed to help MACs compare providers in areas at risk for improper payment using Medicare administrative claims data. FATHOM produces PEPPER.
FI	Fiscal intermediary (FI)
FY	Fiscal year (FY). The Medicare federal fiscal year begins on Oct. 1 and ends on Sept. 30.
ICD-10-CM	International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM)
IPPS	The inpatient prospective payment system (IPPS) sets forth a system of reimbursement for the operating costs of acute care hospital inpatient stays under Medicare Part A (Hospital Insurance) based on prospectively set rates.
LOS	Length of stay (LOS)
MAC	The Medicare Administrative Contractor (MAC) is the contracting authority that replaced the FI and carrier in performing Medicare Fee-for-Service claims processing activities.

ACRONYM/ ABBREVIATION	ACRONYM/ABBREVIATION DEFINITION
MCC	Major complication or comorbidity (MCC): Before the introduction of MS-DRG system version 25, many CMS-DRG classifications were “paired” to reflect the presence of CCs. A significant refinement of version 25 was to replace this pairing, in many instances, with a design that created a tiered system of the absence of CCs, the presence of CCs, and a higher level of presence of MCCs. As a result of this change, the historical list of diagnoses that qualified for membership on the CC list was substantially re-defined and replaced with a new standard CC list and a new MCC list.
MS-DRG	Medicare-Severity Diagnosis-Related Groups (MS-DRGs)
OIG	Office of Inspector General (OIG)
PEPPER	Program for Evaluating Payment Patterns Electronic Report (PEPPER) is an electronic data report in Microsoft Excel format that contains a single hospital’s claims data statistics for DRGs and discharges that are at high risk for improper payments due to billing, coding and/or admission necessity issues.
PPS	Prospective payment system (PPS)
RAC	Recovery Audit Contractor (RAC)
SNF	Skilled nursing facility (SNF)
UB-04	Standard uniform bill used by health care providers to submit claims for services. Claims for Medicare reimbursement are submitted to the provider’s MAC.

## Appendix 1: DRG Listing for the Medical DRGs with CC or MCC Target Area (FY 2020)

<u>DRG</u>	<u>Description</u>
052	Spinal disorders & injuries w CC or MCC
053	Spinal disorders & injuries w/o CC or MCC
054	Nervous system neoplasms w MCC
055	Nervous system neoplasms w/o MCC
056	Degenerative nervous system disorders w MCC
057	Degenerative nervous system disorders w/o MCC
058	Multiple sclerosis & cerebellar ataxia w MCC
059	Multiple sclerosis & cerebellar ataxia w CC
060	Multiple sclerosis & cerebellar ataxia w/o CC or MCC
061	Ischemic stroke, precerebral occlusion or transient ischemia w thrombolytic agent w MCC
062	Ischemic stroke, precerebral occlusion or transient ischemia w thrombolytic agent w CC
063	Ischemic stroke, precerebral occlusion or transient ischemia w thrombolytic agent w/o CC or MCC
064	Intracranial hemorrhage or cerebral infarction w MCC
066	Intracranial hemorrhage or cerebral infarction w/o CC or MCC
067	Nonspecific CVA & precerebral occlusion w/o infarct w MCC
068	Nonspecific CVA & precerebral occlusion w/o infarct w/o MCC
070	Nonspecific cerebrovascular disorders w MCC
071	Nonspecific cerebrovascular disorders w CC
072	Nonspecific cerebrovascular disorders w/o CC or MCC
073	Cranial & peripheral nerve disorders w MCC
074	Cranial & peripheral nerve disorders w/o MCC
075	Viral meningitis w CC or MCC
076	Viral meningitis w/o CC or MCC
077	Hypertensive encephalopathy w MCC
078	Hypertensive encephalopathy w CC
079	Hypertensive encephalopathy w/o CC or MCC
080	Nontraumatic stupor & coma w MCC
081	Nontraumatic stupor & coma w/o MCC
082	Traumatic stupor & coma, coma > 1 hr w MCC
083	Traumatic stupor & coma, coma > 1 hr w CC
084	Traumatic stupor & coma, coma > 1 hr w/o CC or MCC
085	Traumatic stupor & coma, coma < 1 hr w MCC
086	Traumatic stupor & coma, coma < 1 hr w CC
087	Traumatic stupor & coma, coma < 1 hr w/o CC or MCC
088	Concussion w MCC
089	Concussion w CC
090	Concussion w/o CC or MCC
091	Other disorders of nervous system w MCC
092	Other disorders of nervous system w CC
093	Other disorders of nervous system w/o CC or MCC
094	Bacterial & tuberculous infections of nervous system w MCC
095	Bacterial & tuberculous infections of nervous system w CC
096	Bacterial & tuberculous infections of nervous system w/o CC or MCC
097	Non-bacterial infect of nervous sys exc viral meningitis w MCC
098	Non-bacterial infect of nervous sys exc viral meningitis w CC
099	Non-bacterial infect of nervous sys exc viral meningitis w/o CC or MCC
100	Seizures w MCC
101	Seizures w/o MCC
102	Headaches w MCC

<u>DRG</u>	<u>Description</u>
103	Headaches w/o MCC
121	Acute major eye infections w CC or MCC
122	Acute major eye infections w/o CC or MCC
124	Other disorders of the eye w MCC
125	Other disorders of the eye w/o MCC
146	Ear, nose, mouth & throat malignancy w MCC
147	Ear, nose, mouth & throat malignancy w CC
148	Ear, nose, mouth & throat malignancy w/o CC or MCC
150	Epistaxis w MCC
151	Epistaxis w/o MCC
152	Otitis media & URI w MCC
153	Otitis media & URI w/o MCC
154	Other ear, nose, mouth & throat diagnoses w MCC
155	Other ear, nose, mouth & throat diagnoses w CC
156	Other ear, nose, mouth & throat diagnoses w/o CC or MCC
157	Dental & Oral Diseases w MCC
158	Dental & Oral Diseases w CC
159	Dental & Oral Diseases w/o CC or MCC
175	Pulmonary embolism w MCC
176	Pulmonary embolism w/o MCC
177	Respiratory infections & inflammations w MCC
178	Respiratory infections & inflammations w CC
179	Respiratory infections & inflammations w/o CC or MCC
180	Respiratory neoplasms w MCC
181	Respiratory neoplasms w CC
182	Respiratory neoplasms w/o CC or MCC
183	Major chest trauma w MCC
184	Major chest trauma w CC
185	Major chest trauma w/o CC or MCC
186	Pleural effusion w MCC
187	Pleural effusion w CC
188	Pleural effusion w/o CC or MCC
190	Chronic obstructive pulmonary disease w MCC
191	Chronic obstructive pulmonary disease w CC
192	Chronic obstructive pulmonary disease w/o CC or MCC
193	Simple pneumonia & pleurisy w MCC
194	Simple pneumonia & pleurisy w CC
195	Simple pneumonia & pleurisy w/o CC or MCC
196	Interstitial lung disease w MCC
197	Interstitial lung disease w CC
198	Interstitial lung disease w/o CC or MCC
199	Pneumothorax w MCC
200	Pneumothorax w CC
201	Pneumothorax w/o CC or MCC
202	Bronchitis & asthma w CC or MCC
203	Bronchitis & asthma w/o CC or MCC
205	Other respiratory system diagnoses w MCC
206	Other respiratory system diagnoses w/o MCC
280	Acute myocardial infarction, discharged alive w MCC
281	Acute myocardial infarction, discharged alive w CC
282	Acute myocardial infarction, discharged alive w/o CC or MCC

<u>DRG</u>	<u>Description</u>
283	Acute myocardial infarction, expired w MCC
284	Acute myocardial infarction, expired w CC
285	Acute myocardial infarction, expired w/o CC or MCC
286	Circulatory disorders except AMI, w card cath w MCC
287	Circulatory disorders except AMI, w card cath w/o MCC
288	Acute & subacute endocarditis w MCC
289	Acute & subacute endocarditis w CC
290	Acute & subacute endocarditis w/o CC or MCC
291	Heart failure & shock w MCC
292	Heart failure & shock w CC
293	Heart failure & shock w/o CC or MCC
294	Deep vein thrombophlebitis w CC or MCC
295	Deep vein thrombophlebitis w/o CC or MCC
296	Cardiac arrest, unexplained w MCC
297	Cardiac arrest, unexplained w CC
298	Cardiac arrest, unexplained w/o CC or MCC
299	Peripheral vascular disorders w MCC
300	Peripheral vascular disorders w CC
301	Peripheral vascular disorders w/o CC or MCC
302	Atherosclerosis w MCC
303	Atherosclerosis w/o MCC
304	Hypertension w MCC
305	Hypertension w/o MCC
306	Cardiac congenital & valvular disorders w MCC
307	Cardiac congenital & valvular disorders w/o MCC
308	Cardiac arrhythmia & conduction disorders w MCC
309	Cardiac arrhythmia & conduction disorders w CC
310	Cardiac arrhythmia & conduction disorders w/o CC or MCC
314	Other circulatory system diagnoses w MCC
315	Other circulatory system diagnoses w CC
316	Other circulatory system diagnoses w/o CC or MCC
368	Major esophageal disorders w MCC
369	Major esophageal disorders w CC
370	Major esophageal disorders w/o CC or MCC
371	Major gastrointestinal disorders & peritoneal infections w MCC
372	Major gastrointestinal disorders & peritoneal infections w CC
373	Major gastrointestinal disorders & peritoneal infections w/o CC or MCC
374	Digestive malignancy w MCC
375	Digestive malignancy w CC
376	Digestive malignancy w/o CC or MCC
377	G.I. hemorrhage w MCC
378	G.I. hemorrhage w CC
379	G.I. hemorrhage w/o CC or MCC
380	Complicated peptic ulcer w MCC
381	Complicated peptic ulcer w CC
382	Complicated peptic ulcer w/o CC or MCC
383	Uncomplicated peptic ulcer w MCC
384	Uncomplicated peptic ulcer w/o MCC
385	Inflammatory bowel disease w MCC
386	Inflammatory bowel disease w CC
387	Inflammatory bowel disease w/o CC or MCC



<u>DRG</u>	<u>Description</u>
388	G.I. obstruction w MCC
389	G.I. obstruction w CC
390	G.I. obstruction w/o CC or MCC
391	Esophagitis, gastroent & misc digest disorders w MCC
392	Esophagitis, gastroent & misc digest disorders w/o MCC
393	Other digestive system diagnoses w MCC
394	Other digestive system diagnoses w CC
395	Other digestive system diagnoses w/o CC or MCC
432	Cirrhosis & alcoholic hepatitis w MCC
433	Cirrhosis & alcoholic hepatitis w CC
434	Cirrhosis & alcoholic hepatitis w/o CC or MCC
435	Malignancy of hepatobiliary system or pancreas w MCC
436	Malignancy of hepatobiliary system or pancreas w CC
437	Malignancy of hepatobiliary system or pancreas w/o CC or MCC
438	Disorders of pancreas except malignancy w MCC
439	Disorders of pancreas except malignancy w CC
440	Disorders of pancreas except malignancy w/o CC or MCC
441	Disorders of liver except malig, cirr ,alc hepa w MCC
442	Disorders of liver except malig, cirr ,alc hepa w CC
443	Disorders of liver except malig, cirr, alc hepa w/o CC or MCC
444	Disorders of the biliary tract w MCC
445	Disorders of the biliary tract w CC
446	Disorders of the biliary tract w/o CC or MCC
533	Fractures of femur w MCC
534	Fractures of femur w/o MCC
535	Fractures of hip & pelvis w MCC
536	Fractures of hip & pelvis w/o MCC
537	Sprains, strains, & dislocations of hip, pelvis & thigh w CC or MCC
538	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC or MCC
539	Osteomyelitis w MCC
540	Osteomyelitis w CC
541	Osteomyelitis w/o CC or MCC
542	Pathological fractures & musculoskelet & conn tiss malig w MCC
543	Pathological fractures & musculoskelet & conn tiss malig w CC
544	Pathological fractures & musculoskelet & conn tiss malig w/o CC or MCC
545	Connective tissue disorders w MCC
546	Connective tissue disorders w CC
547	Connective tissue disorders w/o CC or MCC
548	Septic arthritis w MCC
549	Septic arthritis w CC
550	Septic arthritis w/o CC or MCC
551	Medical back problems w MCC
552	Medical back problems w/o MCC
553	Bone diseases & arthropathies w MCC
554	Bone diseases & arthropathies w/o MCC
555	Signs & symptoms of musculoskeletal system & conn tissue w MCC
556	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC
557	Tendonitis, myositis & bursitis w MCC
558	Tendonitis, myositis & bursitis w/o MCC
559	Aftercare, musculoskeletal system & connective tissue w MCC
560	Aftercare, musculoskeletal system & connective tissue w CC

<u>DRG</u>	<u>Description</u>
561	Aftercare, musculoskeletal system & connective tissue w/o CC or MCC
562	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC
563	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC
564	Other musculoskeletal sys & connective tissue diagnoses w MCC
565	Other musculoskeletal sys & connective tissue diagnoses w CC
566	Other musculoskeletal sys & connective tissue diagnoses w/o CC or MCC
592	Skin ulcers w MCC
593	Skin ulcers w CC
594	Skin ulcers w/o CC or MCC
595	Major skin disorders w MCC
596	Major skin disorders w/o MCC
597	Malignant breast disorders w MCC
598	Malignant breast disorders w CC
599	Malignant breast disorders w/o CC or MCC
600	Non-malignant breast disorders w CC or MCC
601	Non-malignant breast disorders w/o CC or MCC
602	Cellulitis w MCC
603	Cellulitis w/o MCC
604	Trauma to the skin, subcut tiss & breast w MCC
605	Trauma to the skin, subcut tiss & breast w/o MCC
606	Minor skin disorders w MCC
607	Minor skin disorders w/o MCC
637	Diabetes w MCC
638	Diabetes w CC
639	Diabetes w/o CC or MCC
640	Nutritional & misc metabolic disorders w MCC
641	Nutritional & misc metabolic disorders w/o MCC
643	Endocrine disorders w MCC
644	Endocrine disorders w CC
645	Endocrine disorders w/o CC or MCC
682	Renal failure w MCC
683	Renal failure w CC
684	Renal failure w/o CC or MCC
686	Kidney & urinary tract neoplasms w MCC
687	Kidney & urinary tract neoplasms w CC
688	Kidney & urinary tract neoplasms w/o CC or MCC
689	Kidney & urinary tract infections w MCC
690	Kidney & urinary tract infections w/o MCC
693	Urinary stones w/o ESW lithotripsy w MCC
694	Urinary stones w/o ESW lithotripsy w/o MCC
695	Kidney & urinary tract signs & symptoms w MCC
696	Kidney & urinary tract signs & symptoms w/o MCC
698	Other kidney & urinary tract diagnoses w MCC
699	Other kidney & urinary tract diagnoses w CC
700	Other kidney & urinary tract diagnoses w/o CC or MCC
722	Malignancy, male reproductive system w MCC
723	Malignancy, male reproductive system w CC
724	Malignancy, male reproductive system w/o CC or MCC
725	Benign prostatic hypertrophy w MCC
726	Benign prostatic hypertrophy w/o MCC
727	Inflammation of the male reproductive system w MCC

<u>DRG</u>	<u>Description</u>
728	Inflammation of the male reproductive system w/o MCC
729	Other male reproductive system diagnoses w CC or MCC
730	Other male reproductive system diagnoses w/o CC or MCC
754	Malignancy, female reproductive system w MCC
755	Malignancy, female reproductive system w CC
756	Malignancy, female reproductive system w/o CC or MCC
757	Infections, female reproductive system w MCC
758	Infections, female reproductive system w CC
759	Infections, female reproductive system w/o CC or MCC
760	Menstrual & other female reproductive system disorders w CC or MCC
761	Menstrual & other female reproductive system disorders w/o CC or MCC
808	Major hematom/immun diag exc sickle cell crisis & coagul w MCC
809	Major hematom/immun diag exc sickle cell crisis & coagul w CC
810	Major hematom/immun diag exc sickle cell crisis & coagul w/o CC or MCC
811	Red blood cell disorders w MCC
812	Red blood cell disorders w/o MCC
814	Reticuloendothelial & immunity disorders w MCC
815	Reticuloendothelial & immunity disorders w CC
816	Reticuloendothelial & immunity disorders w/o CC or MCC
834	Acute leukemia w/o major O.R. procedure w MCC
835	Acute leukemia w/o major O.R. procedure w CC
836	Acute leukemia w/o major O.R. procedure w/o CC or MCC
839	Chemo w acute leukemia as sdx w/o CC or MCC
840	Lymphoma & non-acute leukemia w MCC
841	Lymphoma & non-acute leukemia w CC
842	Lymphoma & non-acute leukemia w/o CC or MCC
843	Other myeloprolif dis or poorly diff neopl diag w MCC
844	Other myeloprolif dis or poorly diff neopl diag w CC
845	Other myeloprolif dis or poorly diff neopl diag w/o CC or MCC
846	Chemotherapy w/o acute leukemia as secondary diagnosis w MCC
847	Chemotherapy w/o acute leukemia as secondary diagnosis w CC
848	Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC or MCC
862	Postoperative & post-traumatic infections w MCC
863	Postoperative & post-traumatic infections w/o MCC
865	Viral illness w MCC
866	Viral illness w/o MCC
867	Other infectious & parasitic diseases diagnoses w MCC
868	Other infectious & parasitic diseases diagnoses w CC
869	Other infectious & parasitic diseases diagnoses w/o CC or MCC
871	Septicemia or severe sepsis w/o MV >96 hours w MCC
872	Septicemia or severe sepsis w/o MV >96 hours w/o MCC
896	Alcohol/drug abuse or dependence w/o rehabilitation therapy w MCC
897	Alcohol/drug abuse or dependence w/o rehabilitation therapy w/o MCC
913	Traumatic injury w MCC
914	Traumatic injury w/o MCC
915	Allergic reactions w MCC
916	Allergic reactions w/o MCC
917	Poisoning & toxic effects of drugs w MCC
918	Poisoning & toxic effects of drugs w/o MCC
919	Complications of treatment w MCC
920	Complications of treatment w CC

<u>DRG</u>	<u>Description</u>
921	Complications of treatment w/o CC or MCC
922	Other injury, poisoning & toxic effect diag w MCC
923	Other injury, poisoning & toxic effect diag w/o MCC
945	Rehabilitation w CC or MCC
946	Rehabilitation w/o CC or MCC
947	Signs & symptoms w MCC
948	Signs & symptoms w/o MCC
949	Aftercare w CC or MCC
950	Aftercare w/o CC or MCC
963	Other multiple significant trauma w MCC
964	Other multiple significant trauma w CC
965	Other multiple significant trauma w/o CC or MCC
974	HIV w major related condition w MCC
975	HIV w major related condition w CC
976	HIV w major related condition w/o CC or MCC

## Appendix 2: DRG Listing for the Surgical DRGs with CC or MCC Target Area (FY 2020)

DRG	Description
001	Heart transplant or implant of heart assist system w MCC
002	Heart transplant or implant of heart assist system w/o MCC
006	Liver transplant w/o MCC
011	Tracheostomy for face, mouth & neck diagnoses or laryngectomy w MCC
012	Tracheostomy for face, mouth & neck diagnoses or laryngectomy w CC
013	Tracheostomy for face, mouth & neck diagnoses or laryngectomy w/o CC/MCC
017	Autologous bone marrow transplant w/o CC/MCC
020	Intracranial vascular procedures w PDx hemorrhage w MCC
021	Intracranial vascular procedures w PDx hemorrhage w CC
022	Intracranial vascular procedures w PDx hemorrhage w/o CC/MCC
024	Cranio w major dev impl/acute complex cns PDx w/o MCC
025	Craniotomy & endovascular intracranial procedures w MCC
026	Craniotomy & endovascular intracranial procedures w CC
027	Craniotomy & endovascular intracranial procedures w/o CC/MCC
028	Spinal procedures w MCC
030	Spinal procedures w/o CC/MCC
031	Ventricular shunt procedures w MCC
032	Ventricular shunt procedures w CC
033	Ventricular shunt procedures w/o CC/MCC
034	Carotid artery stent procedure w MCC
035	Carotid artery stent procedure w CC
036	Carotid artery stent procedure w/o CC/MCC
037	Extracranial procedures w MCC
038	Extracranial procedures w CC
039	Extracranial procedures w/o CC/MCC
040	Periph/cranial nerve & other nerv syst proc w MCC
042	Periph/cranial nerve & other nerv syst proc w/o CC/MCC
113	Orbital procedures w CC/MCC
114	Orbital procedures w/o CC/MCC
116	Intraocular procedures w CC/MCC
117	Intraocular procedures w/o CC/MCC
130	Major head & neck procedures w/o CC/MCC
131	Cranial/facial procedures w CC/MCC
132	Cranial/facial procedures w/o CC/MCC
133	Other ear, nose, mouth & throat OR procedures w CC/MCC
134	Other ear, nose, mouth & throat OR procedures w/o CC/MCC
135	Sinus & mastoid procedures w CC/MCC
136	Sinus & mastoid procedures w/o CC/MCC
137	Mouth procedures w CC/MCC
138	Mouth procedures w/o CC/MCC
163	Major chest procedures w MCC
164	Major chest procedures w CC
165	Major chest procedures w/o CC/MCC
166	Other resp system OR procedures w MCC
167	Other resp system OR procedures w CC
168	Other resp system OR procedures w/o CC/MCC
216	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC
217	Cardiac valve & oth maj cardiothoracic proc w card cath w CC
218	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC

DRG	Description
219	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC
220	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC
221	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC
222	Cardiac defib implant w cardiac cath w AMI/hf/shock w MCC
223	Cardiac defib implant w cardiac cath w AMI/hf/shock w/o MCC
224	Cardiac defib implant w cardiac cath w/o AMI/hf/shock w MCC
225	Cardiac defib implant w cardiac cath w/o AMI/hf/shock w/o MCC
226	Cardiac defibrillator implant w/o cardiac cath w MCC
227	Cardiac defibrillator implant w/o cardiac cath w/o MCC
228	Other cardiothoracic procedures w MCC
229	Other cardiothoracic procedures w/o MCC
231	Coronary bypass w PTCA w MCC
232	Coronary bypass w PTCA w/o MCC
233	Coronary bypass w cardiac cath w MCC
234	Coronary bypass w cardiac cath w/o MCC
235	Coronary bypass w/o cardiac cath w MCC
236	Coronary bypass w/o cardiac cath w/o MCC
239	Amputation for circ sys disorders exc upper limb & toe w MCC
240	Amputation for circ sys disorders exc upper limb & toe w CC
241	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC
242	Permanent cardiac pacemaker implant w MCC
243	Permanent cardiac pacemaker implant w CC
244	Permanent cardiac pacemaker implant w/o CC/MCC
247	Perc cardiovasc proc w drug-eluting stent w/o MCC
249	Perc cardiovasc proc w non-drug-eluting stent w/o MCC
250	Perc cardiovasc proc w/o coronary artery stent w MCC
251	Perc cardiovasc proc w/o coronary artery stent w/o MCC
252	Other vascular procedures w MCC
253	Other vascular procedures w CC
254	Other vascular procedures w/o CC/MCC
255	Upper limb & toe amputation for circ system disorders w MCC
256	Upper limb & toe amputation for circ system disorders w CC
257	Upper limb & toe amputation for circ system disorders w/o CC/MCC
258	Cardiac pacemaker device replacement w MCC
259	Cardiac pacemaker device replacement w/o MCC
260	Cardiac pacemaker revision except device replacement w MCC
261	Cardiac pacemaker revision except device replacement w CC
262	Cardiac pacemaker revision except device replacement w/o CC/MCC
266	Endovascular cardiac valve replacement and supplement procedures with MCC
267	Endovascular cardiac valve replacement and supplement procedures without MCC
268	Aortic & heart assist procedures except pulsation balloon with MCC
269	Aortic and heart assist procedures except pulsation balloon without MCC
270	Other major cardiovascular procedures with MCC
271	Other major cardiovascular procedures with CC
272	Other major cardiovascular procedures without CC/MCC
273	Percutaneous intracardiac procedures with MCC
274	Percutaneous intracardiac procedures without MCC
319	Other endovascular cardiac valve procedures w MCC
320	Other endovascular cardiac valve procedures w/o MCC
326	Stomach, esophageal & duodenal proc w MCC
327	Stomach, esophageal & duodenal proc w CC

DRG	Description
328	Stomach, esophageal & duodenal proc w/o CC/MCC
329	Major small & large bowel procedures w MCC
330	Major small & large bowel procedures w CC
331	Major small & large bowel procedures w/o CC/MCC
332	Rectal resection w MCC
333	Rectal resection w CC
334	Rectal resection w/o CC/MCC
335	Peritoneal adhesiolysis w MCC
336	Peritoneal adhesiolysis w CC
337	Peritoneal adhesiolysis w/o CC/MCC
338	Appendectomy w complicated principal diag w MCC
339	Appendectomy w complicated principal diag w CC
340	Appendectomy w complicated principal diag w/o CC/MCC
341	Appendectomy w/o complicated principal diag w MCC
342	Appendectomy w/o complicated principal diag w CC
343	Appendectomy w/o complicated principal diag w/o CC/MCC
344	Minor small & large bowel procedures w MCC
345	Minor small & large bowel procedures w CC
346	Minor small & large bowel procedures w/o CC/MCC
347	Anal & stomal procedures w MCC
348	Anal & stomal procedures w CC
349	Anal & stomal procedures w/o CC/MCC
350	Inguinal & femoral hernia procedures w MCC
351	Inguinal & femoral hernia procedures w CC
352	Inguinal & femoral hernia procedures w/o CC/MCC
353	Hernia procedures except inguinal & femoral w MCC
354	Hernia procedures except inguinal & femoral w CC
355	Hernia procedures except inguinal & femoral w/o CC/MCC
356	Other digestive system OR procedures w MCC
357	Other digestive system OR procedures w CC
358	Other digestive system OR procedures w/o CC/MCC
405	Pancreas, liver & shunt procedures w MCC
406	Pancreas, liver & shunt procedures w CC
407	Pancreas, liver & shunt procedures w/o CC/MCC
408	Biliary tract proc except only cholecyst w or w/o CDE w MCC
409	Biliary tract proc except only cholecyst w or w/o CDE w CC
410	Biliary tract proc except only cholecyst w or w/o CDE w/o CC/MCC
411	Cholecystectomy w CDE w MCC
412	Cholecystectomy w CDE w CC
413	Cholecystectomy w CDE w/o CC/MCC
414	Cholecystectomy except by laparoscope w/o CDE w MCC
415	Cholecystectomy except by laparoscope w/o CDE w CC
416	Cholecystectomy except by laparoscope w/o CDE w/o CC/MCC
417	Laparoscopic cholecystectomy w/o CDE w MCC
418	Laparoscopic cholecystectomy w/o CDE w CC
419	Laparoscopic cholecystectomy w/o CDE w/o CC/MCC
420	Hepatobiliary diagnostic procedures w MCC
421	Hepatobiliary diagnostic procedures w CC
422	Hepatobiliary diagnostic procedures w/o CC/MCC
423	Other hepatobiliary or pancreas OR procedures w MCC
424	Other hepatobiliary or pancreas OR procedures w CC

DRG	Description
425	Other hepatobiliary or pancreas OR procedures w/o CC/MCC
453	Combined anterior/posterior spinal fusion w MCC
454	Combined anterior/posterior spinal fusion w CC
455	Combined anterior/posterior spinal fusion w/o CC/MCC
456	Spinal fus exc cerv w spinal curv/malig/infec or extensive fus w MCC
457	Spinal fus exc cerv w spinal curv/malig/infec or extensive fus w CC
458	Spinal fus exc cerv w spinal curv/malig/infec or extensive fus w/o CC/MCC
459	Spinal fusion except cervical w MCC
460	Spinal fusion except cervical w/o MCC
461	Bilateral or multiple major joint procs of lower extremity w MCC
462	Bilateral or multiple major joint procs of lower extremity w/o MCC
463	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w MCC
464	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w CC
465	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w/o CC/MCC
466	Revision of hip or knee replacement w MCC
467	Revision of hip or knee replacement w CC
468	Revision of hip or knee replacement w/o CC/MCC
470	Major hip & knee joint replacement/reattachment of lower extremity w/o MCC
471	Cervical spinal fusion w MCC
472	Cervical spinal fusion w CC
473	Cervical spinal fusion w/o CC/MCC
474	Amputation for musculoskeletal sys & conn tissue dis w MCC
475	Amputation for musculoskeletal sys & conn tissue dis w CC
476	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC
477	Biopsies of musculoskeletal system & connective tissue w MCC
478	Biopsies of musculoskeletal system & connective tissue w CC
479	Biopsies of musculoskeletal system & connective tissue w/o CC/MCC
480	Hip & femur procedures except major joint w MCC
481	Hip & femur procedures except major joint w CC
482	Hip & femur procedures except major joint w/o CC/MCC
485	Knee procedures w PDx of infection w MCC
486	Knee procedures w PDx of infection w CC
487	Knee procedures w PDx of infection w/o CC/MCC
488	Knee procedures w/o PDx of infection w CC/MCC
489	Knee procedures w/o PDx of infection w/o CC/MCC
492	Lower extrem & humer proc except hip,foot,femur w MCC
493	Lower extrem & humer proc except hip,foot,femur w CC
494	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC
495	Local excision & removal int fix devices exc hip & femur w MCC
496	Local excision & removal int fix devices exc hip & femur w CC
497	Local excision & removal int fix devices exc hip & femur w/o CC/MCC
498	Local excision & removal int fix devices of hip & femur w CC/MCC
499	Local excision & removal int fix devices of hip & femur w/o CC/MCC
500	Soft tissue procedures w MCC
501	Soft tissue procedures w CC
502	Soft tissue procedures w/o CC/MCC
503	Foot procedures w MCC
504	Foot procedures w CC
505	Foot procedures w/o CC/MCC
507	Major shoulder or elbow joint procedures w CC/MCC
508	Major shoulder or elbow joint procedures w/o CC/MCC



DRG	Description
510	Shoulder,elbow or forearm proc,exc major joint proc w MCC
511	Shoulder,elbow or forearm proc,exc major joint proc w CC
512	Shoulder,elbow or forearm proc,exc major joint proc w/o CC/MCC
513	Hand or wrist proc, except major thumb or joint proc w CC/MCC
514	Hand or wrist proc, except major thumb or joint proc w/o CC/MCC
515	Other musculoskelet sys & conn tiss OR proc w MCC
516	Other musculoskelet sys & conn tiss OR proc w CC
517	Other musculoskelet sys & conn tiss OR proc w/o CC/MCC
519	Back & neck procedures except spinal fusion w CC
520	Back & neck procedures except spinal fusion w/o CC/MCC
570	Skin debridement w MCC
571	Skin debridement w CC
572	Skin debridement w/o CC/MCC
573	Skin graft for skn ulcer or cellulitis w MCC
574	Skin graft for skn ulcer or cellulitis w CC
575	Skin graft for skn ulcer or cellulitis w/o CC/MCC
576	Skin graft exc for skin ulcer or cellulitis w MCC
577	Skin graft exc for skin ulcer or cellulitis w CC
578	Skin graft exc for skin ulcer or cellulitis w/o CC/MCC
579	Other skin, subcut tiss & breast proc w MCC
580	Other skin, subcut tiss & breast proc w CC
581	Other skin, subcut tiss & breast proc w/o CC/MCC
582	Mastectomy for malignancy w CC/MCC
583	Mastectomy for malignancy w/o CC/MCC
584	Breast biopsy, local excision & other breast procedures w CC/MCC
585	Breast biopsy, local excision & other breast procedures w/o CC/MCC
614	Adrenal & pituitary procedures w CC/MCC
615	Adrenal & pituitary procedures w/o CC/MCC
616	Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC
617	Amputat of lower limb for endocrine,nutrit,& metabol dis w CC
618	Amputat of lower limb for endocrine,nutrit,& metabol dis w/o CC/MCC
619	OR procedures for obesity w MCC
620	OR procedures for obesity w CC
621	OR procedures for obesity w/o CC/MCC
622	Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC
623	Skin grafts & wound debrid for endoc, nutrit & metab dis w CC
624	Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC
625	Thyroid, parathyroid & thyroglossal procedures w MCC
626	Thyroid, parathyroid & thyroglossal procedures w CC
627	Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC
628	Other endocrine, nutrit & metab OR proc w MCC
629	Other endocrine, nutrit & metab OR proc w CC
630	Other endocrine, nutrit & metab OR proc w/o CC/MCC
653	Major bladder procedures w MCC
654	Major bladder procedures w CC
655	Major bladder procedures w/o CC/MCC
656	Kidney & ureter procedures for neoplasm w MCC
657	Kidney & ureter procedures for neoplasm w CC
658	Kidney & ureter procedures for neoplasm w/o CC/MCC
659	Kidney & ureter procedures for non-neoplasm w MCC
660	Kidney & ureter procedures for non-neoplasm w CC

DRG	Description
661	Kidney & ureter procedures for non-neoplasm w/o CC/MCC
662	Minor bladder procedures w MCC
663	Minor bladder procedures w CC
664	Minor bladder procedures w/o CC/MCC
665	Prostatectomy w MCC
666	Prostatectomy w CC
667	Prostatectomy w/o CC/MCC
668	Transurethral procedures w MCC
669	Transurethral procedures w CC
670	Transurethral procedures w/o CC/MCC
671	Urethral procedures w CC/MCC
672	Urethral procedures w/o CC/MCC
673	Other kidney & urinary tract procedures w MCC
674	Other kidney & urinary tract procedures w CC
675	Other kidney & urinary tract procedures w/o CC/MCC
707	Major male pelvic procedures w CC/MCC
708	Major male pelvic procedures w/o CC/MCC
709	Penis procedures w CC/MCC
710	Penis procedures w/o CC/MCC
711	Testes procedures w CC/MCC
712	Testes procedures w/o CC/MCC
713	Transurethral prostatectomy w CC/MCC
714	Transurethral prostatectomy w/o CC/MCC
715	Other male reproductive system OR proc for malignancy w CC/MCC
716	Other male reproductive system OR proc for malignancy w/o CC/MCC
717	Other male reproductive system OR proc exc malignancy w CC/MCC
718	Other male reproductive system OR proc exc malignancy w/o CC/MCC
734	Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC
735	Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC
736	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC
737	Uterine & adnexa proc for ovarian or adnexal malignancy w CC
738	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC
739	Uterine,adnexa proc for non-ovarian/adnexal malig w MCC
740	Uterine,adnexa proc for non-ovarian/adnexal malig w CC
741	Uterine,adnexa proc for non-ovarian/adnexal malig w/o CC/MCC
742	Uterine & adnexa proc for non-malignancy w CC/MCC
743	Uterine & adnexa proc for non-malignancy w/o CC/MCC
744	D&C, conization, laparoscopy & tubal interruption w CC/MCC
745	D&C, conization, laparoscopy & tubal interruption w/o CC/MCC
746	Vagina, cervix & vulva procedures w CC/MCC
747	Vagina, cervix & vulva procedures w/o CC/MCC
749	Other female reproductive system OR procedures w CC/MCC
750	Other female reproductive system OR procedures w/o CC/MCC
765	Cesarean section w CC/MCC
766	Cesarean section w/o CC/MCC
799	Splenectomy w MCC
800	Splenectomy w CC
801	Splenectomy w/o CC/MCC
802	Other OR proc of the blood & blood forming organs w MCC
803	Other OR proc of the blood & blood forming organs w CC
804	Other OR proc of the blood & blood forming organs w/o CC/MCC

DRG	Description
820	Lymphoma & leukemia w major OR procedure w MCC
821	Lymphoma & leukemia w major OR procedure w CC
822	Lymphoma & leukemia w major OR procedure w/o CC/MCC
823	Lymphoma & non-acute leukemia w other proc w MCC
824	Lymphoma & non-acute leukemia w other proc w CC
825	Lymphoma & non-acute leukemia w other proc w/o CC/MCC
826	Myeloprolif disord or poorly diff neopl w maj OR proc w MCC
827	Myeloprolif disord or poorly diff neopl w maj OR proc w CC
828	Myeloprolif disord or poorly diff neopl w maj OR proc w/o CC/MCC
829	Myeloprolif disord or poorly diff neopl w other proc w CC/MCC
830	Myeloprolif disord or poorly diff neopl w other proc w/o CC/MCC
853	Infectious & parasitic diseases w OR procedure w MCC
854	Infectious & parasitic diseases w OR procedure w CC
855	Infectious & parasitic diseases w OR procedure w/o CC/MCC
856	Postoperative or post-traumatic infections w OR proc w MCC
857	Postoperative or post-traumatic infections w OR proc w CC
858	Postoperative or post-traumatic infections w OR proc w/o CC/MCC
901	Wound debridements for injuries w MCC
902	Wound debridements for injuries w CC
903	Wound debridements for injuries w/o CC/MCC
904	Skin grafts for injuries w CC/MCC
905	Skin grafts for injuries w/o CC/MCC
907	Other OR procedures for injuries w MCC
908	Other OR procedures for injuries w CC
909	Other OR procedures for injuries w/o CC/MCC
928	Full thickness burn w skin graft or inhal inj w CC/MCC
929	Full thickness burn w skin graft or inhal inj w/o CC/MCC
939	OR proc w diagnoses of other contact w health services w MCC
940	OR proc w diagnoses of other contact w health services w CC
941	OR proc w diagnoses of other contact w health services w/o CC/MCC
957	Other OR procedures for multiple significant trauma w MCC
958	Other OR procedures for multiple significant trauma w CC
959	Other OR procedures for multiple significant trauma w/o CC/MCC
969	HIV w extensive OR procedure w MCC
970	HIV w extensive OR procedure w/o MCC
981	Extensive OR procedure unrelated to principal diagnosis w MCC
982	Extensive OR procedure unrelated to principal diagnosis w CC
983	Extensive OR procedure unrelated to principal diagnosis w/o CC/MCC
987	Non-extensive OR proc unrelated to principal diagnosis w MCC
988	Non-extensive OR proc unrelated to principal diagnosis w CC
989	Non-extensive OR proc unrelated to principal diagnosis w/o CC/MCC

### **Appendix 3: Rehabilitation and Primary Psychiatric CCS Diagnosis Categories**

<u>CCS</u>	<u>Description</u>
254	Rehabilitation
650	Adjustment disorders
651	Anxiety disorders
652	Attention-deficit, conduct, and disruptive behavior disorders
654	Developmental disorders
655	Disorders usually diagnosed in infancy, childhood, or adolescence
656	Impulse control disorders, not elsewhere classified
657	Mood disorders
658	Personality disorders
659	Schizophrenia and other psychotic disorders
662	Suicide and intentional self-inflicted injury
670	Miscellaneous disorders