Critical Access Hospital
Program for Evaluating Payment
Patterns Electronic Report

User's Guide

Eighth Edition

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Eighth Edition, effective with the Q4FY18 release

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.[1,2] As part of a 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 the hospital's 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 (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 (referred to in the report as "target areas"). Data in PEPPER are presented in tabular form, as well as in graphs that depict the hospital's target area percentages over time. PEPPER also includes reports on the hospital's top 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 the hospital in identifying potential overpayments as well as potential underpayments.

PEPPER is available for critical access hospitals as well as short- and long-term acute care inpatient Prospective Payment System (PPS) hospitals and inpatient psychiatric facilities, inpatient rehabilitation facilities, hospices, partial hospitalization programs, skilled nursing facilities and home health agencies. The critical access hospital (CAH) PEPPER is the version of PEPPER specifically for critical access hospitals.

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

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 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.

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

[2] Department of Health and Human Services/Office of Inspector General. 2005. "Supplementing the Compliance Program Guidance for Hospitals," *Federal Register* 70, no. 19, January 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: nation, Medicare Administrative Contractor jurisdiction and state. These comparisons enable a hospital to determine if 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 80th percentile. Coding-focused target areas also have a lower control limit, which is the national 20th 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 the hospital's target area percent is in the top twenty percent of all hospital target area percents in the respective comparison group (i.e. is at/above the 80th percentile) or is in the bottom twenty percent of all hospital target area percents in the respective comparison group (i.e. is at/below the 20th 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
Critical access hospital providers only	Third and fourth positions of the CMS Certification Number = "13"
Claim with valid medical record number	UB04 FL03a 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 UB04 FL17
Exclude Health Maintenance Organization claims	Exclude claims submitted to a Medicare Health Maintenance Organization
Exclude cancelled claims	Exclude claims cancelled by the Medicare Administrative Contractor

The CAH PEPPER is available to the Chief Executive Officer, Administrator, President, or Compliance Officer through a secure portal on the 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 an Access database (the First-look Analysis Tool for Hospital Outlier Monitoring, or 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, with the numerators representing discharges that have been identified as problematic. 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), or all discharges. DRG-coding related target areas generally include in the numerator the DRG(s) that have been identified as prone to DRG coding errors, and the denominator includes these DRGs as well as 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 Full and Abbreviated Title	TARGET AREA DEFINITION
Stroke Intracranial Hemorrhage (Stroke ICH)	*Numerator (N):* count of discharges for DRGs 061 (acute ischemic stroke with use of thrombolytic agent with MCC), 062 (acute ischemic stroke with use of thrombolytic agent with 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) *Denominator (D):* count of discharges for DRGs 061, 062, or 063, 064, 065, 066, 067 (nonspecific CVA and precerebral occlusion without infarct with MCC), 068 (nonspecific CVA and precerebral occlusion without infarct without MCC), 069 (transient ischemia)
Respiratory Infections (Resp Inf)	*N:* count of discharges for DRGs 177 (respiratory infections and inflammations with MCC), 178 (respiratory infections and inflammations with CC) *D:* 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) Note: Beginning with the Q4FY18 PEPPER, some hospitals may see increases in the numerator and denominator counts for Simple Pneumonia and in the denominator counts for Respiratory Infection, due to a coding guideline change effective for discharges October 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)."

TARGET AREA Full and Abbreviated Title	TARGET AREA DEFINITION
Simple Pneumonia (Simp Pne)	*N:* count of discharges for DRGs 193, 194 *D:* 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 Note: Beginning with the Q4FY18 PEPPER, some hospitals may see increases in the numerator and denominator counts for Simple Pneumonia and in the denominator counts for Respiratory Infection, due to a coding guideline change effective for discharges October 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)."
Septicemia (Septicemia) **revised as of the Q4FY17 release*	*N:* count of discharges for DRGs 870 (septicemia or severe sepsis with mechanical ventilation >96 hours), 871 (septicemia or severe sepsis without mechanical ventilation >96 hours with MCC), 872 (septicemia or severe sepsis without mechanical ventilation >96 hours without MCC) *D:* 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 < 96 hours), 689 (kidney and urinary tract infections with MCC), 690 (kidney and urinary tract infections without MCC), 870, 871, 872
Medical DRGs with CC or MCC (Med CC MCC)	*N:* count of discharges for medical DRGs in groups 1, 2 or 3[3] (see Appendix 1) with a CC or MCC, excluding discharges for DRGs 065 (intracranial hemorrhage or cerebral infarction with CC or tPA in 24 hrs), 837 (chemo with acute leukemia as SDX or with high dose chemo agent with MCC), 838 (chemo with acute leukemia as SDX with CC or high dose chemo agent) (Note: These DRGs are structured such that they may be assigned on the basis of medication administration.) *D:* count of discharges for medical DRGs in groups 1, 2 or 3[3], excluding DRGs 065, 837, 838

[3] In the MS-DRGs, there are three "groups" of DRGs with CCs and/or MCCs:
Group 1: MS-DRGs broken out into three tiers: with MCC, with CC, without CC or MCC
Group 2: MS-DRGs broken out into two tiers: with MCC, without MCC
Group 3: MS-DRGs are broken out into two tiers: with CC or MCC, without CC or MCC

TARGET AREA Full and Abbreviated Title	TARGET AREA DEFINITION
Surgical DRGs with CC or MCC (Surg CC MCC)	*N:* count of discharges for surgical DRGs in groups 1, 2 or 3[3] (see Appendix 2) with a CC or MCC, excluding discharges for DRGs 005 (liver transplant with MCC or intestinal implant), 023 (craniotomy with major device implant/acute complex CNS principal diagnosis with MCC or chemo implant), 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 procedure with drug-eluting stent with MCC or 4+ vessels/stents), 248 (percutaneous cardiovascular procedure with non-drug-eluting stent with MCC or 4+ vessels/stents), 518 (back and neck procedures except spinal fusion with MCC or disc/neurostimulator)(Note: These DRGs are structured such that they may be assigned on the basis of a procedure being performed.) *D:* count of all discharges for surgical DRGs in groups 1, 2 or 3[3], excluding discharges for DRGs 005, 023, 029, 041, 129, 246, 248, 518
Single CC or MCC (Single CC MCC)	*N:* count of discharges for DRGs in groups 1, 2 or 3[3] with one CC or MCC coded on the claim (recognizing CC exclusions as per table 6K of the IPPS final rule) *D:* count of discharges for DRGs in groups 1, 2 or 3[3] with one or more CCs or MCCs coded on the claim (recognizing CC exclusions as per table 6K of the IPPS final rule)
Chronic Obstructive Pulmonary Disease (COPD)	*N*: 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) *D*: count of all discharges for medical DRGs in MDC 04 (respiratory system) (DRGs 175 through 208)
Three-day Skilled Nursing Facility-qualifying Admissions (3-day SNF)	*N:* count of discharges to a SNF with a three-day length of stay *D:* 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))
Swing Bed Transfers (Swing Bed Trans)	*N:* count of discharges with a length of stay equal to three or four days with patient discharge status code 61 or 89 *D:* count of discharges with a length of stay equal to three or four days

TARGET AREA Full and Abbreviated Title	TARGET AREA DEFINITION
30-day Readmissions to Same Hospital or Elsewhere (Readm)	*N:* count of index (first) admissions during the 12-month time period for which a readmission occurred within 30 days to the same critical access hospital, to another critical access hospital or to another short-term acute care 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)[4] diagnosis categories (see Appendix 3) *D*: count of all discharges excluding patient discharge status codes 02, 82, 07, 20 and excluding rehabilitation and primary psychiatric CCS diagnosis categories
30-day Readmissions to Same Hospital (Readm Same)	*N:* count of index (first) admissions during the 12-month time period for which a readmission occurred within 30 days to the same critical access hospital 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) *D*: count of all discharges excluding patient discharge status codes 02, 82, 07, 20 and excluding rehabilitation and primary psychiatric CCS diagnosis categories
Two-day Stays for Medical DRGs (2DS Med) **revised as of the Q4FY17 release*	*N*: count of discharges for medical DRGs with a length of stay 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 *D*: 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
Two-day Stays for Surgical DRGs (2DS Surg) **revised as of the Q4FY17 release*	*N*: count of discharges for surgical DRGs with a length of stay 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 *D*: 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

[4] ICD-10 diagnoses and procedures have been collapsed into general categories using Clinical Classification Software (CCS). More information on CCS can be found at http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp

TARGET AREA Full and Abbreviated Title	TARGET AREA DEFINITION
One-day Stays for Medical DRGs (1DS Med) **revised as of the Q4FY17 release*	*N*: count of discharges for medical DRGs with a length of stay 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 *D*: 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
One-day Stays for Surgical DRGs (1DS Surg) **revised as of the Q4FY17 release*	*N*: count of discharges for surgical DRGs with a length of stay 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 *D*: 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

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 Office of Inspector General audits, while others were identified through the now defunct Payment Error Prevention Program and 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, in particular one- and two-day stays, 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 including 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 including 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 SNF-qualifying admissions and three- and four-day lengths of stay with a transfer to a swing bed) are included to focus on this issue.

The coding of complications and comorbidities (CCs) and, more recently, major complications and comorbidities (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 2018 are documented in the *Federal Register*, Volume 82, number 155, August 14, 2017, pages 37990-38589.
- Changes for FY 2017 are documented in the Federal Register, Volume 81, number 162, August 22, 2016, pages 56761-57438.
- Changes for FY 2016 are documented in the *Federal Register*, Volume 80, number 158, August 17, 2015, pages 49325-49886.

How Hospitals Can Use PEPPER Data

The CAH PEPPER allows critical access hospitals 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 percent of all CAHs' target area percents fall is identified as the 80th percentile. CAHs whose target percents are at or above the 80th percentile (i.e., in the top 20 percent) are considered at risk for improper Medicare payments. Similarly, for areas at risk for undercoding, CAHs whose target percents are at or below the 20th percentile (i.e., in the bottom 20 percent) are considered at risk for improper Medicare payments. Percentiles are calculated for each of the three comparison groups (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 (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 80TH PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20TH PERCENTILE)
Stroke Intracranial Hemorrhage (Stroke ICH)	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 if 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 if 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.
Respiratory Infections (Resp Inf)	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 if 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 if 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.
Simple Pneumonia (Simp Pne)	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 if 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 if 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.
Septicemia (Septicemia)	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 if 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 if 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.

TARGET AREA	SUGGESTED INTERVENTIONS FOR HIGH OUTLIERS (IF AT/ABOVE 80TH PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20TH PERCENTILE)
Medical DRGs with CC or MCC (Med CC MCC) **Surgical DRGs with CC or MCC** (Surg CC MCC) **Single CC or MCC** (Single CC MCC)	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 if 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: Effective Oct. 1, 2015, a principal diagnosis can also be a CC or MCC. Principal and secondary diagnosis codes should be reviewed to determine if 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 if 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: Effective Oct. 1, 2015, a principal diagnosis can also be a CC or MCC. Principal and secondary diagnosis codes should be reviewed to determine if they are a CC/MCC.
Chronic Obstructive Pulmonary Disease (COPD)	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 if 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, as this is an admission-necessity focused target area.
Three-day Skilled Nursing Facility-qualifying Admissions (3-day SNF)	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 if the admission was necessary.	Not applicable, as this is an admission-necessity focused target area.
Swing Bed Transfers (Swing Bed Trans)	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 if the admission was necessary.	Not applicable, as this is an admission-necessity focused target area.

TARGET AREA	SUGGESTED INTERVENTIONS FOR HIGH OUTLIERS (IF AT/ABOVE 80TH PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20TH PERCENTILE)
30-day Readmissions to Same Hospital or Elsewhere (Readm) **30-day Readmissions to Same Hospital** (Readm Same)	A sample of readmission cases should be reviewed to identify appropriateness of admission, discharge, quality of care and DRG assignment and 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: 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: • Patients discharged home (patient discharge status code 01) and readmitted the same or next day may indicate a potential premature discharge or incomplete care. • Patients readmitted for the same principal diagnosis as the first admission may indicate a potential premature discharge or incomplete care. 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.	Not applicable, as these are admission-necessity focused target areas.

TARGET AREA	SUGGESTED INTERVENTIONS FOR HIGH OUTLIERS (IF AT/ABOVE 80TH PERCENTILE)	SUGGESTED INTERVENTIONS FOR LOW OUTLIERS (IF AT/BELOW 20TH PERCENTILE)
Both two-day stay target areas: **Two-day Stays for Medical DRGs** (2DS Med) **Two-day Stays for Surgical DRGs** (2DS Surg)	This could indicate that there are unnecessary admissions related to inappropriate use of admission screening criteria or outpatient observation, in particular if the two-day stay rate has increased after the first quarter of fiscal year 2014 (October 1, 2013). A sample of two-day stay cases should be reviewed to determine if 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.	Not applicable, as these are admission-necessity focused target areas.
Both one-day stay target areas: **One-day Stays for Medical DRGs** (1DS Med) **One-day Stays for Surgical DRGs** (1DS Surg)	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 if 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."	Not applicable, as these are admission-necessity focused target areas.

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 a jurisdiction.

The hospital's state percentile indicates the percentage of all other hospitals in the state within the MAC jurisdiction 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 a state.

For more on percents versus percentiles, see the "Frequently Asked Questions" section on 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 80th percentile (for all target areas) or at or below the 20th percentile (for coding-focused target areas) indicate that the hospital is an outlier. Outlier status should be evaluated in the priority order of 1) nation, 2) jurisdiction and 3) state. If a hospital is an outlier for nation (compared to all hospitals in the nation), this should be interpreted as the highest priority. If a hospital is an outlier for jurisdiction (compared to all CAHs in the jurisdiction), this is somewhat of a lower priority. Lastly, if a hospital is an outlier for the state (compared to all CAHs in the state), this would be the lowest priority, as 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 80th percentile as compared to the jurisdiction and at the 65th percentile as compared to the nation. The Swing Bed Transfers target area may have a smaller "Sum of Payments" but is at the 80th percentile for jurisdiction and 90th percentile for 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, with each bar representing 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.

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).

The graph includes trend lines for the percents that are at the 80th percentile (and the 20th percentile for coding-focused target areas) for the three comparison groups (nation, jurisdiction and state) so the hospital can easily identify when it is an outlier as compared to any of these groups. A table of these percents ("Comparative Data") is included under the hospital's data table. For more on percents versus percentiles, see the "Frequently Asked Questions" section on 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, effective 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 number of discharges for the target area (target area discharge count, which is the numerator), the denominator count of discharges, the proportion of the numerator and denominator (percent), average length of stay and Medicare payment data. The hospital's percent will be shown in **red bold print** if it is at or above the national 80th percentile (high outlier); for coding-focused target areas it will be shown in *green italics* if it is at or below the national 20th 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 80th and 20th percentiles (for coding-focused areas only) for the three comparison groups of 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 (to the left of 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 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 length of stay 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 average length of stay for each DRG and the national average length of stay 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 may be saved to as many PCs as necessary.

For help using PEPPER, please submit a request for assistance at 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 Critical Access Hospital 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

Average Length of Stay — 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 30-day Readmissions to Same Hospital or Elsewhere and the 30-day Readmissions to Same Hospital target areas, the ALOS is calculated using the first (index) admission's length of stay, not the second (readmission) admission's length of stay.

Data Table — The statistical findings for a hospital are presented in tabular form, labeled by time period and indicator.

Fiscal Year — For Medicare data, the fiscal year starts October 1 and ends September 30.

Graph — In PEPPER, a graph shows a hospital's percentages for the previous three years. The hospital's percentages are compared to the 80th percentiles for the nation, jurisdiction and state or all target areas and also to the 20th percentiles for the nation, jurisdiction and state for coding-focused target areas. See *Percentile*.

Length of Stay — The length of stay (LOS) for an individual discharge is determined by subtracting the date of admission (Admission Date) from the date of discharge (Through Date). If the dates of admission and discharge fall on the same day, the LOS equals one day.

Outlier — In CAH PEPPER, hospitals are identified as an outlier if their target area percent is at or above the national 80th percentile (high outlier) or at or below the national 20th percentile (low outlier) (coding-focused target areas only).

Percentile — 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 percent 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 80th percentile.

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.

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For more on percents versus percentiles, please see the "Training and Resources" page in the Critical Access Hospital section on PEPPER.CBRPEPPER.org for a short slide presentation with visuals to assist in the understanding of these terms.

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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
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 diagnosis-related group (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.
DRG	The Diagnosis Related Group (DRG) is a system that was developed for Medicare in 1980, becoming effective in 1983, as part of the prospective payment system to classify hospital cases expected to have similar hospital resource use.
DS	Used in conjunction with CAH PEPPER one- and two-day stay (DS) target areas.
FATHOM	First-look Analysis Tool for Hospital Outlier Monitoring (FATHOM) is a Microsoft Access application. It was designed to help Medicare Administrative Contractors (MACs) compare providers in areas at risk for improper payment using Medicare administrative claims data. FATHOM produces PEPPER.
FY	Fiscal Year; the Medicare federal fiscal year begins October 1 and ends September 30.
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
MAC	The Medicare Administrative Contractor (MAC) is the contracting authority that replaced the fiscal intermediary (FI) and carrier in performing Medicare Fee-For-Service claims processing activities.
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 complications or comorbidities (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 Major CCs. 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.
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

ACRONYM/ ABBREVIATION	ACRONYM/ABBREVIATION DEFINITION
	statistics for DRGs and discharges at high risk for improper payments due to billing, coding and/or admission necessity issues.
SNF	Skilled Nursing Facility

Appendix 1: DRG Listing for the Medical DRGs with CC or MCC Target Area (FY 2018)

DRG	Description
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
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
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

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
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
691 Urinary stones w ESW lithotripsy w CC/MCC
692 Urinary stones w ESW lithotripsy w/o CC or 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

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 hematol/immun diag exc sickle cell crisis & coagul w MCC
809 Major hematol/immun diag exc sickle cell crisis & coagul w CC
810 Major hematol/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
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 2018)

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 w MCC
012	Tracheostomy for face, mouth & neck diagnoses w CC
013	Tracheostomy for face, mouth & neck diagnoses w/o CC/MCC
016	Autologous bone marrow transplant w 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

DRG	Description
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
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 with MCC
267	Endovascular cardiac valve replacement 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

DRG	Description
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
326	Stomach, esophageal & duodenal proc w MCC
327	Stomach, esophageal & duodenal proc w CC
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

DRG	Description
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
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
469	Major hip & knee joint replacement/reattachment of lower extremity w MCC or total ankle replacement
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

DRG	Description
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
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

DRG	Description
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
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

DRG	Description
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
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

DRG	Description
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 Clinical Classification Software (CCS) Diagnosis Categories

CCS	Description
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