MICHIGAN VALUE COLLABORATIVE

FEBRUARY 2022

DATA USERS GUIDE

Improving the health of Michigan through sustainable, high-value healthcare

Michigan Value Collaborative

Blue Cross Blue Shield Blue Care Network of Michigan

Nonprofit corporations and independent licensees of the Blue Cross and Blue Shield Association

Michigan Value Collaborative

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Purpose

The purpose of this document is to provide information about the Michigan Value Collaborative's (MVC) episode data structure to MVC members who utilize our data for quality improvement purposes. MVC data consists of de-identified claims data from Blue Cross Blue Shield of Michigan (BCBSM), Blue Care Network (BCN), the Centers for Medicare and Medicaid Services (CMS), and the Michigan Department of Health and Human Services (MDHHS). MVC maintains claims from these payers going back to January 1, 2015.

Background

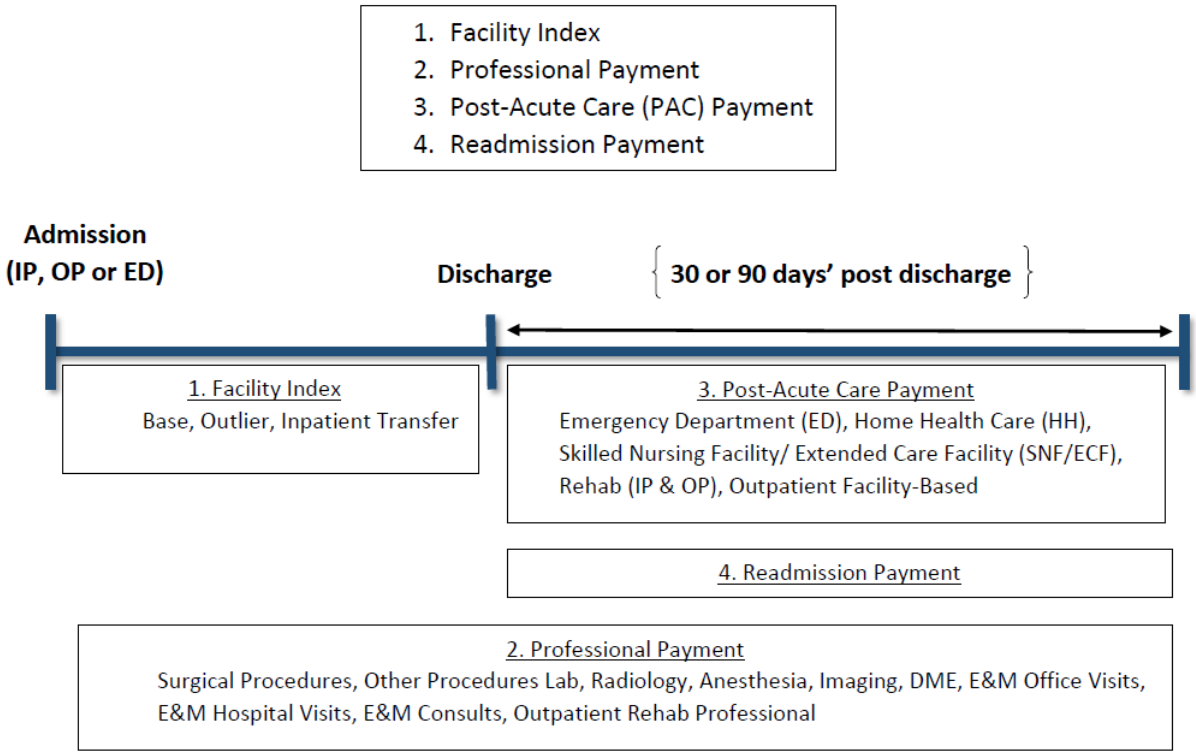
MVC is a partnership between Michigan hospitals, physician organizations, and BCBSM/BCN. MVC is a quality improvement initiative that aims to improve the health of Michigan through sustainable, high-value healthcare. MVC strives to achieve this through rigorous performance feedback, empirical identification of best practices, and collaborative learning. All analyses and reports are based on de-identified paid claims data for BCBSM, BCN, Medicare Fee-for-Service (FFS), and Medicaid beneficiaries who are Michigan residents. These claims are then used to create 30- or 90-day episodes of care for 14 service lines containing over 40 different conditions. MVC maintains claims from these payers going back to January 1, 2015.

Defining Episodes of Care

I. Conditions and Index Events

MVC has organized claims into episodes of care for over 40 different surgical and medical conditions. An episode begins with an index event and includes all claims within the 30- or 90-days post-discharge. An episode of care is made up of four main payment components: a facility index payment, professional payment, post-acute care payment, and readmission payment. These components, and their sub-components, can be seen in Figure 1 below. Please refer to Appendix A for a more detailed episode component breakdown and Appendix B for the MVC Claim Categorization Rules.

Figure 1. Episode of Care Payment Components



MVC considers multiple date fields on each claim to identify the correct date for the start and end of an index event. This varies by payer, but MVC utilizes the admission date on an inpatient facility claim when it is not missing and is after the claim from/start date but before the claim end/through date. Otherwise, MVC uses the claim from/start date for the start of the index event. Similarly, MVC prioritizes using the discharge date on a claim but uses the claim end date when the discharge date is missing.

MVC uses Berenson-Eggers Type of Service (BETOS) codes to categorize claims found within the post-discharge period. BETOS codes group Current Procedural Terminology (CPT) codes into clinically meaningful categories. A listing of BETOS codes can be found on the CMS website.

II. Episode Definitions (Based on Index Event)

MVC defines each episode using International Classification of Diseases 9/10 (ICD9/ICD10) procedure and diagnosis codes or Current Procedural Terminology (CPT) codes. We use this method to create clinically meaningful cohorts rather than those based on diagnosis related groups (DRG), which are assigned by billing departments. In creating the episodes, the first diagnosis code on a claim is considered for medical conditions, while all procedure codes are evaluated for surgical conditions. The transition to ICD-10 coding was successful using CMS' General Equivalence Mappings (GEMs) and was verified based on clinical expertise. With each data update, we look at data trends and have observed no unexpected deviations. Certain exclusion criteria are applied to each condition to ensure that the patients attributed to that condition are comparable across hospitals. For a full list of MVC episode definitions, please refer to the resources section on the MVC registry.

While medical condition episodes must begin with an index event in the inpatient setting, surgical condition index events can occur in the inpatient, outpatient, or emergency department setting. Place of service for surgical conditions is categorized as such based on the type of claim where the inclusion code was found.

III. Related and Unrelated Claims (Based on Post-Discharge Period)

Not all claims contribute to the total episode payment. MVC implements standard related and unrelated criteria that are applicable across all episodes (Appendices C and D). All SNF, rehab, and home health claims are considered related to the index event. Additionally, some MVC conditions utilize condition-specific related and unrelated criteria. When these are applied, the first and second diagnosis codes of post-discharge claims are examined against a condition-specific document that was created based on expert clinician input to determine whether that claim should be considered related or unrelated to the index event.

IV. Transfer Cases

MVC attributes transfer patients to the hospital where the index admission began. However, if a patient is transferred from the originating hospital before an MVC episode has been initialized, then the patient is attributed to the receiving hospital. MVC episodes are triggered by an index event that meets the inclusion criteria for one of our conditions. Transfer cases represent a small percentage of overall cases, but because they represent real patients, inclusion in the MVC analytics ensures this population's outcomes have the ability to be measured and improved as part of overall quality improvement.

V. Validity

MVC methodology for claim categorization and attribution was validated during the 2015 MVC Validation Project, where we compared MVC claims data with electronic medical record data across all participating hospitals. As a result, we made significant improvements to MVC methodology. This validation study was published in the Journal of Managed Care in 2017.[1] We continue to evaluate and refine our methodology on a regular basis.

VI. Dual-Insurance Considerations

As MVC contains a multi-payer claims database, there are instances where a beneficiary is covered by multiple insurance plans. To avoid the duplication of episodes, MVC selects the episode with the highest utilization and payment. In this way, MVC selects the payer that is covering the majority of the services within that episode. MVC does not combine claims from different payers into a single episode.

VII. Condition Hierarchy and Temporal Considerations

MVC creates episodes based on the timing of each event and does not allow for overlapping episodes. A new episode will not initialize for a patient unless at least 90 days have passed since the index discharge of their previous episode, if any. For example, if a patient has an admission for CHF and an admission for COPD three

weeks later, then MVC would only show a CHF episode. The COPD admission would appear as a readmission within that CHF episode. If two surgical procedures occur on the same day, then MVC employs a condition hierarchy to determine which episode type it is classified as. This condition hierarchy is largely based on the average payment of each condition, with the most expensive procedure prioritized highest.

Price Standardization

MVC has developed a process to standardize medical claim payments for the purpose of analyzing hospital level variation in utilization. The goal of our approach is to eliminate the extent to which price variations are a result of differences due to negotiated contracts, inflation, wage index, geographic region, payer, or hospital characteristics. The standard price applied to each service is based on all available Medicare FFS data. This method would tend to overstate the payments at small, rural hospitals and understate the payments at large, urban hospitals. Therefore, the payments within MVC data are a measure of utilization instead of actual cost.[2,3]

The MVC Coordinating Center continues to evaluate changes in reimbursement policies to ensure standardized payments are as accurate as possible across services and payers. The goal is to accurately measure the proportionate contribution of each payment component to the total episode payment.

Our price standardization process divides up the data into three parts. Facility claims are comprised of 1) inpatient facility claims and 2) other facility claims, while 3) professional claims are treated as one group. This document will describe price standardization for each group separately.

I. Inpatient Facility Claims

We calculate three payment amounts for inpatient claims: DRG base payments, outlier payments, and transfer payments.

A. Diagnosis Related Group (DRG) Base Payment

Inpatient claims are assigned payments by Diagnosis Related Group (DRG). Each DRG is assigned an average price based on Medicare data. One complication in pricing data over multiple years is that the DRG definitions (and relative weights) change over time. To account for this, we use the most recent version of third party DRG grouping software. This takes information from five data elements (patient sex, patient age, patient discharge disposition, ICD9/ICD10 diagnoses, ICD9/ICD10 procedures) and regroups DRGs for each inpatient claim.

B. Outlier Payment

Outlier payments are made separately from the base payment to providers to compensate for particularly complicated patients (i.e., when the level of treatment greatly exceeds the expected average for a given DRG's relative weight). As a general rule, these outlier payments are triggered when the claim's length of stay is significantly longer than the average length of stay for its DRG.

Our outlier payment calculation uses information from TRICARE, the civilian component of the military health system, to standardize patients. The TRICARE DRG schedule includes a national long-stay threshold. Inpatient

claims associated with lengths of stay that exceed the national long-stay threshold will be flagged as outliers. The outlier payment is calculated as $2,500 x each day over the length-of-stay threshold.

If LOS > LOS Threshold DRG, then Outlier Payment = (LOS-LOS Threshold DRG)*$2,500
Otherwise, Outlier Payment = 0

C. Transfer Payment

When a patient is transferred from one hospital to another, both the initial hospital as well as the transfer hospital bill for an inpatient admission separately. When this occurs, the initial hospitalization is captured as the index event, and the assigned DRG would determine the index base payment. The transfer payment is based on the DRG from the inpatient stay at the transfer hospital. If a transfer did not occur, the transfer payment for the episode is $0.

II. Post-Acute Care Claims

A. IP Rehab Claims

Inpatient rehab claims are priced based on DRG. IP Rehab stays that extend past the episode end date are pro-rated. For example, if a patient begins an IP Rehab stay on day 88 and is discharged on day 92, then only three of the five days would count toward the 90-day episode payment. To accomplish this, MVC would calculate the IP Rehab payment as three-fifths of the total.

B. Skilled Nursing Facility (SNF) Claims

In Q4 2019, CMS moved away from utilizing Resource Utilization Groups (RUGs) and instead began using a Patient Driven Payment Model (PDPM). To appropriately standardize payments, MVC applied this per diem payment across conditions, payers, and years. Therefore, SNF payment variation will be fully due to utilization rate and length of stay. SNF stays that extend past the episode end date are pro-rated. For example, if a patient begins a SNF stay on day 86 and is discharged on day 100, then only five of the fifteen days would count toward the 90-day episode payment. To accomplish this, MVC would calculate the SNF payment as one-third (5/15) of the total.

C. OP Rehab Claims

Outpatient rehab claims are priced based on CPT codes.

D. Home Health (HH) Claims

Consistent with CMS, HH payments are calculated using predetermined base payments under the Prospective Payment System (PPS). Base payments are adjusted according to characteristics in the Home Health Resource Groups (HHRG), including different patient health conditions and patient care needs.

MVC calculates HH payments based on the code rates and length of service. In accordance with CMS payment policies, if the patient receives four visits or fewer during the 60-day episode, the services are paid using the standardized per visit payment and Healthcare Common Procedure Coding System (HCPCS) code. CMS refers to this payment adjustment as Low Utilization Payment Adjustments (LUPAs). For HH claims that contain more than four visits in a 60-day period, the payment calculation is based on the HHRG code in the

Non-LUPA payment schedule. For BCBSM HH claims, we use the standard payment application for CMS HH LUPA claims.

E. ED Claims

ED claims are priced based on CPT codes.

MVC standardizes the method by which ED visits are identified and priced to account for hospital differences. Typically, an ED visit that directly precedes a hospital admission is billed as a claim line within that hospital admission. In this case, there would be no separate facility payment associated with that ED visit, as the hospital stay would be paid based on the DRG. However, critical access hospitals (CAHs) are able to bill for this ED visit separately, resulting in payment and rate differences. Therefore, in order to utilize a consistent methodology across hospitals MVC does not price ED claims at CAHs that occur on the same date as an index admission.

F. Other Outpatient Facility Claims

These constitute the wide variety of facility claims that are not categorized elsewhere. When possible, we use the CPT codes associated with each claim line to price the claim. In cases where the CPT code is not available, we use the revenue code on the claim line. Each CPT or revenue code is associated with a quantity. The total payments for each code are summed and then divided by the sum of quantities to create a code rate for each CPT and revenue code, i.e.:

Standardized payment = Code Rate * Quantity
where Code Rate = Total payment for code / Total code quantity
and quantity is capped at 0.95*max code quantity

Prescriptions filled in the post-discharge period are not captured in the episode. Outpatient facility claims with a $0 paid amount are assigned a $0 standard payment.

III. Professional Claims

This process is similar to the one used for Other Outpatient Facility Claims, with the only difference being that all professional claims have CPT codes. Each professional claim is associated with a CPT code, quantity, and unit which are used to calculate the total payment. Additionally, we incorporate CPT modifier codes when present. CPT modifier codes will either increase or decrease the standard payment for that claim. For example, there is a CPT modifier code for another surgeon assisting in the case. In this situation, there will be a secondary claim to accompany the primary surgical claim, but this secondary claim will have a CPT modifier code which will result in a lower payment on that claim. Professional claims with a $0 paid amount are assigned a $0 standard payment.

Risk Adjustment

I. What is Risk Adjustment?

Hospitals treat a variety of patients, and some patients are costlier than others. Hospitals that treat a disproportionate number of costly patients may be unfairly classified as “high-cost hospitals” simply because

of the type of patients that they treat. Risk adjustment is a statistical method that "levels the playing field" by accounting for differences in case mix.

II. How Does MVC Calculate Risk-Adjusted Episode Payments?

MVC performs risk adjustment using observed/expected (O/E) ratios. The numerator in this ratio is the aggregate of all the observed payments for a particular hospital. The denominator is the aggregate of all the expected payments. This ratio is multiplied by the statewide expected mean payment to arrive at the "risk-adjusted payment" for that hospital.

III. How Does MVC Calculate Expected Payments?

MVC calculates expected payments for each condition (e.g., AMI, pneumonia, CABG) and each component (e.g., total episode payments, readmission payments) separately. Condition and component-specific expected payments are based on a statistical model that uses a combination of required and non-required variables.

IV. Required Variables

The following required variables are always included in the final model: age, gender, insurance type, high prior six-month payments, and end-stage renal disease.

V. Non-required Variables

Non-required variables include 79 comorbidities based on hierarchical condition categories (HCC) (Appendix E), and condition specific risk adjusters (see Episode Definition file in resource section of the registry.).

Non-required variables are selected using a model specification technique that occurs in two steps:

1. All candidate variables are individually tested using a univariate regression model to see if they predict payment. Non-required variables with a p-value < 0.10 are retained.
2. All of the retained variables are included in a multivariable regression model and variables with a $p < 0.05$ are used for the final model.

The MVC risk-adjustment models employ the 79 Hierarchical Condition Categories (HCCs) that CMS has empirically shown to be predictive of expenditures for Medicare beneficiaries. We utilize all 25 diagnosis codes reported on a claim to identify these HCCs. By risk adjusting for HCCs, which include end-stage renal disease and cancer, we account for the greater complexity and cost of these episodes.

VI. Condition-Specific Risk-Adjustment Variables (CSRAV)

MVC incorporates several condition-specific variables into our risk-adjustment model that were suggested by participating hospitals and clinicians. For each variable that is suggested, MVC evaluates the appropriateness of including the variable by following the four principles below:

Principle 1: All variables will be considered as a "candidate" for the risk-adjustment model. In other words, any variable may be excluded in the final model if they are not found to be statistically significant.

Principle 2*:* For surgical conditions, treatment decisions (e.g., laparoscopic vs open) are typically not considered.

Principle 3: For all conditions, we will consider certain diagnosis codes:

- Cancer diagnosis
- Reoperation diagnosis

Principle 4: Variables that represent small variations of a disease process should not be considered. However, these variables can be grouped into broad categories:

- Simple case
- Complex case

Examples

Variable	Category	Appropriate risk-adjustment variable?
Lap vs Open for Colectomy	Treatment decision (rarely both)	No
Cancer for colectomy	Severity of illness	Yes
Dialysis for AMI	Treatment decision or complication	No
Emergency intubation for AMI	Treatment decision or complication	No
GI bleed for colectomy	Severity of illness	Yes
Re-operative CABG	Severity of illness	Yes
Cardiac surgery for AMI	Severity of illness	Yes*
Trach for pneumonia	Treatment decision or complication	No
**In select instances, a treatment decision strongly reflects severity of illness.*		

Data Use and Limitations:

MVC has agreements in place with CMS, BCBSM, and the Michigan Department of Health and Human Services (MDHHS) around how the data in the MVC registry can be used and what can be shown. MVC members are required to sign a confidentiality agreement before being given access to the MVC data registry. For both Medicare FFS and Medicaid data, MVC is not permitted to show patient-level information or display any cell with fewer than 11 patients. However, in October 2021, MVC - in partnership with the University of Michigan - officially became a federally recognized Qualified Entity Certification Program (QECP). QECP status will allow MVC to show providers patient level data for patients they saw within the last two years and will remove some suppression requirements for Medicare FFS patients. MVC is planning to add QECP reports to the registry, which will allow for patient-level drill down and allow MVC to show additional data in some push reports and custom requests in accordance with all required security requirements. Members will be required to sign additional documents to enter into a data sharing agreement with MVC before they are allowed additional data access.

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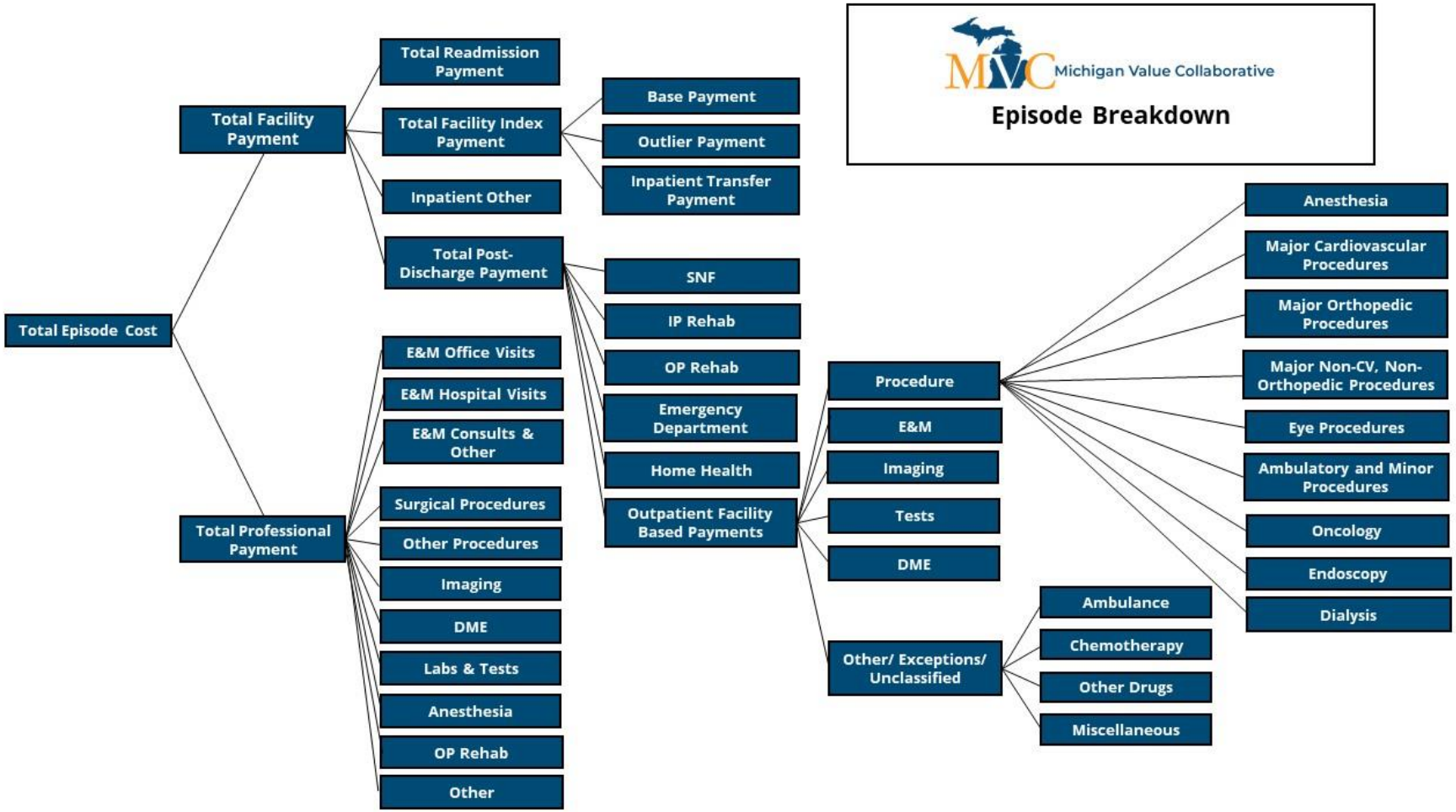
Appendix A. Episode Breakdown



Appendix B. Claims Categorization Rules

Facility Claim Type	New Definition
Inpatient	(1) Bill Type = 11 (or 12 if DRG present) **and** (2) DRG* is not a rehab code (945, 946, 949, 950) **and** (3) Revenue code is not an IP rehab code (118, 128, 138, 148, 158)
SNF	Bill Type in (18, 21)
Emergency Dept.	(1) Bill Type = 1x **or** Bill Type = 85 **and** (2) Revenue code is an ED code (450, 451, 452, 456, 459)
Home Health	Bill Type in (31, 32, 33, 34)
Inpatient Rehab	(1) Bill Type = 11 **and** (2) DRG* is a rehab DRG (945, 946, 949, 950) **or** revenue code is an IP rehab code (118, 128, 138, 148, 158)
Outpatient Rehab	(1) Revenue code is an OP rehab code (41X, 42X, 43X, 44X, 940, 941, 943, 944, 945, 948) **or** (2) CPT is a rehab CPT **or** (3) Bill Type in (74, 75)
Outpatient / Other	Everything else

*Regrouped DRG

Appendix C: Standard Related Codes in Post-Discharge Period

Stroke + Transient Ischemic Attack (TIA)				
43300	43321	43390	43411	4352
43301	43330	43391	43490	4353
43310	43331	43400	43491	4358
43311	43380	43401	4350	4359
43320	43381	43410	4351	436

Sepsis/Infection				
00845	03841	04102	0417	6868
0090	03842	04103	04183	6869
0380	03843	04104	04184	78552
03810	03844	04105	04185	78559
03811	03849	04109	04189	7907
03812	0388	04110	0419	99591
03819	0389	04119	4210	99592
0382	0390	0412	4211	99593
0383	04100	0414	5670	99594
03840	04101	0416	56739	

Urinary Tract Infection (UTI)				
5909	5950	5959	5990	

Acute Myocardial Infarction (AMI)				
41000	41021	41050	41071	4110
41001	41030	41051	41080	4111
41010	41031	41060	41081	41181
41011	41040	41061	41090	41189
41020	41041	41070	41091	42292

Pneumonia				
4658	4808	48231	48281	4831
4659	4809	48232	48282	4838
46619	481	48239	48283	4848
4800	4820	48240	48284	485
4801	4821	48241	48289	486
4802	4822	48242	4829	4870
4803	48230	48249	4830	

Pulmonary Embolism (PE) Deep Vein Thrombosis (DVT)				
41511	45381	45386	45111	45183
41512	45382	45387	45119	45184
41519	45383	45389	4512	45189
45340	45384	4539	45181	4519
45341	45385	4510	45182	4536
45342				

Acute gastrointestinal ulcerative disease				
53100	53131	53230	53321	53420
53101	53200	53231	53330	53421
53110	53201	53300	53331	53430
53111	53210	53301	53400	53431
53120	53211	53310	53401	538
53121	53220	53311	53410	5789
53130	53221	53320	53411	

Pressure Ulcers				
70700	70703	70706	70720	70723
70701	70704	70707	70721	70724
70702	70705	70709	70722	70725

Electrolyte Imbalance				
2760	2763	27651	2766	2768
2761	2764	27652	2767	2769
2762	27650			

Debility, malaise, fatigue, weakness				
7197	72887	78079	7812	7993

Complications of surgical and medical care, not elsewhere classified				
997-999	37960	5187	51852	99665
E870-79	37961	51881	58153	99666
2440	37962	99659	99660	99667
28984	37963	2851	99661	99668
2910	4275	78820	99662	99669
29181	5070	72888	99663	99670
33818	5185	51851	99664	

Pneumothorax, plural effusions				
51189	5119	5121	5128	51289

Medication effects				
693	9954	99586	99522	99523
9952				

Aftercare		
V5789	V571	V5849

Acute exacerbations of chronic diseases

Diabetes Mellitus (DM)				
24910	24930	25012	25022	25032
24911	24931	25013	25023	25033
24920	25010	25020	25030	2510
24921	25011	25021	25031	2513

Asthma				
49301	49311	49321	49391	49392
49302	49312	49322		

Chronic Obstructive Pulmonary Disease (COPD)	
49121	49122

Congestive Heart Failure (CHF)				
4150	42823	42833	42841	42843
42821	42831			

Renal failure				
5845	5846	5847	5848	5849

Hypertension		
4010	40200	40201

Appendix D. Standard Unrelated Codes for Post-Discharge Period

ICD DX Codes	CCS* DX Code	ICD CODE DESCRIPTION
V580	45	Radiotherapy encounter
V581	45	Chemotherapy encounter (End 2005)
V5811	45	Antineoplastic chemotherapy encounter (Begin 2005)
V5812	45	Immunotherapy encounter (Begin 2005)
V661	45	Radiotherapy convalescence
V662	45	Chemotherapy convalescence
V671	45	Radiotherapy follow-up
V672	45	Chemotherapy follow-up
Z510	45	Encounter for antineoplastic radiation therapy
Z5111	45	Encounter for antineoplastic chemotherapy
Z5112	45	Encounter for antineoplastic immunotherapy

*CCS=Clinical Classification Software.

Appendix E: Hierarchical Condition Categories

Condition Categories	
Acute Myocardial Infarction	Hemiplegia/Hemiparesis
Acute Renal Failure	Hip Fracture/Dislocation
Amputation Status Complications	HIV/AIDS
Amyotrophic Lateral Sclerosis	Inflammatory Bowel Disease
Angina Pectoris	Intestinal Obstruction/Perforation
Artificial Openings for Feeding or Elimination	Ischemic or Unspecified Stroke
Aspiration and Specified Bacterial Pneumonias	Lung and Other Severe Cancers
Atherosclerosis of the Extremities	Lymphoma and Other Cancers
Bone/Joint/Muscle Infections/Necrosis	Major Head Injury
Breast, Prostate, and Other Cancers	Major Organ Transplant or Replacement Status
Cardio-Respiratory Failure and Shock	Metastatic Cancer and Acute Leukemia
Cerebral Hemorrhage	Monoplegia, Other Paralytic Syndromes
Cerebral Palsy	Morbid Obesity
Chronic Hepatitis	Multiple Sclerosis
Chronic Kidney Disease, Stage 4	Muscular Dystrophy
Chronic Kidney Disease, Stage 5	Myasthenia Gravis/Myoneural Disorders
Chronic Obstructive Pulmonary Disease	Opportunistic Infections
Chronic Pancreatitis	Paraplegia
Chronic Ulcer of Skin, Except Pressure	Parkinson's and Huntington's Diseases
Cirrhosis of Liver	Pneumococcal Pneumonia, Empyema, Lung Abscess
Coagulation Defects	Pressure Ulcer of Skin with Full Skin Loss
Colorectal, Bladder, and Other Cancers	Pressure Ulcer of Skin with Necrosis
Coma, Brain Compression	Protein-Calorie Malnutrition
Complications of Implanted Device	Quadriplegia
Congestive Heart Failure	Respirator Dependence
Cystic Fibrosis	Respiratory Arrest
Depressive, Bipolar, and Paranoid Disorders	Rheumatoid Arthritis
Diabetes with Acute Complications	Schizophrenia
Diabetes with Chronic Complications	Seizure Disorders and Convulsions
Diabetes without Complication	Septicemia or Sepsis
Diabetic Retinopathy and Vitreous Hemorrhage	Severe Head Injury
Dialysis Status	Severe Hematological Disorders
Disorders of Immunity	Severe Skin Burn or Condition
Drug/Alcohol Dependence	Specified Heart Arrhythmias

Drug/Alcohol Psychosis	Spinal Cord Disorders/Injuries
Endocrine and Metabolic Disorders	Traumatic Amputations and Complications
End-Stage Liver Disease	Unstable Angina, Acute Ischemic Heart Disease
Exudative Macular Degeneration	Vascular Disease
Fibrosis of Lung	Vascular Disease with Complications
	Vertebral Fractures

References

1. Ellimoottil C, Syrjamaki JD, Voit B, Guduguntla V, Miller DC, Dupree JM. Validation of a claims-based algorithm to characterize episodes of care. *Am J Manag Care*. 2017;23(11):e382-e386.

2. Birkmeyer JD, Gust C, Baser O, Dimick JB, Sutherland JM, Skinner JS. Medicare payments for common inpatient procedures: Implications for episode-based payment bundling. *Health Serv Res*. 2010;45(6 PART 1):1783-1795. doi:10.1111/j.1475-6773.2010.01150.x

3. Gottlieb DJ, Zhou W, Song Y, Andrews KG, Skinner JS, Sutherland JM. Prices don't drive regional Medicare spending variations. *Health Aff*. 2010;29(3):537-543. doi:10.1377/hlthaff.2009.0609