



Risky Business: Introduction to Risk Adjustment

Ashley Comiskey, MSN, RN, CCDS
Quality Director
Baptist Health Paducah
Paducah, Kentucky



Presented By



Ashley Comiskey, MSN, RN, CCDS, quality director at Baptist Health Paducah in Kentucky, has more than 20 years' experience in healthcare. Her experience includes 12 years of direct patient care nursing in critical care and post-anesthesia care, physician education for Baptist Health's accountable care organization and clinically integrated network, and CDI supervisor for Baptist Health Paducah. She was the 2019 recipient of ACDIS' Rookie of the Year Award, a 2019 Nursing Excellence in Patient Safety award winner from Baptist Health Paducah, as well as the 2020 Trust Builder award recipient from TrustHCS.

Learning Objectives

- At the end of this educational opportunity, the learner will be able to:
 - Define risk adjustment
 - Identify at least two types of risk adjustment methodologies
 - Describe how risk adjustment affects quality scoring and payment methodologies
 - Explain CDI programs' role in capturing risk adjusted diagnoses

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Value Based Care (VBC)

- What is it?
 - VBC is a healthcare delivery model in which providers, including hospitals and physicians, are paid based on patient health outcomes
- Why VBC?
 - Out of control healthcare costs and poor patient outcomes
- VBC is changing the way hospitals and providers are reimbursed
 - Moving away from traditional fee-for-service payments for care
 - Shifting from quantity focus to quality focus
- VBC shifts the focus of healthcare delivery from an episodic and volume-based approach to a value, quality of care, and patient centered healthcare delivery strategy
- The “value” in VBC is derived from measuring health outcomes (quality of care) against the cost of delivering that care.
 - $\text{Quality/Cost} = \text{Value}$

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Payment Methodologies

- Reimbursement occurs through a several different methodologies

- CMS

- Medicare Parts A & B (traditional fee-for-service)
 - Medicare Part C (Medicare Advantage Plans)
 - Quality Based Incentives
 - Quality payment program
 - » MIPS
 - » APMs
 - Value-Based Purchasing
 - Hospital Readmission Reduction Program

Risk adjustment will affect reimbursement – REGARDLESS of payment methodology

- DRGs
- Private payers
 - Contracts

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Measuring Quality

- Types of measures

- Process measures
 - Ex – ED throughput measures; “Left without being seen”
 - Outcomes measures
 - Ex – rate of surgical complications

- Data sources

- Administrative data is collected via claims, which includes ICD-10 diagnoses.
 - Administrative data is used in the calculation of several different quality metrics, some of which are publically reported
 - Documentation → ICD-10 Code → Data
 - Patient medical records
 - Information manually abstracted by specially trained staff (quality department, etc.)
 - Patient surveys

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Risk Adjustment

- Risk adjustment uses ICD-10 diagnoses codes to identify patients with higher severity/complexity from others, compare health status/wellness among populations, predict costs, and quality of care
- Allows insurers to predict and allocate the amount of funds needed to care for patients based on their health status and co-morbid conditions
 - Low-risk “healthier” patients ideally will require less spend than higher-risk “sick” patients
- Risk adjustment methodologies (partial list)
 - *CMS-Hierarchical Condition Category (HCC)
 - HHS – HCC
 - Diagnostic Related Groups (DRG)

*Methodology of Focus

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Risk Adjustment and Quality

- Appropriately and accurately capturing ICD-10 diagnoses codes allow for complex patients with co-morbid conditions and complications to have a smaller impact on some quality measures
- Depending on the quality measure and payment methodology – risk adjustment can be captured and applied cumulatively (12 months, 90 days) or episode/encounter based (patient safety indicators)

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Risk Adjustment, Quality, and Payments

- While providers and hospitals still use the traditional FFS model for payments, those payments are adjusted to reflect the quality of care provided.
- High VALUE providers and hospitals are rewarded with payment increases, while low VALUE providers/hospitals are penalized with payment reductions.
- Example: In the Hospital Readmission Reduction Program, hospitals can see up to a 3% reduction in MS-DRG payments if EXPECTED performance is not met.
 - Expected performance is calculated based on patient risk (risk adjustment)

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Hierarchical Condition Categories (HCCs)

- HCCs are groupings of clinically similar diagnoses into condition categories in a hierarchical fashion
 - Highest severity condition category takes precedence over other condition categories
- Hierarchy example:

Category	HCC	Coefficient
Diabetes	HCC 17: Diabetes with Acute Complications	0.307
	HCC 18: Diabetes with Chronic Complications	0.307
	HCC 19: Diabetes without Complications	0.106

HCC	ICD 10 Code	Code Description
HCC 19: Diabetes without Complications	E08.9	Diabetes mellitus due to underlying condition without complications
	E09.9	Drug or chemical induced diabetes mellitus without complications
	E10.9	Type 1 diabetes mellitus without complications
	E11.9	Type 2 diabetes mellitus without complications
	E13.9	Other specified diabetes mellitus without complications
	Z79.4	Long term (current) use of insulin

- HCC 19 = 6 diagnoses codes
- HCC 18 = 400 diagnoses codes
- HCC 17 = 21 diagnoses codes

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HCCs

- HCC diagnoses must be captured at least once per calendar year to risk adjust.
 - Clock resets on January 1st!!!!
 - Example: BKA captured on 12/1/19, pt is not seen again until 12/1/20 but the BKA code is note captured – in the eyes of CMS a miracle has occurred!
 - Their leg grew back and they are no longer risk adjusted for that HCC!
- Ideally, HCC diagnoses are captured at each face-to-face visit
 - *Official Guidelines for Coding and Reporting* Section IV.J states, “Code all documented conditions that coexist”
 - Change in practice for providers and coders

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Risk Adjustment Factor (RAF)

- RAF is the risk score assigned to beneficiaries based on his/her disease burden and demographic factors.
 - Risk score = expected health status
- Average Medicare Patient has a RAF of 1.00
 - RAF below 1.00 = healthier patient
 - RAF above 1.00 = sicker patient
- $RAF = \text{Demographic coefficient} + \text{HCC coefficients} + \text{Disease interaction coefficients}$
- Demographic coefficient options
 - Community, NonDual, Aged
 - Community, NonDual, Disabled
 - Community, Full Benefit Dual, Aged
 - Community, Full Benefit Dual, Disabled
 - Community, Partial Benefit Dual, Aged
 - Community, Partial Benefit Dual, Disabled
 - Institutionalized

**For educational purposes, Demographic coefficient will be based on 75 yo, Community, NonDual, Aged status

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HCC Case Study

- 75 yr old female admitted with pneumonia. with a history of CVA, residual left-sided weakness and dysphagia, HTN, COPD, and CKD. At admission RR 33, spO2 85% on room air, accessory muscle usage noted.
- She was treated with 100% NRB, antibiotics. Speech therapy recommended thickened liquids due to aspiration risk upon swallow screen and study.
- Current documentation:
 - DRG 194 Simple Pneumonia with CC

Diagnosis	ICD 10 Code	HCC	Coefficient
Pneumonia	J18.9	N/A	N/A
Hemiplegia	I69.359	103	0.498
COPD	J44.9	111	0.335
dysphagia	R13.10	N/A	N/A
Hypertensive Chronic Kidney Disease	I12.9	N/A	N/A
CKD, unspecified	N18.9	N/A	N/A
Demographic Coefficient	N/A	N/A	0.452
		TOTAL RAF	1.285

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HCC Case Study

- Queries for aspiration pneumonia, CKD stage, and acute respiratory failure with hypoxia
- DRG change to 177: Respiratory infections and inflammations with MCC
- Added MCC – Acute respiratory failure with hypoxia

Diagnosis	ICD 10 Code	HCC	Coefficient
Aspiration Pneumonia	J69.0	114	0.612
Acute Respiratory Failure with Hypoxia	J96.01	84	0.314
Hemiplegia	I69.359	103	0.498
COPD	J44.9	111	0.335
dysphagia	R13.10	N/A	N/A
Hypertensive Chronic Kidney Disease	I12.9	N/A	N/A
CKD, stage 4	N18.9	137	0.284
Demographic Coefficient	N/A	N/A	0.452
		TOTAL RAF	2.495

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CDI and Risk Adjustment

- Compliant query practice
 - “Guidelines for Achieving a Compliant Query Practice—2019 update” ACDIS/AHIMA position paper
 - Clinical Validity
- Collaboration/education/relationships
 - Moving beyond queries
 - Hospital leadership buy-in
 - Department education
 - Nursing
 - Dietary
 - Wound care
- Audits

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FY 2022 Hospital Value-Based Purchasing Guide					
Payment adjustment effective for discharges from October 1, 2021 through September 30, 2022					
Baseline Period		Performance Period		Baseline Period	
July 1, 2012–June 30, 2015		July 1, 2017–June 30, 2020		January 1–December 31, 2018	
Measures		Threshold	Benchmark	HCAHPS Performance Standards	
30-Day Mortality, Acute Myocardial Infarction (MORT-30-AMI)		0.861753	0.881305	Floor (%)	
Coronary Artery Bypass Graft (CABG) Surgery 30-Day		0.968210	0.979000	Threshold (%)	
Mortality Rate (MORT-30-CABG)		0.879889	0.903608	Benchmark (%)	
30-Day Mortality, Heart Failure (MORT-30-HF)		0.920058	0.936962	15.73	79.18
30-Day Mortality, COPD (MORT-30-COPD)				19.03	79.72
Baseline Period				25.71	65.95
July 1, 2012–June 30, 2015				10.62	63.59
Performance Period				5.89	65.46
September 1, 2017–June 30, 2020				66.76	87.12
Measure		Threshold	Benchmark	6.84	51.69
30-Day Mortality, Pneumonia (MORT-30-PN)		0.836122	0.870506	19.09	71.37
Baseline Period					
April 1, 2012–March 31, 2015					
Performance Period					
April 1, 2017–March 31, 2020					
Measure		Threshold	Benchmark		
Total Hip Arthroplasty (THA)/Total Knee Arthroplasty (TKA)		0.029833	0.021493		
Complication Rate (COMP-HIP-KNEE)					
Clinical Outcomes			25%	Person and Community Engagement	
Safety			25%	Efficiency and Cost Reduction	
Baseline Period		Performance Period		Baseline Period	
January 1–December 31, 2018		January 1–December 31, 2020		January 1–December 31, 2018	
Measures (Healthcare-Associated Infections)		Threshold	Benchmark	Measures	
Central Line-Associated Bloodstream Infections (CLABSI)		0.633	0.000	Threshold	
Catheter-Associated Urinary Tract Infections (CAUTI)		0.727	0.000	Benchmark	
Surgical Site Infection (SSI): Colon		0.749	0.000	Median Medicare Spending	Mean of the lowest decile
SSI: Abdominal Hysterectomy		0.727	0.000	per Beneficiary ratio across	Medicare Spending per
Methicillin-resistant Staphylococcus aureus (MRSA)		0.748	0.000	all hospitals during the	all hospitals during the
Clostridium difficile Infection (CDI)		0.646	0.047	performance period	performance period

<https://www.qualitynet.org/inpatient/hvbp/resources>

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Heart Failure 30-Day Mortality Administrative Claims Audit

- Project purpose
 - Identify trends and opportunities related to documentation, coding, and risk adjustment in relation to the CHF mortality measure specifications included in the VBP program
 - Discover nuances within the measure that may explain or shine light on the difficulties Baptist Health System experiences in the effort to improve O/E mortality outcomes

Source: www.qualitynet.org/infopatient/measures/mortality/methodology

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Heart Failure 30-Day Mortality Measure Specifications

Hospital-Level 30- Day, All-Cause, Risk-Standardized Mortality Rate following HF hospitalization	
Description: The measure estimates a hospital-level 30-day risk-standardized mortality rate (RMSR). Mortality is defined as death for any cause within 30 days after the date of admission for the index admission for patients 65 years or older and are either Medicare FFS beneficiaries hospitalized in non-federal hospitals or are hospitalized in a VA facility.	
Measure Type: Outcomes	
Data Source: Claims - IP, OP, Amb, VA administrative claims	
Denominator: Pt's 65 years or older with a discharge principal diagnosis of heart failure , enrolled in Medicare FFS, and were not transferred from another acute care facility.	
Denominator ICD 10 Codes	
I110 Hypertensive heart disease with heart failure	I130 Hypertensive heart dz and CKD w/HF and stage 1-4 CKD or unspecified CKD
I132 Hypertensive heart and CKD with HF and stage 5 CKD, or ESRD	I501 Left ventricular failure
I5020 Unspecified systolic heart failure	I5021 Acute systolic heart failure
I5022 Chronic systolic heart failure	I5023 Acute on Chronic systolic heart failure
I5030 Unspecified diastolic heart failure	I5031 Acute diastolic heart failure
I5032 Chronic diastolic heart failure	I5033 Acute on chronic diastolic heart failure
I5040 Unspecified combined systolic and diastolic heart failure	I5041 Acute combined systolic and diastolic heart failure
I5042 Chronic combined systolic and diastolic heart failure	I509 Heart failure, unspecified
I5043 Acute on chronic combined systolic and diastolic heart failure	
Numerator: Patients aged 65 years or older that expired from any cause within 30 days of the index admission date.	

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Heart Failure 30-Day Mortality Measure Specifications

Exclusions		
Discharged alive on the day of admission or the following day who were not transferred to another acute care facility <i>(Transfers include: discharged patients that are admitted at a different short-term acute care hospital on the same day or next calendar day - Cases that meet this criterion are considered transfers regardless of whether the first instiution indicates intent to transfer in the discharge disposition code or if the second admission is for the same condition)</i>		
Enrolled in hospice or used VA hospice services any time in the 12 months prior to the index admission, including the first day of the index admission	Discharged AMA	
Has a procedure code for LVAD implantation or heart transplantation either during the index admission or in the 12 months prior to the index admission PROCEDURE CODES BELOW:		
02HA0QZ - insertion of implantable heart assist system into heart, open approach	02HA3QZ - insertion of implantable heart assist system into heart, percutaneous approach	02HA4QZ - insertion of implantable heart assist system into heart, percutaneous endoscopic approach
02HA0RS - insertion of biventricular external heart assist system into heart, open approach	02HA3RS - insertion of Biventricular external heart assist system into heart, percutaneous approach	02HA4RS - insertion of biventricular external heart assist system into heart, percutaneous endoscopic approach
02HA0RZ - insertion of external heart assist system into heart, open approach	02HA3RZ - insertion of external heart assist system into heart, percutaneous approach	02HA4RZ - insertion of external heart assist system into heart, percutaneous endoscopic approach
02YA0Z0 - Transplantation of heart, allogeneic, open approach	02YA0Z1 - Transplantation of heart, syngeneic, open approach	02YA0Z2 - Transplantation of Heart, Zooplastic, open approach

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Random Sample and Audit Process

- 100 patients across the Baptist Health System were randomly selected using information contained in the Hospital Specific Report (HSR) provided by CMS

Valvular and rheumatic heart disease (CC 91)	Hypertension (CC 95)	Stroke (CC 99-100)	Renal failure (CC 135-140)	Chronic obstructive pulmonary disease (COPD) (CC 111)	Pneumonia (CC 114-116)	Diabetes mellitus (DM) or DM complications except proliferative retinopathy (CC 17-19, 123)	Protein-calorie malnutrition (CC 21)
1	1	0	0	1	1	0	1

- Audit Process**
 - Index admission reviewed for compliance with coding guidelines, clinical validity, query and documentation opportunities
 - Coding summary compared with HSR to validate capture of condition categories
 - After index admission review, the EMR was reviewed starting at the first available encounter not exceeding 12 months from the index admission date noted on the HSR
 - Since condition categories were reported as groups on the HSR, CDI attempted to identify the specified condition category via manual abstraction and utilizing the HCC dashboard for Baptist Health's ACO
 - Barriers validating the condition categories captured in the HSR include
 - Lack of access to documentation and coding summaries from outside facilities and providers
 - HCC dashboard lacked all condition categories used in the HF risk adjustment model
 - V22 of the HCC methodology is used in the heart failure measures, while there are more recent versions available

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Condition Categories Not Included in HCC Methodology

- Condition Categories:
 - 51 – Dementia with complications
 - 52 – Dementia without complications
 - 53 – Nonpsychotic Organic Brain Syndromes/Conditions
 - 73 – Amyotrophic Lateral Sclerosis and Other Motor Neuron Disease
 - 74 – Cerebral Palsy
 - 89 – Coronary Atherosclerosis/Other Chronic Ischemic Heart Disease
 - 91 – Valvular and Rheumatic Heart Disease
 - 95 – Hypertension
 - 116 – Viral and Unspecified Pneumonia, Pleurisy
 - 123 – Diabetic and other Vascular Retinopathies
 - 139 – CKD, mild or Unspecified (Stages 1-2 or Unspecified)
 - 140 – Unspecified Renal Failure
 - 168 – Concussion or Unspecified Head Injury
 - 171 – Major Fracture, Except Skull, Vertebrae, or Hip
 - 172 – Internal Injuries
 - 174 – Other Injuries
 - 190 – Amputation Status, Upper Limb

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Condition Categories Excluded Form Risk Adjustment If Only Captured During Index Admission

- | | |
|--|--|
| • 17 – Diabetes with Acute Complications | • 115 – Pneumococcal Pneumonia, Empyema, Lung Abscess |
| • 84 – Cardio-Respiratory Failure and Shock | • 135 – Acute Renal Failure |
| • 85 – Congestive Heart Failure | • 140 – Unspecified Renal Failure |
| • 86 – Acute Myocardial Infarction | • 166 – Severe Head Injury |
| • 87 – Unstable Angina and other Acute Ischemic Heart Disease | • 167 – Major Head Injury |
| • 99 – Cerebral Hemorrhage | • 168 – Concussion or Unspecified Head Injury |
| • 100 – Ischemic or Unspecified Stroke | • 170 – Hip Fracture/Dislocation |
| • 103 – Hemiplegia/Hemiparesis | • 171 – Major Fracture, Except Skull, Vertebrae, or Hip |
| • 104 – Monoplegia, Other Paralytic Syndromes | • 173 – Traumatic Amputations and Complications |
| • 106 – Atherosclerosis of the Extremities with Ulceration or Gangrene | • 189 – Amputation Status, Lower Limb/Amputation Complications |
| • 107 – Vascular Disease with Complications | • 190 – Amputation Status, Upper Limb |
| • 108 – Vascular Disease | |
| • 114 – Aspiration and Specified Bacterial Pneumonias | |

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Audit Findings

- 8 index admissions were identified as having a possible alternative principal diagnosis (co-equal)
- 4 index admissions were included in the measure because of the HTN-CHF-CKD combo code as principal diagnosis, admission due to CKD/ESRD
- Several ICD 10 codes mapping to a risk adjusting condition category were present on claims, but were not capture by CMS on the HSR
 - Per measure specifications, “As a part of the data processing prior to the measure calculation, records are removed for non-short-term acute care facilities, such as psychiatric facilities, rehabilitation facilities, or long-term care hospitals. Additional data cleaning steps include removing claims with stays longer than one year, claims with overlapping dates, claims for patients not listed in the Medicare enrollment database, and records with invalid provider IDs”.

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Ranking Opportunities

- The rank was determined by the highest number of opportunities found during the abstraction along with the total condition categories that risk adjust across the care continuum.
 - The top 11 categories identified
 - Consideration was given to ease of implementation, current education/interventions in place, barriers, and DRG impact in the final ranking of the areas of focus
 - Using tool previous developed by CDI, we were easily able to identify the condition categories that risk adjust for CMS Condition Specific Mortality Measures, Procedure-Specific Mortality Measures, and HCC Risk Adjustment use for RAF calculation for ACO beneficiaries
 - The maximum score in this category was 7 representing AMI, HF, PNA, COPD, stoke, and CABG mortality measures and RAF/ACO scoring

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Top Opportunities

Rank	Risk Adjustment		Audit Findings	Continuum of Care	Barriers / Recommendation	DRG Impact
RANK	Description of Risk Variable Groupings (as reported in CMS data file)	Condition Categories	Total # of opportunities	CC Impacts Mortality Measures: AMI, HF, PNA, COPD, Stroke, CABG & HCC for ACO/RAF Score (total number of metrics; Max total: 7)	Barriers	MCC/CC/HCC
1	Protein-calorie malnutrition (CC 21)	Protein-calorie malnutrition (CC 21)	22	7	MSA in Epic	MCC, CC, HCC
2	Major psychiatric disorders (CC 57-59)	Schizophrenia (CC 57)	24	5	Complex, subject matter expert specific to psychiatric physician or APRN	CC, HCC
		Major depressive, bipolar, and paranoid disorders (CC 58)				CC, HCC
		Reactive and unspecified psychosis (CC 59)				HCC
3	Dementia or other specified brain disorders (CC 51-53)	Dementia with complications (CC 51)	16	6	Requesting subject matter expert provider DSMS criteria	CC
		Dementia without complications (CC 52)				
		Nonpsychotic organic brain syndromes/conditions (CC 53)				
4	Vascular disease and complications (CC 106-108)	Atherosclerosis of the extremities with ulceration or gangrene (CC 106)	0	7	Provider Engagement & Build a preference list for vascular surgery	CC, HCC
		Vascular disease with complications (CC 107)	1			
		Vascular disease (CC 108)	14			HCC
5	Coronary atherosclerosis or angina (CC 88-89)	Angina pectoris (CC 88)	14	5	Provider Engagement	CC, HCC

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Top Opportunities Continued

Rank	Risk Adjustment		Audit Findings	Continuum of Care	Barriers / Recommendation	DRG Impact
RANK	Description of Risk Variable Groupings (as reported in CMS data file)	Condition Categories	Total # of opportunities	CC Impacts Mortality Measures: AMI, HF, PNA, COPD, Stroke, CABG & HCC for ACO/RAF Score (total number of metrics; Max total: 7)	Barriers	MCC/CC/HCC
6	Pneumonia (CC 114-116)	Aspiration and specified bacterial pneumonias (CC 114)	8	7	Provider Engagement	MCC, HCC
		Pneumococcal pneumonia, empyema, lung abscess (CC 115)				
		Viral and unspecified pneumonia, pleurisy (CC 116)	4	6		MCC
7	Cardio-respiratory failure and shock (CC84)	Cardio-respiratory failure and shock (CC 84 plus ICD-10-CM codes R09.01 and R09.02)	6	4	Provider Engagement	MCC, CC, HCC
8	Diabetes mellitus (DM) or DM complications except proliferative retinopathy (CC 17-19, 123)	Diabetes with acute complications (CC 17)	6	4	Coding & CDI Engagement/ Coding guidelines from outpatient to inpatient	MCC, HCC
		Diabetes with chronic complications (CC 18)				HCC
		Diabetes without complications (CC 19)				
9	Chronic liver disease (CC 27-29)	End-stage liver disease (CC 27)	6	4	not identified at this time / subject matter expert (PA)	MCC, CC, HCC
		Cirrhosis of liver (CC 28)				HCC
		Chronic hepatitis (CC 29)				CC, HCC
10	Chronic obstructive pulmonary disease (COPD) (CC 111)	Chronic obstructive pulmonary disease (COPD) (CC 111)	5	6	Provider Engagement / subject matter expert PA	CC, HCC
11	Renal failure (CC 135-140)	Chronic kidney disease, moderate (stage 3) (CC 138)	5	7	Provider Engagement	HCC

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Improvement Opportunities Found Through Audit

Rank	Risk Adjustment		Audit Findings	Continuum of Care	Barriers / Recommendation	Education Opportunities		
RANK	Description of Risk Variable Groupings (as reported in CMS data file)	Condition Categories	Total # of opportunities	CC Impacts Mortality Measures: AMI, HF, PNA, COPD, Stroke, CABG & HCC for KCO/RAF Score (total number of metrics; Max total: 7)	Barriers	Coding Opportunities (in Patient Setting)	CDI Opportunities	Provider Opportunities
1	Protein-calorie malnutrition (CC 21)	Protein-calorie malnutrition (CC 21)	22	7	MSA in Epic	re-educate from coding supervisor: "Yes, we can code cachexia when patient described as cachectic. See Coding Clinic Q3 2006 page 15"	same as coding	copy/paste, pre-populated assessments in templates causing conflicting documentation; update on MSA attestation
2	Major psychiatric disorders (CC 57-59)	Schizophrenia (CC 57) Major depressive, bipolar, and paranoid disorders (CC 58) Reactive and unspecified psychosis (CC 59)	24	5	Complex, subject matter expert specific to psychiatric physician or APRN	clinical indicators to look for	IP query template for depression?	How to properly document Depression - consider collaborating with a Psychiatric to form a tip sheet, include documentation requirements to properly code Medications with no associated diagnosis
3	Dementia or other specified brain disorders (CC 51-53)	Dementia with complications (CC 51) Dementia without complications (CC 52) Nonpsychotic organic brain syndromes/conditions (CC 53)	16	6	Requesting subject matter expert provider: DSM5 criteria	identifying behavior disturbances picking up when documented	identifying behavior disturbances	Age related disability & Age related cognitive decline
4	Vascular disease and complications (CC 106-108)	Atherosclerosis of the extremities with ulceration or gangrene (CC 106) Vascular disease with complications (CC 107) Vascular disease (CC 108)	0 1 14	7	Provider Engagement & Build a preference list for vascular surgery	dissections, varicose veins w/ulceration AAA, PVD, Aortic ectasia	dissections, varicose veins w/ulceration AAA, PVD, Aortic ectasia	dissections, varicose veins w/ulceration AAA, PVD, Aortic ectasia
5	Coronary atherosclerosis or angina (CC 88-89)	Angina pectoris (CC 88)	14	5	Provider Engagement	kick back for query	query for dx (i) medication	medication but not dx
6	Pneumonia (CC 114-116)	Aspiration and specified bacterial pneumonias (CC 114) Pneumococcal pneumonia, empyema, lung abscess (CC 115) Viral and unspecified pneumonia, pleurisy (CC 116)	8 4 4	7 6	Provider Engagement	coding lobar pneumonia when lobe specified, kick back uncertain dx kick back uncertain dx	coding lobar pneumonia when lobe specified, query uncertain dx query uncertain dx	D/C summary - uncertain dx, specifying pneumonia uncertain dx
7	Cardio-respiratory failure and shock (CC 84)	Cardio-respiratory failure and shock (CC 84 plus ICD-10-CM codes R09.01 and R09.02)	6	4	Provider Engagement	pick up documented diagnosis	query for CRF - oxygen dependent (amb and IP)	education BHS clinical criteria for ARF & CRF
8	Diabetes mellitus (DM) or DM complications except proliferative retinopathy (CC 17-19, 123)	Diabetes with acute complications (CC 17) Diabetes with chronic complications (CC 18) Diabetes without complications (CC 19)	6	4	Coding & CDI Engagement/ Coding guidelines from outpatient to inpatient	educate to pick up every complication	educate to pick up every complication	Education to Document DM type & any complications, uncontrolled DM does not lead to a complication code
9	Chronic liver disease (CC 27-29)	End-stage liver disease (CC 27) Cirrhosis of liver (CC 28) Chronic hepatitis (CC 29)	6	4	not identified at this time / subject matter expert (PA)	pick up ESD when documented; kick back to CDI for portal HTN query when appropriate clinical indicators to look for pick up chronic hepatitis when documented	query for portal HTN & hepatorenal syndrome Clinical indicators to look for Query for cirrhosis & Alcoholic Liver Disease	document portal HTN & hepatorenal syndrome when present Documentation of cirrhosis & Alcoholic liver disease
10	Chronic obstructive pulmonary disease (COPD) (CC 111)	Chronic obstructive pulmonary disease (COPD) (CC 111)	5	6	Provider Engagement / subject matter expert PA	clinical indicators to look for	query - correlating medication w/ dx	MEAT Criteria, correlating meds with dx
11	Renal failure (CC 135-140)	Chronic kidney disease, moderate (stage 3) (CC 138)	5	7	Provider Engagement	kick back for query	query	KDIGO

Intervention Examples

- Specialty Specific ICD-10 diagnoses preference lists in Epic
- Collaboration with consultant departments
 - Registered dietitians – Malnutrition severity assessments – MD attestation
 - Wound care
 - Nursing education – GCS scoring, pressure ulcer staging, descriptive documentation
- Provider education
 - Presentations
 - Physician advisor utilization
 - Tip sheets



Clinical Indicators for Depression

Each Diagnosis must be pertinent to the Date of Service and satisfy the M.E.A.T. Criteria

M.E.A.T. (At least one required)	Monitor/Manage • Signs or symptoms • Disease course	Evaluate • Study results • Medication effectiveness • Treatment response	Assess/Address or • Ordering of tests • Communication with patient/family, (discussion/counseling) • Review of records • Referrals	Treat • Prescribed medications, treatments, other modalities
Physical Evaluation	<ul style="list-style-type: none"> Cardinal symptoms: 5 or more of the following (one must be #1 or #2) present during the same 2 week period that represents a change from baseline function: <ol style="list-style-type: none"> Depressed mood most of the day, nearly every day Loss of interest or pleasure in all, or almost all, activities most of the day, nearly every day Weight loss or gain of 5% body weight in 1 month (unintentional), or decreased or increased appetite nearly every day Insomnia or hypersomnia nearly every day Psychomotor agitation or retardation nearly every day Fatigue or loss of energy nearly every day Feelings of worthlessness or excessive, inappropriate guilt nearly every day Diminished ability to concentrate or indecisiveness nearly every day Recurrent thought (not just fear) of death or recurrent suicidal thoughts, plans or attempts 			
Clinical Evaluation	<ul style="list-style-type: none"> Symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning Episode is not attributable to the effects of substance abuse, a psychosis like schizophrenia, or another underlying medical condition Mild – few, if any symptoms in excess of 5, intensity distressing but manageable, minor functional impairment Moderate – symptoms intermediate between mild and severe Severe – large number of symptoms, especially suicidal symptoms or deeply withdrawn, intense and unmanageable symptoms, marked functional impairment Psychotic features – delusions and/or hallucinations 			

Key Words	<ul style="list-style-type: none"> Single vs recurrent Mild, moderate, severe Full remission – no significant signs or symptoms for >2 months following an MDD episode Partial remission – symptoms of the MDD episode persist but full criteria no longer met, or a period of <2 months without significant symptoms following an episode
Diagnostic PX	<ul style="list-style-type: none"> Inquiry about cardinal symptoms and any changes Description of general appearance and behavior Assessment of ability to concentrate Assessment of current and past weight Psychiatric specific exam (1997 Guidelines) Evidence of hypercortisolism Screening instruments (PHQ9, PHQ2, Beck Depression Inventory, WHO-5, Geriatric depression scale, etc.)
Therapeutic TX	<ul style="list-style-type: none"> Initiate or adjust antidepressant medications Addition or adjustment of adjunctive mood stabilizers Addition or adjustment of antipsychotic medications Referral for management by psychiatrist or psychologist Electroconvulsive therapy (ECT) Therapy/Counseling Recommendation of community support services
Possible Medications	<ul style="list-style-type: none"> Paroxetine (Paxil) Sertraline (Zoloft) Citalopram (Celexa) Escitalopram (Lexapro) Fluoxetine (Prozac) Duloxetine (Cymbalta) Venlafaxine (Effexor) Vilazodone (Viibryd) Amitriptyline (Elavil) Lamotrigine (Lamictal) Lithium Olanzapine (Zyprexa) Aripiprazole (Abilify) Risperidone (Risperdal) Vortioxetine (Trintellix)

	<ul style="list-style-type: none"> Cariprazine (Vraylar) Lurasidone (Latuda)
Coding Considerations	<ul style="list-style-type: none"> Unspecified depression is not an HCC. Try to get episode and severity when possible Depression and anxiety should not be coded as F41.8 unless the provider uses the term depression with anxiety.
Query	<ul style="list-style-type: none"> Episode (single vs. recurrent) Severity (mild, moderate, severe) Remission status
Related Conditions	<ul style="list-style-type: none"> Bipolar Disorder Dysthymia Dementia

Resources:
ACDIS 2019 Outpatient CDI Pocket Guide Focusing on HCCs

acdis2022
IMAGINE
May 2–5, 2022 | Kissimmee, FL



Thank you. Questions?

ashley.comiskey@bhsi.com

In order to receive your continuing education certificate(s) for this program, you must complete the online evaluation. The link can be found in the continuing education section of the program guide.

hcpro

Sources

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- 2018 Procedure-Specific Measure Updates and Specifications Report: CABG Mortality (May 4, 2018). Retrieved from <https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1163010421830>
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Top Opportunities



Rank	Risk Adjustment		Audit Findings	Continuum of Care	Barriers / Recommendation	DRG Impact
RANK	Description of Risk Variable Groupings (as reported in CMS data file)	Condition Categories	Total # of opportunities	CC Impacts Mortality Measures: AMI, HF, PNA, COPD, Stroke, CABG & HCC for ACO/RAF Score (total number of metrics; Max total: 7)	Barriers	MCC/CC/HCC
1	Protein-calorie malnutrition (CC 21)	Protein-calorie malnutrition (CC 21)	22	7	MSA in Epic	MCC, CC, HCC
2	Major psychiatric disorders (CC 57-59)	Schizophrenia (CC 57) Major depressive, bipolar, and paranoid disorders (CC 58) Reactive and unspecified psychosis (CC 59)	24	5	Complex, subject matter expert specific to psychiatric physician or APRN	CC, HCC CC, HCC
3	Dementia or other specified brain disorders (CC 51-53)	Dementia with complications (CC 51) Dementia without complications (CC 52) Nonpsychotic organic brain syndromes/conditions (CC 53)	16	6	Requesting subject matter expert provider DSM5 criteria	HCC CC
4	Vascular disease and complications (CC 106-108)	Atherosclerosis of the extremities with ulceration or gangrene (CC 106) Vascular disease with complications (CC 107) Vascular disease (CC 108)	0 1 14	7	Provider Engagement & Build a preference list for vascular surgery	CC, HCC HCC
5	Coronary atherosclerosis or angina (CC 88-89)	Angina pectoris (CC 88)	14	5	Provider Engagement	CC, HCC

Top Opportunities Continued

Rank	Risk Adjustment		Audit Findings	Continuum of Care	Barriers / Recommendation	DRG Impact
RANK	Description of Risk Variable Groupings (as reported in CMS data file)	Condition Categories	Total # of opportunities	CC Impacts Mortality Measures: AMI, HF, PNA, COPD, Stroke, CABG & HCC for ACO/RAF Score (total number of metrics; Max total: 7)	Barriers	MCC/CC/HCC
6	Pneumonia (CC 114-116)	Aspiration and specified bacterial pneumonias (CC 114) Pneumococcal pneumonia, empyema, lung abscess (CC 115) Viral and unspecified pneumonia, pleurisy (CC 116)	8 4	7 6	Provider Engagement	MCC, HCC MCC
7	Cardio-respiratory failure and shock (CC84)	Cardio-respiratory failure and shock (CC 84 plus ICD-10-CM codes R09.01 and R09.02, Diabetes with acute complications (CC 17) Diabetes with chronic complications (CC 18) Diabetes without complications (CC 19) End-stage liver disease (CC 27) Cirrhosis of liver (CC 28) Chronic hepatitis (CC 29)	6	4	Provider Engagement	MCC, CC, HCC
8	Diabetes mellitus (DM) or DM complications except proliferative retinopathy (CC 17-19, 123)	Diabetes with acute complications (CC 17) Diabetes with chronic complications (CC 18) Diabetes without complications (CC 19) End-stage liver disease (CC 27) Cirrhosis of liver (CC 28) Chronic hepatitis (CC 29)	6	4	Coding & CDI Engagement/ Coding guidelines from outpatient to inpatient	MCC, HCC HCC
9	Chronic liver disease (CC 27-29)	Diabetes with acute complications (CC 17) Diabetes with chronic complications (CC 18) Diabetes without complications (CC 19) End-stage liver disease (CC 27) Cirrhosis of liver (CC 28) Chronic hepatitis (CC 29)	6	4	not identified at this time / subject matter expert (PA)	MCC, CC, HCC HCC CC, HCC
10	Chronic obstructive pulmonary disease (COPD) (CC 111)	Chronic obstructive pulmonary disease (COPD) (CC 111)	5	6	Provider Engagement / subject matter expert PA	CC, HCC
11	Renal failure (CC 135-140)	Chronic kidney disease, moderate (stage 3) (CC 138)	5	7	Provider Engagement	HCC

Improvement Opportunities Found Through Audit

Rank	Risk Adjustment		Audit Findings	Continuum of Care	Barriers / Recommendation	Education Opportunities		
RANK	Description of Risk Variable Groupings (as reported in CMS data file)	Condition Categories	Total # of opportunities	CC Impacts Mortality Measures: AMI, HF, PNA, COPD, Stroke, CABG & HCC for ACO/RAF Score (Total number of metrics: Max total: 7)	Barriers	Coding Opportunities (In Patient Setting)	CDI Opportunities	Provider Opportunities
1	Protein-calorie malnutrition (CC 21)	Protein-calorie malnutrition (CC 21)	22	7	MSA in Epic	re-educate-From coding supervisor: "Yes, we can code cachexia when patient described as cachectic. See Coding Clinic Q3 2006 page 15"	same as coding	copy/paste, pre-populated assessments in templates causing conflicting documentation; update on MSA attestation
2	Major psychiatric disorders (CC 57-59)	Schizophrenia (CC 57) Major depressive, bipolar, and paranoid disorders (CC 58) Reactive and unspecified psychosis (CC 59)	24	5	Complex, subject matter expert specific to psychiatric physician or APRN	clinical indicators to look for	IP query template for depression?	How to properly document Depression - consider collaborating with a Psychiatrist to form a tip sheet, include documentation requirements to properly code Medications with no associated diagnosis
3	Dementia or other specified brain disorders (CC 51-53)	Dementia with complications (CC 51) Dementia without complications (CC 52) Non psychotic organic brain syndromes/conditions (CC 53)	16	6	Requesting subject matter expert provider DSM5 criteria	identifying behavior disturbances picking up when documented Coding opportunities for coding age related & cognitive decline	identifying behavior disturbances	Age related disability & Age related cognitive decline
4	Vascular disease and complications (CC 106-108)	Atherosclerosis of the extremities with ulceration or gangrene (CC 106) Vascular disease with complications (CC 107) Vascular disease (CC 108)	0 1 14	7	Provider Engagement & Build a preference list for vascular surgery			
5	Coronary atherosclerosis or angina (CC 88-89)	Angina pectoris (CC 88)	14	5	Provider Engagement	dissections, varicose veins w/ulceration AAA, PVD, Aortic ectasia kick back for query	dissections, varicose veins w/ulceration AAA, PVD, Aortic ectasia query for dx r/t medication	dissections, varicose veins w/ulceration AAA, PVD, Aortic ectasia medication but not dx
6	Pneumonia (CC 114-116)	Aspiration and specified bacterial pneumonias (CC 114) Pneumococcal pneumonia, empyema, lung abscess (CC 115) Viral and unspecified pneumonia, pleurisy (CC 116)	8 4	7 6	Provider Engagement	coding lobar pneumonia when lobe specified, kick back uncertain dx kick back uncertain dx	coding lobar pneumonia when lobe specified, query uncertain dx query uncertain dx	D/C summary - uncertain dx, specifying pneumonia uncertain dx
7	Cardio-respiratory failure and shock (CC 84)	Cardio-respiratory failure and shock (CC 84 plus ICD-10-CM codes R09.01 and R09.02)	6	4	Provider Engagement	pick up documented diagnosis	query for CRF - oxygen dependent (amb and IP)	education BHS clinical criteria for ARF & CRF
8	Diabetes mellitus (DM) or DM complications except proliferative retinopathy (CC 174.9, 123)	Diabetes with acute complications (CC 17) Diabetes with chronic complications (CC 18) Diabetes without complications (CC 19)	6	4	Coding & CDI Engagement/ Coding guidelines from outpatient to inpatient	educate to pick up every complication	educate to pick up every complication	Education to Document DM type & any complications, uncontrolled DM does not lead to a complication code
9	Chronic liver disease (CC 27-29)	End-stage liver disease (CC 27) Cirrhosis of liver (CC 28) Chronic hepatitis (CC 29)	6	4	not identified at this time / subject matter expert (PA)	pick up ESD when documented; kick back to CDI for portally HTN query when appropriate clinical indicators to look for	query for portal HTN & Hepatorenal syndrome Clinical indicators to look for Query for cirrhosis & Alcoholic Liver Disease	document portal HTN & Hepatorenal syndrome when present Documentation of cirrhosis & Alcoholic liver disease
10	Chronic obstructive pulmonary disease (COPD) (CC 111)	Chronic obstructive pulmonary disease (COPD) (CC 111)	5	6	Provider Engagement / subject matter expert PA	pick up chronic hepatitis when documented clinical indicators to look for	query -correlating medication w/ DX	MEAT Criteria, correlating meds with dx
11	Renal failure (CC 135-140)	Chronic kidney disease, moderate (stage 3) (CC 138)	5	7	Provider Engagement	kick back for query	query	KDIGO