

## Purpose

Hierarchical Condition Category (HCC) Coding is the risk adjustment methodology used by the Centers for Medicare and Medicaid Services (CMS) and other payors to determine the annual capitated payments for Medicare Advantage beneficiaries and to determine expected costs in Medicare Shared Savings Programs (ACOs) and newer Alternative Payment Models (APMs). Capturing HCC scores for your patients accurately reflects their severity to ensure appropriate funds are available for complex populations and helps your practice be more successful in APM participation or value-based models. This tool was developed to define what conditions carry a risk adjustment weight and provide common example diagnosis codes for home-based primary care. Understanding which conditions risk adjust will help your practice improve their diagnosis coding accuracy and reflect the severity of the complex patient population you care for.

HCC Category	HCC Category Descriptor / Example Diagnoses	2020 HCC Value	ICD-10 Code
1	HIV/AIDS	0.355	
	Human immunodeficiency virus [HIV] disease		B20
2	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	0.352	
	Gram-negative sepsis, unspecified		A41.50
	Sepsis, unspecified organism		A41.9
6	Opportunistic Infections	0.424	
	Pneumocystis		B59
8	Metastatic Cancer and Acute Leukemia	2.659	
	Secondary malignant neoplasm of unspecified site		C79.9
9	Lung and Other Severe Cancers	1.024	
	Malignant neoplasm of lower lobe, unspecified bronchus or lung		C34.30
	Multiple myeloma in remission		C90.01
	Other Severe (e.g., Mesothelioma, Pancreas, Gallbladder, Liver, Stomach, Esophagus, Small intestine)		
10	Lymphoma and Other Cancers	0.675	
	Secondary and unspecified malignant neoplasm of lymph node, unspecified		C77.9
	Hodgkin lymphoma, unspecified, unspecified site		C81.90
	Unspecified B-cell lymphoma, unspecified site		C85.10
	Non-Hodgkin lymphoma, unspecified, unspecified site		C85.90
	Other (e.g., Brain, Endocrine, Ovary, Connective & Soft tissue, Peripheral nerves)		
11	Colorectal, Bladder, and Other Cancers	0.307	
	Malignant neoplasm of colon, unspecified		C18.9
	Malignant neoplasm of bladder, unspecified		C67.9
	Malignant neoplasm of unspecified kidney, except renal pelvis		C64.9
	Other (e.g., Mouth, Tongue, Salivary Glands, Nasopharynx, Sinuses, Ear, Labia, Cervix)		

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12	Breast, Prostate, and Other Cancers and Tumors	0.15	
	Malignant neoplasm of unspecified site of unspecified female breast		C50.919
	Malignant neoplasm of prostate		C61
	Malignant neoplasm of endometrium		C54.1
	Other (e.g., Penis, Eye, Musculoskeletal, Melanoma, Brain benign, Merkel cell, Carcinoid)		
17	Diabetes with Acute Complications	0.302	
	Type 1 diabetes mellitus with ketoacidosis without coma		E10.10
	Type 2 diabetes mellitus with ketoacidosis without coma		E11.10
18	Diabetes with Chronic Complications	0.302	
	Type 2 diabetes mellitus with diabetic chronic kidney disease		E11.22
	Type 2 diabetes mellitus with other circulatory complications		E11.59
19	Diabetes without Complication	0.105	
	Type 2 diabetes mellitus without complications		E11.9
21	Protein-Calorie Malnutrition	0.455	
	Mild protein-calorie malnutrition		E44.1
22	Morbid Obesity	0.25	
	Body mass index (BMI) 40.0-44.9, adult		Z68.41
	Class 2 (BMI 35-39.9) severe obesity with serious comorbidity in adult		E66.01
23	Other Significant Endocrine and Metabolic Disorders	0.194	
	Hyperparathyroidism, unspecified		E21.3
	Secondary hyperparathyroidism of renal origin		N25.81
27	End-Stage Liver Disease	0.882	
	Chronic hepatic failure without coma		K72.10
28	Cirrhosis of Liver	0.363	
	Alcoholic cirrhosis of liver without ascites		K70.30
	Other cirrhosis of liver		K74.69
29	Chronic Hepatitis	0.147	
	Chronic viral hepatitis, unspecified		B18.9
33	Intestinal Obstruction/Perforation	0.219	
	Fecal impaction		K56.41
34	Chronic Pancreatitis	0.287	
	Other chronic pancreatitis		K86.1
35	Inflammatory Bowel Disease	0.308	
	Crohn's disease, unspecified, without complications		K50.90
	Other ulcerative colitis without complications		K51.80
39	Bone/Join/Muscle Infections/Necrosis	0.401	
	Arthritis due to other bacteria, unspecified joint		M00.80
	Direct infection of unspec. joint in infectious and parasitic diseases classified elsewhere		M01.X0
	Other reactive arthropathies, unspecified site		M02.80
	Reactive arthropathy, unspecified		M02.9
	Osteomyelitis, unspecified		M86.9
40	Rheumatoid Arthritis and Inflammatory Connective Tissue Disease	0.421	
	Other rheumatoid arthritis with rheumatoid factor of unspecified site		M05.80
	Rheumatoid arthritis with rheumatoid factor, unspecified		M05.9
	Rheumatoid arthritis without rheumatoid factor, unspecified site		M06.00
46	Severe Hematological Disorders	1.372	
	Refractory anemia, unspecified		D46.4
	Sickle-cell disease without crisis		D57.1
47	Disorders of Immunity	0.665	
	Antineoplastic chemotherapy induced pancytopenia		D61.810
	Neutropenia, unspecified		D70.9

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48	Coagulation Defects and Other Specified Hematologic Disorders	0.192	
	Sickle-cell trait		D57.3
	Senile Purpura		D69.2
	Thrombocytopenia, unspecified		D69.6
51	Dementia with Complications	0.346	
	Alzheimer's disease with behavioral complications		F02.81
52	Dementia without Complication	0.346	
	Alzheimer's disease without behavioral complications		F02.80
54	Substance Use with Psychotic Complications	0.329	
	Alcohol dependence with withdrawal delirium		F10.231
	Cannabis abuse with psychotic disorder, unspecified		F12.159
55	Substance Use Disorder, Moderate/Severe, or Substance Use with Complications	0.329	
	Alcohol dependence, uncomplicated		F10.20
	Alcohol dependence, in remission		F10.21
	Opioid dependence, uncomplicated		F11.20
	Opioid dependence, in remission		F11.21
56	Substance Use Disorder, Mild, Except Alcohol and Cannabis	0.329	
	Drug abuse (can specify amphetamines, barbiturates, cocaine, hallucinogens, opioids, etc.)		F19.10
57	Schizophrenia	0.524	
	Schizophrenia, unspecified		F20.9
58	Reactive and Unspecified Psychosis	0.393	
	Atypical psychosis		F29
	Unspecified psychosis not due to a substance or known physiological condition		F29
59	Major Depressive, Bipolar, and Paranoid Disorders	0.309	
	Major depressive disorder, recurrent, mild		F33.0
60	Personality Disorders	0.309	
	Personality disorder, Unspec. (others: Antisocial, Borderline, Manipulative, Narcissistic, etc.)		F60.9
70	Quadriplegia	1.242	
	Quadriplegia, unspecified		G82.50
	Functional quadriplegia		R53.2
71	Paraplegia	1.068	
	Paraplegia, unspecified		G82.20
72	Spinal cord Disorders/ Injuries	0.481	
	Myelitis, unspecified		G04.91
	Unspecified injury at unspecified level of thoracic spinal cord, subsequent encounter		S24.109D
	Unspecified injury at unspecified level of thoracic spinal cord, sequela		S24.109S
	Complete lesion of unspecified level of lumbar spinal cord, sequela		S34.119S
	Incomplete lesion of unspecified level of lumbar spinal cord, subsequent encounter		S34.129D
73	Amyotrophic Lateral Sclerosis and Other Motor Neuron Disease	0.999	
	Amyotrophic lateral sclerosis		G12.21
74	Cerebral Palsy	0.339	G80.9
75	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome, Inflammatory and Toxic Neuropathy	0.472	
	Myasthenia gravis without (acute) exacerbation		G70.00
	Myoneural disorder, unspecified		G70.9
76	Muscular Dystrophy	0.518	G71.0
77	Multiple Sclerosis	0.423	G35
78	Parkinson's and Huntington's Diseases	0.606	
	Parkinson's disease		G20
	Huntington's disease		G10

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79	Seizure Disorders and Convulsions	0.22	
	Other seizures		G40.89
	Epilepsy, unspecified, not intractable, without status epilepticus		G40.909
80	Coma, Brain Compression/Anoxic Damage	0.486	
	Persistent vegetative state		R40.3
	Anoxic brain damage, not elsewhere classified		G93.1
82	Respirator Dependence/Tracheostomy Status	1.0	
	Encounter for attention to tracheostomy		Z43.0
	Dependence on respirator [ventilator] status		Z99.11
83	Respiratory Arrest	0.354	R09.2
84	Cardio-Respiratory Failure and Shock	0.282	
	Chronic respiratory failure with hypoxia		J96.11
	Chronic respiratory failure with hypercapnia		J96.12
85	Congestive Heart Failure	0.331	
	Hypertensive heart disease with heart failure		I11.0
	Pulmonary hypertension, unspecified		I27.20
	Cardiomyopathy, unspecified		I42.9
	Unspecified systolic (congestive) heart failure		I50.20
	Chronic Systolic (congestive) heart failure		I50.22
	Unspecified diastolic (congestive) heart failure		I50.30
	Heart failure, unspecified		I50.9
86	Acute Myocardial Infarction	0.195	
	Other myocardial infarction type		I21.A9
87	Unstable Angina and Other Acute Ischemic Heart Disease	0.195	
	Unstable angina		I20.0
88	Angina Pectoris	0.135	
	Angina pectoris, unspecified		I20.9
	Stable angina		I20.8
96	Specified Heart Arrhythmias	0.268	
	Unspecified atrial fibrillation		I48.91
	Sick sinus syndrome		I49.5
	Supraventricular Tachycardia		I47.1
99	Cerebral Hemorrhage	0.23	
	Other nontraumatic subarachnoid hemorrhage		I60.8
	Other nontraumatic intracerebral hemorrhage		I61.8
100	Ischemic or Unspecified Stroke	0.23	
	Cerebral infarction due to thrombosis of unspecified carotid artery		I63.039
	Cerebral infarction, unspecified		I63.9
103	Hemiplegia/Hemiparesis	0.437	
	Hemiplegia and hemiparesis following unspec. cerebrovascular disease affecting unspec. side		I69.359
104	Monoplegia, Other Paralytic Syndromes	0.331	
	Monoplegia, unspecified affecting unspecified side		G83.30
106	Atherosclerosis of the Extremities with Ulceration or Gangrene	1.488	
	Gas gangrene		A48.0
	Gangrene, not elsewhere classified		I96
107	Vascular Disease with Complications	0.383	
	Chronic pulmonary embolism		I27.82
	Embolism and thrombosis of arteries of extremities, unspecified		I74.4
	Varicose veins of unspecified lower extremity with ulcer of unspecified site		I83.009

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108	Vascular Disease	0.288	
	Atherosclerosis of aorta		I70.0
	Aortic aneurysm of unspecified site, without rupture		I71.9
	Peripheral vascular disease, unspecified		I73.9
	Phlebitis & thrombophlebitis of unspecified deep vessels of unspecified lower extremity		I80.209
	Acute embolism & thrombosis of unspecified deep veins of unspecified lower extremity		I82.409
	Chronic embolism & thrombosis of unspecified deep veins of unspecified lower		I82.509
110	Cystic Fibrosis	0.51	
	Cystic fibrosis, unspecified		E84.9
111	Chronic Obstructive Pulmonary Disease	0.335	
	Emphysema, unspecified		J43.9
	Chronic obstructive pulmonary disease, unspecified		J44.9
112	Fibrosis of Lung and Other Chronic Lung Disorders	0.219	
	Pulmonary fibrosis, unspecified		J84.10
	Interstitial pulmonary disease, unspecified		J84.9
114	Aspiration and Specified Bacterial Pneumonias	0.517	
	Pneumonitis due to inhalation of food and vomit		J69.0
115	Pneumococcal Pneumonia, Emyema, Lung Abscess	0.13	
	Pneumonia due to Streptococcus pneumoniae		J13
	Abscess of lung with pneumonia		J85.1
122	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	0.222	
	Vitreous hemorrhage, unspecified eye		H43.10
	Vitreous hemorrhage, bilateral		H43.13
124	Exudative Macular Degeneration	0.521	
	Exudative age-related macular degeneration, unspecified eye, stage unspecified		H35.3290
134	Dialysis Status	0.435	
	Other mechanical complication of intraperitoneal dialysis catheter, sequela		T85.691S
135	Acute Renal Failure	0.435	
	Other acute kidney failure		N17.8
136	Chronic Kidney Disease, Stage 5	0.289	N18.5
137	Chronic Kidney Disease, Severe (Stage 4)	0.289	N18.4
138	Chronic kidney disease, Moderate (Stage 3)	0.069	N18.3
157	Pressure Ulcer of Skin with Necrosis Through to Muscle, Tendon, or Bone	2.028	
	Pressure ulcer of unspecified site, stage 4		L89.94
158	Pressure Ulcer of Skin with Full Thickness Skin Loss	1.069	
	Pressure ulcer of unspecified site, stage 3		L89.93
	Pressure ulcer of unspecified site, unstageable		L89.95
159	Pressure Ulcer of Skin with Partial Thickness Skin Loss	0.656	
	Pressure ulcer of unspecified site, stage 2		L89.92
161	Chronic Ulcer of Skin, Except Pressure	0.515	
	Non-pressure chronic ulcer of skin of other sites with unspecified severity		L98.499
162	Severe Skin Burn or Condition	0.224	
	Burns involving 10-19% of body surface with 10-19% third degree burns		T31.11
166	Severe Head Injury	0.486	
	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter		S06.9X5A

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167	Major Head Injury	0.077	
	Unspecified fracture of skull, sequela		S02.91XS
	Unspecified fracture of facial bones, sequela		S02.92XS
	Diffuse traumatic brain injury without loss of consciousness, sequela		S06.2X0S
	Diffuse traumatic brain injury with loss of consciousness of unspecified duration, sequela		S06.2X9S
	Traumatic subdural hemorrhage without loss of consciousness, sequela		S06.5X0S
	Traumatic subarachnoid hemorrhage without loss of consciousness, sequela		S06.6X0S
169	Vertebral Fractures without Spinal Cord Injury	0.476	
	Collapsed vertebra, not elsewhere classified, site unspec., initial encounter for fracture		M48.50XA
	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture		M80.88XA
	Fracture of neck, unspecified, initial encounter		S12.9XXA
	Wedge compression fracture of unspecified thoracic vertebra, initial encounter for closed fracture		S22.000A
	Other fracture of sacrum, initial encounter for closed fracture		S32.19XA
	Fracture of coccyx, initial encounter for closed fracture		S32.2XXA
	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture		M80.08XA
170	Hip Fracture/Dislocation	0.35	
	Pathological fracture, unspecified femur, initial encounter for fracture		M84.453A
	Pathological fracture in neoplastic disease, hip, unspecified, initial encounter for fracture		M84.559A
	Unspecified fracture of unspecified ilium, initial encounter for closed fracture		S32.309A
	Unspecified fracture of unspecified acetabulum, initial encounter for closed fracture		S32.409A
	Unspecified fracture of unspecified ischium, initial encounter for closed fracture		S32.609A
	Fracture of other parts of pelvis, initial encounter for closed fracture		S32.89XA
173	Traumatic Amputations and Complications	0.208	
	Partial traumatic transmetacarpal amputation of unspecified hand, initial encounter		S68.729A
	Partial traumatic amputation of unspecified great toe, initial encounter		S98.129A
176	Complications of Specified Implanted Device or Graft	0.582	
	Other cystostomy complication		N99.518
186	Major Organ Transplant or Replacement Status	0.832	
	Presence of heart assist device		Z95.811
188	Artificial Openings for Feeding or Elimination	0.534	
	Encounter for attention to gastrostomy		Z43.1
	Encounter for attention to ileostomy		Z43.2
	Encounter for attention to colostomy		Z43.3
	Encounter for attention to cystostomy		Z43.5
189	Amputation Status, Lower Limb/Amputation Complications	0.519	
	Phantom limb syndrome with pain		G54.6
	Partial traumatic amputation of unspecified great toe, subsequent encounter		S98.129D

- CMS uses a Hierarchical Condition Category (HCC) risk adjustment model to calculate patient risk scores to predict health care costs. Scores are used to adjust capitated payments for beneficiaries enrolled in Medicare Advantage and to determine expected costs in Medicare Shared Savings Programs (ACOs). Total Risk Adjustment Factor (RAF) Score = Demographics + Diagnoses + Interactions + Multiple HCC's (4-10)
- Each year CMS publishes a "denominator" to convert risk scores into dollar amounts. The 2020 denominator is \$9,365.50. The patient's Risk Adjustment Factor (RAF) score is multiplied by the Fee for Service county rate to convert risk into annual estimated expenditures per beneficiary.

- The diagnoses above often are “unspecified” only as examples. It is important to code to the highest level of specificity to achieve an accurate risk score. All active diagnoses need to be documented and resubmitted each year.
- E/M documentation must support all submitted diagnoses. Proper documentation of each diagnosis must demonstrate the provider is Monitoring, Evaluating, Assessing/Addressing, and Treating (MEAT) the condition yearly.
- Useful Tool: Risk score calculator resource--<http://www.hccuniversity.com/risk-score-calculator/>
- Disclaimer: HCC Risk Adjustment values vary based on beneficiary demographics, RA model, specificity of the diagnosis reported, and change year to year. Unspecified diagnosis code ranges are used throughout this resource simply as a reference point for you to then select the appropriate specified code based on your patient's conditions. HCC values listed are based on the 2020 CMS Alternative Payment Condition Count Model for community non-dual aged beneficiaries. Risk adjustment weights may vary depending on the clinical circumstances.



### HCCIntelligence™ Resource Center

HCCI has developed a number of free and premium resources to help home-based primary care (HBPC) providers and practice staff through our HCCIntelligence™ Resource Center at <https://www.hccinstitute.org>.



#### Hotline

Call 630.283.9222 or email [Help@HCCInstitute.org](mailto:Help@HCCInstitute.org)  
9:00 am–5:00 pm (CST)  
Monday through Friday



#### Webinars

Every third Wednesday of the month, HCCI hosts a webinar on topics relevant to HBPC.



#### Virtual Office Hours

Immediately following the monthly webinar, HCCI hosts Virtual Office Hours where experts address questions on any HBPC topic.



#### Tools & Tip Sheets

Downloadable tools, tip sheets, sample forms and how-to guides on a variety of HBPC topics.



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