Hierarchal Condition Code – Coding and Reimbursement



- Risk-adjustment model originally designed to estimate future health care costs for patients
- Mandated by CMS in 1997
 - Implemented in 2004
- Identifies patients with serious and/or chronic illnesses
- ► CMS HCC model is becoming increasingly prevalent as the environment shifts to value-based payment models.
- Other payers have also adopted HCC models
- Payers use a patient's Risk Adjustment Factor (RAF) score to predict costs.
- Models evaluate
 - Serious health conditions expected to have medical costs over time
 - Multiple chronic conditions expected to have higher health care utilization and costs.

- HCC assigned values based on
 - Chronic conditions
 - Co-morbidities
 - Demographics
 - Disease interactions
- Updated annually



- ► Relies on ICD-10 coding to assign risk scores
- Each HCC is mapped to ICD-10 codes
- ► HCC is part of the Risk Adjustment Factor (RAF) that is used to determine reimbursement
- ► Each HCC has an associated value (relative factor), which contributes to RAF
- Demographic factors (such as age and gender) are considered to assign Risk Adjustment Factor (RAF) score
- Two patients can have different payment rates based on HCCs and total RAF

- ▶ In 2021, approximately 10,000 ICD-10CM codes map to 86 HCC categories
- An individual may have more than one HCC assigned
- All HCCs are defined by diagnosis codes, typically chronic conditions
- ► HCCs are calculated over a year, using scores from all providers that have treated the patient in that time
- Multiple ICD-10 codes may be assigned to a single HCC
 - Once assigned to an HCC, will not appear in another HCCs, with few exceptions



- CMS-HCC model focuses on long-term conditions such as diabetes, chronic obstructive pulmonary disease (COPD), and congestive heart failure (CHF) that impact the likelihood of future healthcare costs.
 - Does not include acute illnesses and injuries that are not reliably predictive of ongoing healthcare costs.
- ► HHS-HCC model accounts for both chronic and acute conditions.
 - Examples of acute conditions include maternity care, low birth weight babies, and organ transplants.



The diagnosis codes reported on claims determine a patient's disease burden and risk score.



Communicate patient complexity and paint a picture of the whole patient



Risk scores are generated quarterly using 12 months of historic experience with 6 months of claims run-out



Current year's data analyzed to determine payment for the next year

HCC Classification

- ► HCCs in the hierarchy, arranged in a strictly hierarchical fashion
- Diagnosis codes considered in serious or chronic categories have a risk adjustment value assigned
- Similar to current FFS models
 - RVU concept for CPTs or
 - DRG concept for Inpatient stays
- ► The more serious the condition, the higher the care and the higher the risk score
- ► If 2 or more serious conditions in the same category are documented, the HCC is assigned for the most serious condition
- No condition category carries a negative payment weight
- ➤ A condition that is higher-ranked in a disease hierarchy will have at least as large a payment weight as a lower-ranked condition in the same hierarchy



HCC Classification

- ▶ Diseases and conditions are organized into body systems or similar disease processes. The top HCC categories include:
 - Major depressive and bipolar disorders
 - Asthma and pulmonary disease
 - Diabetes
 - Specified heart arrhythmias
 - Congestive Heart Failure
 - Breast and prostate cancer
 - Rheumatoid arthritis



Duplicate Assignments of Diagnosis Groups

- Some diagnosis codes denote the presence of more than one clinical condition or disease
- Reside in 2 HCCs
 - 131.03 Hypertensive heart/renal disease, with heart/renal failure" assigned to both
 - ☐ HCC 80 "Congestive Heart Failure"
 - HCC 131 "Renal Failure"

ICD-10-CM Codes	HCC Category Description
E84.0, E84.1-, E84.8, E84.9	Cystic fibrosis
J41.0-J41.8, J42, J43, J44, J98.2, J98.3	Chronic obstructive pulmonary disease
A48.1, J15.0-J15.2-, J15.5, J15.6, J15.8, J69, J95.851	Aspiration and specified bacterial pneumonias
T81.502(A)(D)(S), T81.512(A)(D)(S), T81.522(A)(D)(S), T81.532(A)(D)(S), T81.592(A)(D)(S), T82.41X(A)(D)(S), T82.42X(A)(D)(S), T82.43X(A)(D)(S), T82.49X(A)(D)(S), T85.611(A)(D)(S), T85.621(A)(D)(S), T85.631(A)(D)(S), T85.691(A)(D)(S), T85.71X(A)(D)(S), Y62.2, Z49.0-, Z49.3-, Z91.15, Z99.2	Dialysis status
N17	Acute renal failure
I12.0, I13.11, I13.2, N18.5, N18.6	Chronic kidney disease (stage 5)
N18.4	Chronic kidney disease, severe (stage 4)
L89.004, L89.014, L89.024, L89.104, L89.114, L89.124, L89.134, L89.144, L89.154, L89.204, L89.214, L89.224, L89.304, L89.314, L89.324, L89.44, L89.504, L89.514, L89.524, L89.604, L89.614, L89.624, L89.814, L89.894, L89.94	Pressure ulcer of skin with necrosis through to muscle, tendon, bone
L89.000-L89.023, L89.100-L89.153, L89.200-L89.223, L89.300-L89.323, L89.4-, L89.500-L89.523, L89.600-L89.623, L89.810-L89.893, L89.9-	Pressure ulcer of skin with full thickness skin loss
\$06.1X3-\$06.1X6(A), \$06.2X3-\$06.2X6(A), \$06.303(A)-\$06.306(A), \$06.313-\$06.316(A), \$06.323-\$06.326(A), \$06.333-\$06.336(A), \$06.343-\$06.346(A), \$06.353-\$06.356(A), \$06.363-\$06.366(A), \$06.373-\$06.376(A), \$06.383-\$06.386(A), \$06.4X3-\$06.4X6(A), \$06.5X3-\$06.5X6(A), \$06.6X3-\$06.6X6(A), \$06.813-\$06.816(A), \$06.823-\$06.826(A), \$06.893-\$06.896(A), \$06.9X3-\$06.9X6(A)	Severe head injury

HCC Classification

- ► Within a particular type of illness or body system, disease hierarchies assign a person to the most severe manifestation. For example:
 - Metastatic cancer more severe than prostate cancer.
- ► Comorbid or coexisting conditions are captured through the accumulation of disease burden across multiple body systems or disease types.
- Unrelated categories can be separately considered and counted.
 - Metastatic cancer and congestive heart failure, may both be used in predicting the total disease burden
- Related groups are evaluated according to the hierarchy.

HCC Category Description	Controlling HCC	HCC Will not Count if Identified
Metastatic cancer and acute leukemia	8	9, 10, 11, 12
Lung and other severe cancers	9	10, 11, 12
Lymphoma and other cancers	10	11, 12
Colorectal, bladder and other cancers	11	12
Diabetes with acute complications	17	18, 19
Diabetes with chronic complications	18	19
End-stage liver disease	27	28, 29, 80
Cirrhosis of liver	28	29
Severe hematological disorders	46	48
Dementia with complications	51	52
Substance use with psychotic complications	54	55, 56
Substance use disorder, moderate/severe or substance use with complications	55	56
Schizophrenia	57	58, 59, 60
Reactive and unspecified psychosis	58	59, 60
Major depressive, bipolar and paranoid disorders	59	60
Quadriplegia	70	71, 72, 103, 104, 169
Paraplegia	71	72, 104



Risk Adjustment

- Reported diagnostic codes must follow ICD-10 CM coding conventions and the Tabular List and Alphabetic Index
 - Chronic diseases treated on an ongoing basis may be coded and reported as many times as the patient receives treatment/care for the condition(s)
 - Every code with an assigned HCC reported at least once per reporting year will be evaluated
 - No sequencing is involved, and codes may be assigned for all properly documented conditions that coexist at the time of the encounter/visit, and require or affect patient care, treatment, or management.

- ► MEAT Only one element of MEAT is required to report diagnosis
 - Monitor,
 - Evaluate,
 - Assess,
 - Treatment
- ► TAMPER
 - Treatment
 - Assessment
 - Monitor
 - Plan
 - Evaluate
 - Referral

Diagnosis HCCs

- ▶ Diagnoses can't be inferred from test results, but it can be assigned to each condition documented on the record
- Cannot be determined from test results or patient medical history
- Documentation must show that the condition is monitored, evaluated, or treated.
- ► Each diagnosis should also have an assessment and plan
- ► The treatment and level of care must be justified, and the patient health status considered

Provider Documentation

- Acceptable Documentation Sources
 - Office Notes
 - Consultation Report
 - Hospital Admission History and Physical
 - Inpatient Progress Notes
 - Discharge Summary
 - Anesthesia Notes
 - Physician Services



Provider Documentation

- ▶ Document each condition that influences ability to evaluate or treat the patient. This includes conditions:
 - Present but stable
 - Managed on therapy
 - Requiring observation
 - * Requiring referral to another provider for management
 - Influencing provider decision-making in care of the patient
 - Educate providers to avoid "history of" for current conditions
 - In ICD 10 coding language, "history of" means that the patient no longer has the condition, in which case it cannot be coded as an active disease



Diagnosis HCCs

- Patient's risk adjustment diagnosis must be based on clinical medical record documentation from a face-to-face encounter.
- Documentation to support diagnosis codes submitted by physicians, NPs, PAs, BH clinicians
- Document all relevant chronic illnesses that may impact care.
- Related diagnoses known to complicate a chronic condition.
- ► When appropriate, select diagnosis codes that are disease specific and not just a symptom code.
- Some conditions assign no HCCs for unspecified
- Code to the highest level of specificity

Chronic Conditions

- Conditions the patient has and is expected to have as an ongoing health issue
- Document chronic conditions annually, even when stable with treatment
- Document that the condition is chronic
- Document severity/stage of condition (i.e. stage IV chronic kidney disease/major depression)
- ▶ Document associated conditions or complications and relationship to the underlying chronic condition (i.e. diabetic retinopathy, cirrhosis secondary to alcoholism)
 - Coders should follow casual relationship guidelines when coding diagnoses

Chronic Conditions

- Active status Conditions that are present and unresolved or unlikely to resolve need to be documented at least annually.
- CMS considers the condition resolved if not evaluated and coded at least once/calendar year
 - Risk factor score for the member is lowered

Chronic Conditions

Conditions That Will Always be Present

- Amputation
- Transplants
- Alcoholism in remission
- CHF (compensated)
- Must be documented annually to be weighted

Conditions that May Always be Present

- Ostomy
- Cirrhosis
- Diabetes
- Hepatitis
- Paraplegia/Quadriplegia be specific
- Must be documented when present to be weighted

Chronic Conditions – "History of"

- History of Cancer The patient has successfully completed treatment for malignancy, does not have active disease or metastases and is not being treated for cancer
- ➤ Cancer on a long-term therapy (i.e., breast/prostate cancer on hormonal therapy) is active cancer, not "history of" cancer when the therapy is not prophylactic.
- A patient with cancer who declines treatment is considered active cancer.
- ► History of stroke vs CVA A stroke is an acute event and should not be diagnosed once a patient is discharged from the hospital.
- Document deficits and history of stroke, or the specific deficits (i.e., hemiplegia secondary to CVA)

Causal Relationships

- Apply causal relationship guidelines
 - Do not query for relationship if not specifically documented
- ► Report "Code Also" diagnoses where applicable

Diabetes mellitus (E08-E13)

E08.4 Diabetes mellitus due to underlying condition with neurological complications



Code Notes to Remember!

Use Additional Code

code to identify control using: insulin (Z79.4) oral antidiabetic drugs (Z79.84) oral hypoglycemic drugs (Z79.84)

Code First

the underlying condition, such as: congenital rubella (P35.0) Cushing's syndrome (E24.-) cystic fibrosis (E84.-) malignant neoplasm (C00-C96) malnutrition (E40-E46)

pancreatitis and other diseases of the pancreas (K85-K86.-)

HCC Classification

- ► HCFA 1500 updated in 2012 to allow up to 12 diagnoses
- Confirm payors accept more that 4 diagnoses on HCFA 1500
 - Work with payor to allow 0.1 lines with 99999 to accept more diagnoses
 - Alternate submission method (file)
 - Send to payors quarterly to report all diagnoses
- Confirm clearing house will accept all Diagnoses on UB or 1500

HCC Example

- ▶ 75 year old woman
- Lives alone
- History of depression,
- Does not exercise
- MEAT active problem list
 - Major Depression
 - GERD
 - Hyperlipidemia
 - Type I Diabetes due to Cushing's Disease
 - Chronic Kidney Disease
 - Anxiety with depression
 - History of alcoholism
 - Alcoholic Cirrhosis of the liver
 - Morbid Obesity
 - Heart Failure
 - Peripheral Vascular Disease
 - Hypertension



HCCs

Dx	Description	HCC Category	нсс	
F33.42	Major Depression – Full Remission	Major depressive, bipolar and paranoid disorders	59	0.309
173.9	Peripheral vascular disease unspecified	Vascular Disease	108	0.288
K70.3	Alcoholic Cirrhosis of the liver	Cirrhosis of the liver	28	0.363
E08.2	Diabetes mellitus due to underlying condition (Cushing's Disease)	Diabetes with chronic complications	18	0.302
E66.01	Morbid (severe) obesity due to excess calories	Morbid Obesity	22	0.250
I11.0	Hypertensive heart disease with heart failure	Congestive heart failure	85	0.331
J42	Unspecified chronic bronchitis	COPD	111	0.335
F10.21	Alcohol dependence in remission	Substance use disorder, moderate/severe or substance use with complications	55	0.329
		Total		2.507



HCC Classification

Coder reviews record and assigns ICD-10 codes

Broken into diagnostic groups

Assigned to condition categories

HCC Codes assigned

Hierarchy is imposed for conditions meeting HCCs



Additional Reimbursement Considerations



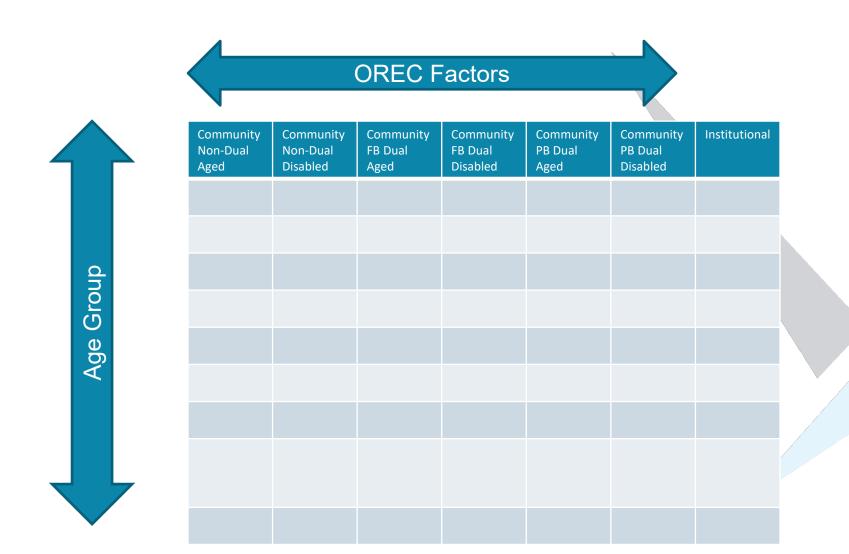
New Enrollee

- Alternate payment Model for patients with less than 1 year Part B eligibility date
- Original Reason for Entitlement Code (OREC) factor in overall score
- Used in payment calculation
- Reason patient was originally eligible for Medicare
- Age as of February 1 of the payment year
- Disability,
- Sex Separate tables for male and female
- Living Status
 - ☐ Living in community
 - ☐ Living in Institution
- Medicaid / Medicare Eligibility

Medicaid Factor

- Included if the patient is Medicaid eligible for one or more month in the data collection year
 - ❖ FB Full Benefits
 - ❖ PB Partial Benefits
 - □ QMB
 - □ SLMB
- OREC Factors:
 - Non-Medicaid, non originally disabled
 - Medicaid Non originally disabled
 - Non-Medicaid, originally disabled
 - Medicaid, originally disabled
 - Beneficiary lives in the community, or institutional

Medicaid Factor



Disease Interactions

- Represent the additional resources for certain condition in combination with each other
- Assumed higher cost utilization for some diseases when a patient is also disabled
- Increase overall "Score"

Disease Interactions

Description	Community Non-Dual Aged	Community Non-Dual Disabled	Community FB Dual Aged	Community FB Dual Disabled	Community PB Dual Aged	Community PB Dual Disabled	Institutional
Immune Disorders /Cancer	0.837	0.460	0.853	0.679	0.656	0.601	
Congestive Heart Failure / Diabetes	0.120	0.024	0.192	0.043	0.113		0.169
Congestive Heart Failure / Chronic Obstructive Pulmonary Disease	0.153	0.121	0.230	0.154	0.158	0.141	0.191
Congestive Heart Failure / Rena/	0.155	0.411	0.187	0.461	0.186	0.382	
Cardiorespiratory Failure /Chronic Obstructive Pulmonary Disease	0.363	0.379	0.528	0.455	0.392	0.479	0.414
Congestive Heart Failure / Specified Heart Arrhythmias	0.084	0.282	0.138	.0361	0.101	0.303	
Substance Use Disorder / Psychiatric		0.138		0.191		0.201	
Sepsis / Pressure Ulcer							0.155
Sepsis / Artificial Openings for Feeding or Elimination							0.359

Chronic Condition Count Variables

Accounts for the total number of diseases or conditions

# Conditions	Non Dual Aged	Non Dual Disabled	Full Dual Aged	Full Dual Disabled	Partial Dual Aged	Partial Dual Disabled	Institutional
0	1.469	1.402	0.934	1.220	1.166	1.306	0.778
1	1.115	1.153	1.020	1.187	1.070	1.249	1.048
2	1.113	1.100	1.063	1.126	1.086	1.142	1.078
3	1.077	1.038	1.56	1.070	1.071	1.062	1.074
4	1.043	1.020	1.050	1.043	1.046	1.028	1.088
>5	0.960	0.952	0.992	0.964	0.975	0.959	0.993

HCCs

Dx	Description	HCC Category	нсс	Wt
F33.42	Major Depression – Full Remission	Major depressive, bipolar and paranoid disorders	59	0.309
173.9	Peripheral vascular disease unspecified	Vascular Disease	108	0.288
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J42	Unspecified chronic bronchitis	COPD	111	0.335
F10.21	Alcohol dependence in remission	Substance use disorder, moderate/severe or substance use with complications	55	0.329
		Total		2.507
Interaction	CHF and Diabetes			0.121
	CHF and COPD			0.155
8 Payment HCCs				0.960
		Total		3.743

Risk Adjustment

- ► A Relative Adjustment Factor(RAF) weight is assigned to each category
- HCC adjustment models include
 - Part C adjustment models
 - ESRD adjustment models
 - Part D RXHCC model
- Blended Risk Scores
 - ❖ 75% of the risk score calculated with 2021 HCC model using
 - Diagnoses from encounter data
 - ☐ Risk Adjustment Processing System (RAPS) inpatient records
 - □ FFS
 - Summed with 25% of the risk score calculated with the 2017 CMS-HCC model, using diagnoses from RAPS and FFS.
- 2022 Part C Risk Adjustment Model will fully phase in CY 2020 model
 - Adds variables that count conditions in the risk adjustment model ("payment conditions")
 - Includes payment for additional conditions for mental health, substance use disorder, and chronic kidney disease
 - Discontinues supplementing diagnoses from encounter data with diagnoses from inpatient records submitted to RAPS for calculating beneficiary risk scores

Risk Adjustment

Risk Adjustment Score

Actual Payment Performance

Expected Payment Performance

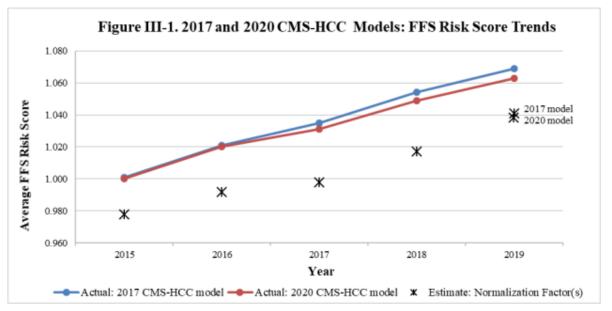
X National Average

- Ratio greater than 1 indicates performance worse than expected for reported beneficiaries' clinical complexity
- Ratio that is less than one indicates performance better than expected for reported clinical complexity



Normalization Factor

- ► Each year, the average risk score changes due to trends in the health of the Medicare population and differences in how disease are coded.
- ► The CMS risk model, was designed to generate an average risk score of 1.0 for FFS beneficiaries
- CMS applies a "normalization" factor so that the average expected risk score in the payment year will 1.0
- Linear approach with five years of data



https://www.cms.gov/files/document/2021-announcement.pdf



Medicaid Models



Social Determinants of Health

- Used to Calculate Risk Scores in Some Medicaid Models
- Environment in which people are born, grow, live, work and age.
- ➤ A composite measure of financial stress based on 7 census variables associated with addresses geocoded to the census block group (CBG)
 - Housing Issues- People with 3 or more addresses in a single calendar year
 - Disability and Agency Relationships
 - Department of Mental (DMH) Health Client
 - Department of Developmental Services (DDS) Client
 - Health Care Access and Quality.
 - Medicaid due to disability
 - Neighborhood Stress Score

Social Determinants of Health

- Current Social Determinants of Health ICD-10-CM Code Categories
 - Z55 Problems related to education and literacy
 - Z56 Problems related to employment and unemployment
 - Z57 Occupational exposure to risk factors
 - ❖ Z59 Problems related to housing and economic circumstances
 - Z60 Problems related to social environment
 - ❖ Z62 Problems related to upbringing
 - Z63 Other problems related to primary support group, including family circumstances
 - ❖ Z64 Problems related to certain psychosocial circumstances
 - Z65 Problems related to other psychosocial circumstance

Questions



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