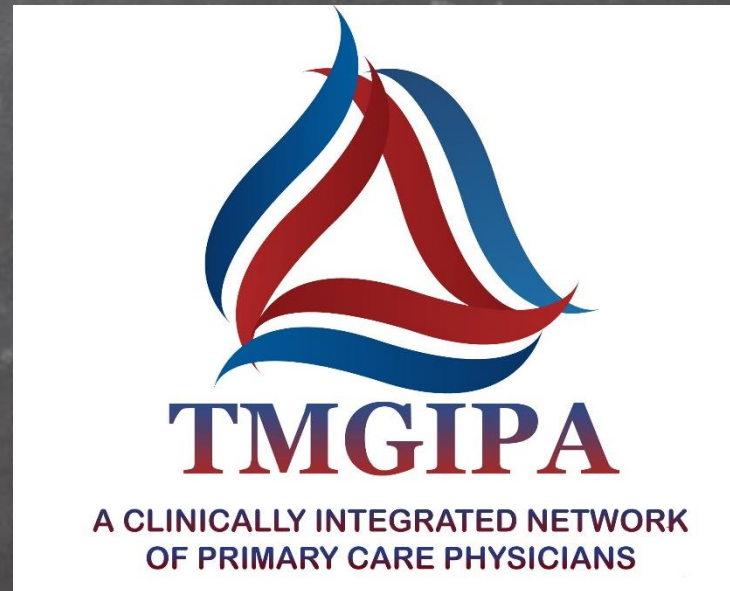


RISK ADJUSTMENT 2018 AND RAF SCORES 101



Robert Resnik MD MBA

Terminology

- **HCC**- Hierarchical Condition Categories – Chronic conditions used to create a risk adjustment methodology (PART A,B,C)
- **RX HCC** – Some HCC codes adjust risk due to prescription burden of disease (Part D)
- **RAF** – Risk Adjustment Factor

Risk Adjustment: Medicare Risk Adjustment

Medicare Advantage (MA) plans receive payment for each covered member from Centers for Medicare and Medicaid Services (CMS)

Risk Adjustment (RA) is used to adjust plan payments to ensure accurate and adequate payment to plans for providing services and covering benefits

Payment is driven by member's Risk Score which is based on member's predicted health status & demographic characteristics

Medicare RA CMS-HCC (Hierarchical Condition Category) model is used to risk adjust payment

Risk Adjustment: The Risk Score

Calculating the Risk Score

- Each member is assigned a risk score



Demographic Characteristics

(Factors associated with age, sex, disabled status, original entitlement reason, and Medicaid eligibility)



Health Status

(Factors associated with conditions included in CMS-HCC Model)

= Risk Score

Demographic RAF for Medicare Enrollees

Table VI-1. 2017 CMS-HCC Model Relative Factors for Community and Institutional Beneficiaries

Variable	Description Label	Community, NonDual, Aged	Community, NonDual, Disabled	Community, FBDual, Aged	Community, FBDual, Disabled	Community, PBDual, Aged	Community, PBDual, Disabled	Institutional
Female								
0-34 Years		-	0.244	-	0.318	-	0.344	1.031
35-44 Years		-	0.303	-	0.306	-	0.383	0.999
45-54 Years		-	0.322	-	0.338	-	0.374	1.007
55-59 Years		-	0.350	-	0.388	-	0.371	0.986
60-64 Years		-	0.411	-	0.449	-	0.395	1.028
65-69 Years		0.312	-	0.425	-	0.341	-	1.200
70-74 Years		0.374	-	0.511	-	0.406	-	1.092
75-79 Years		0.448	-	0.611	-	0.484	-	0.995
80-84 Years		0.537	-	0.739	-	0.552	-	0.860
85-89 Years		0.664	-	0.917	-	0.678	-	0.749
90-94 Years		0.797	-	1.037	-	0.817	-	0.626
95 Years or Over		0.816	-	1.094	-	0.913	-	0.456
Male								
0-34 Years		-	0.155	-	0.225	-	0.330	1.049
35-44 Years		-	0.190	-	0.204	-	0.267	1.074
45-54 Years		-	0.221	-	0.281	-	0.300	1.008
55-59 Years		-	0.271	-	0.372	-	0.307	1.055
60-64 Years		-	0.303	-	0.486	-	0.343	1.039
65-69 Years		0.300	-	0.492	-	0.334	-	1.269
70-74 Years		0.379	-	0.582	-	0.409	-	1.323
75-79 Years		0.466	-	0.692	-	0.491	-	1.331
80-84 Years		0.561	-	0.816	-	0.546	-	1.189
85-89 Years		0.694	-	1.009	-	0.679	-	1.129

Risk Adjustment: The Risk Score



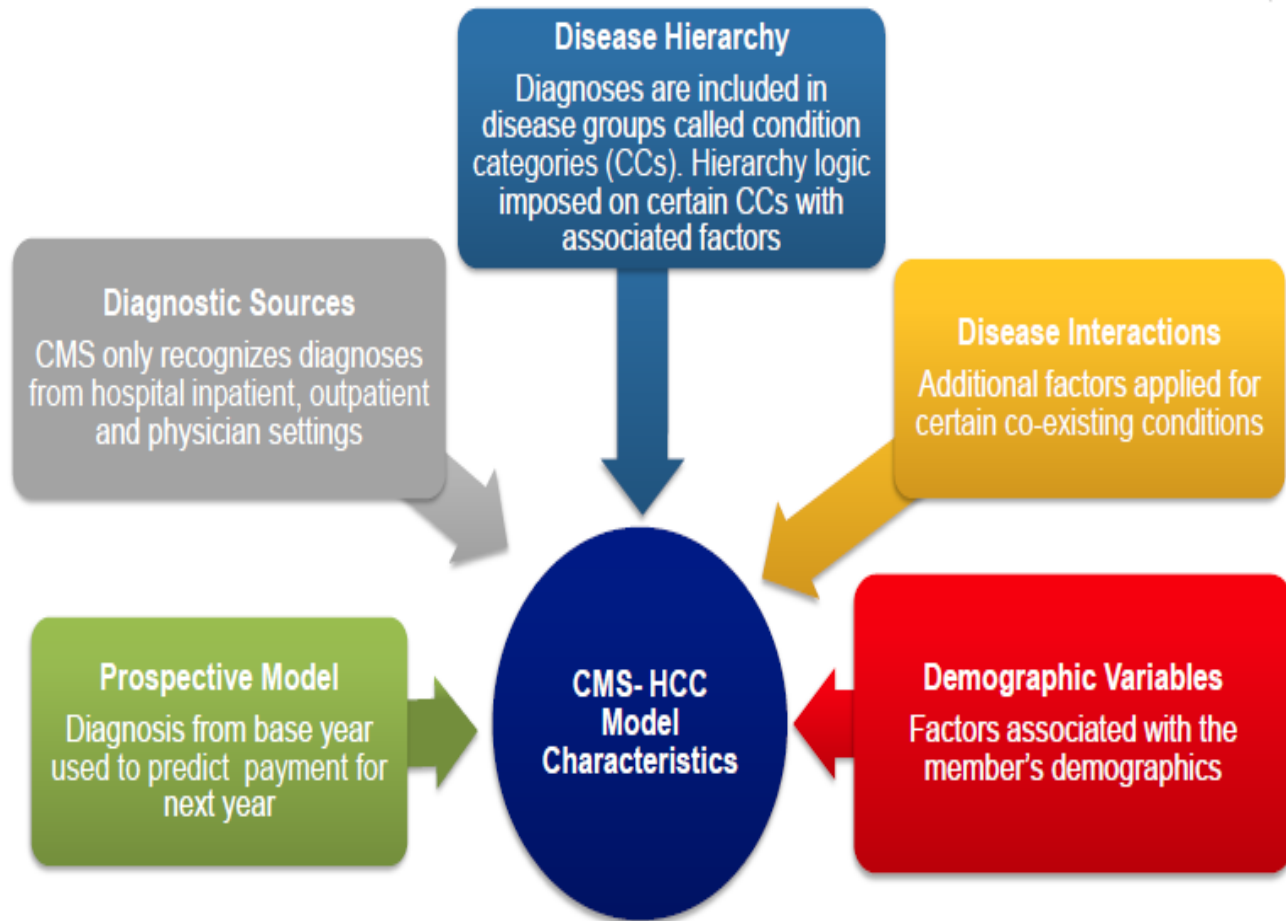
Higher risk scores represent members with a greater than average burden of illness



Lower risk scores represent a healthier population, but may also falsely indicate a healthier population due to:

- Inadequate or incomplete chart documentation
 - Incomplete or inaccurate diagnosis coding
-

Risk Adjustment: Hierarchical Condition Category

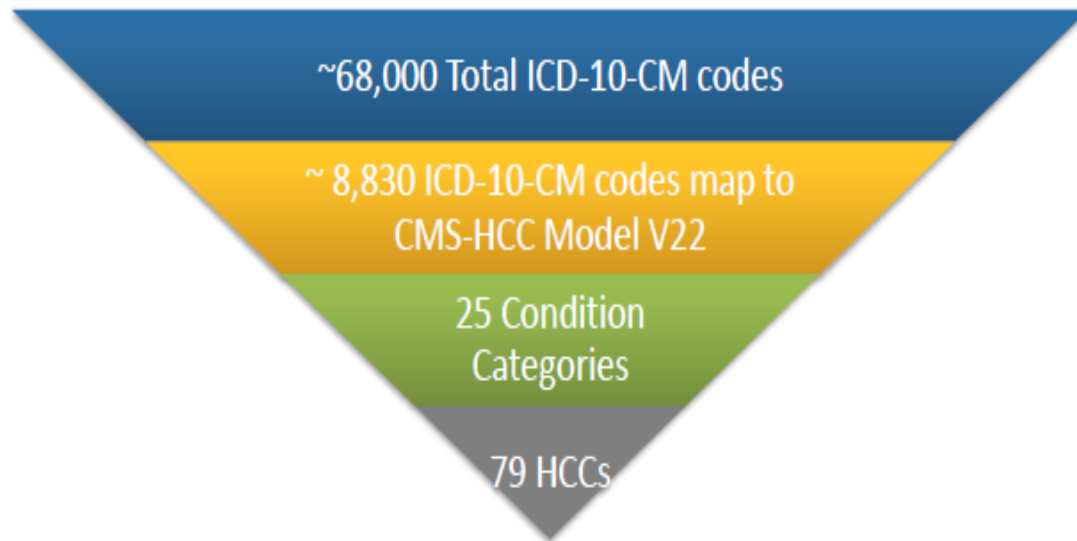


On Jan. 1 each year, the member's risk score is reset for a new year of diagnosis encounter data

Risk Adjustment: Hierarchical Condition Category

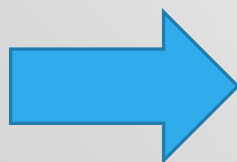
Hierarchical Condition Category (HCC)

- HCCs are a grouping of clinically related diagnoses (ICD-10-CM codes) with similar cost implications
- Only those diagnoses that map to an HCC are used in risk score calculation



- Source: <https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html>

Variable	Description Label	Community, NonDual, Aged	Community, NonDual, Disabled	Community, FBDual, Aged	Community, FBDual, Disabled	Community, PBDual, Aged	Community, PBDual, Disabled	Institutional
90-94 Years		0.857	-	1.186	-	0.822	-	0.964
95 Years or Over		0.976	-	1.268	-	1.038	-	0.781
Medicaid and Originally Disabled								
Medicaid		-	-	-	-	-	-	0.062
Originally Disabled, Female		0.244	-	0.172	-	0.126	-	-
Originally Disabled, Male		0.152	-	0.192	-	0.105	-	-
Disease Coefficients	Description Label							
HCC1	HIV/AIDS	0.312	0.288	0.585	0.500	0.550	0.232	1.747
HCC2	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	0.455	0.532	0.596	0.811	0.409	0.417	0.346
HCC6	Opportunistic Infections	0.435	0.704	0.548	0.919	0.482	0.765	0.580
HCC8	Metastatic Cancer and Acute Leukemia	2.625	2.644	2.542	2.767	2.442	2.582	1.143
HCC9	Lung and Other Severe Cancers	0.970	0.927	0.973	1.025	0.955	0.879	0.727
HCC10	Lymphoma and Other Cancers	0.677	0.656	0.713	0.761	0.667	0.577	0.401
HCC11	Colorectal, Bladder, and Other Cancers	0.301	0.352	0.332	0.361	0.325	0.400	0.293
HCC12	Breast, Prostate, and Other Cancers and Tumors	0.146	0.202	0.159	0.190	0.152	0.182	0.199
HCC17	Diabetes with Acute Complications	0.318	0.371	0.346	0.431	0.354	0.423	0.441
HCC18	Diabetes with Chronic Complications	0.318	0.371	0.346	0.431	0.354	0.423	0.441
HCC19	Diabetes without Complication	0.104	0.128	0.097	0.160	0.098	0.136	0.160
HCC21	Protein-Calorie Malnutrition	0.545	0.753	0.752	0.845	0.562	0.709	0.260
HCC22	Morbid Obesity	0.273	0.227	0.410	0.373	0.244	0.242	0.511
HCC23	Other Significant Endocrine and Metabolic Disorders	0.228	0.444	0.228	0.353	0.193	0.351	0.337
HCC27	End-Stage Liver Disease	0.962	1.110	1.242	1.349	0.889	0.963	0.962
HCC28	Cirrhosis of Liver	0.390	0.394	0.342	0.491	0.460	0.324	0.390
HCC29	Chronic Hepatitis	0.165	0.267	0.038	0.400	0.263	0.324	0.390
HCC33	Intestinal Obstruction/Perforation	0.246	0.524	0.369	0.503	0.324	0.510	0.335



Disease Hierarchies

Some HCCs will “override” others so that if a patient has more than one HCC within a category.....

- Diabetes HCCs
 - Diabetes with Acute Complications-HCC17
 - Diabetes with Chronic Complications-HCC18
 - Diabetes without Complications-HCC19

HCC	If the Disease Group is Listed in this Column...	Then drop the Disease Group listed in this column
17	Diabetes with Acute Complications	18, 19
18	Diabetes with Chronic Complications	19

Table 1. HCCs included in the CMS-HCC risk-adjustment model⁶
HCC number and brief description of disease/condition

HCC1 = HIV/AIDS

HCC2 = Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock

HCC6 = Opportunistic Infections

HCC8 = Metastatic Cancer and Acute Leukemia

HCC9 = Lung and Other Severe Cancers

HCC10 = Lymphoma and Other Cancers

HCC11 = Colorectal, Bladder, and Other Cancers

HCC12 = Breast, Prostate, and Other Cancers and Tumors

HCC17 = Diabetes with Acute Complications

HCC18 = Diabetes with Chronic Complications

HCC19 = Diabetes without Complication

HCC21 = Protein-Calorie Malnutrition

HCC22 = Morbid Obesity

HCC23 = Other Significant Endocrine and Metabolic Disorders

HCC27 = End-Stage Liver Disease

HCC28 = Cirrhosis of Liver

HCC29 = Chronic Hepatitis

HCC33 = Intestinal Obstruction/Perforation

HCC34 = Chronic Pancreatitis

HCC35 = Inflammatory Bowel Disease

HCC39 = Bone/Joint/Muscle Infections/Necrosis

HCC40 = Rheumatoid Arthritis and Inflammatory Connective Tissue Disease

HCC46 = Severe Hematological Disorders

HCC47 = Disorders of Immunity

HCC48 = Coagulation Defects and Other Specified Hematological Disorders

HCC54 = Drug/Alcohol Psychosis

HCC55 = Drug/Alcohol Dependence

HCC57 = Schizophrenia

HCC58 = Major Depressive, Bipolar, and Paranoid Disorders

HCC70 = Quadriplegia

HCC71 = Paraplegia

HCC72 = Spinal Cord Disorders/Injuries

HCC73 = Amyotrophic Lateral Sclerosis and Other Motor Neuron Disease

HCC74 = Cerebral Palsy

HCC75 = Myasthenia Gravis/Myoneural Disorders, Inflammatory and Toxic Neuropathy

HCC76 = Muscular Dystrophy

HCC77 = Multiple Sclerosis

HCC78 = Parkinson's and Huntington's Diseases

HCC79 = Seizure Disorders and Convulsions

HCC80 = Coma, Brain Compression/Anoxic Damage

Table VI-4. Disease Hierarchies for the 2017 CMS-HCC Model

Hierarchical Condition Category (HCC)	If the Disease Group is Listed in this column...	...Then drop the Disease Group(s) listed in this column
Hierarchical Condition Category (HCC) LABEL		
8	Metastatic Cancer and Acute Leukemia	9,10,11,12
9	Lung and Other Severe Cancers	10,11,12
10	Lymphoma and Other Cancers	11,12
11	Colorectal, Bladder, and Other Cancers	12
17	Diabetes with Acute Complications	18,19
18	Diabetes with Chronic Complications	19
27	End-Stage Liver Disease	28,29,80
28	Cirrhosis of Liver	29
46	Severe Hematological Disorders	48
54	Drug/Alcohol Psychosis	55
57	Schizophrenia	58
70	Quadriplegia	71,72,103,104,169
71	Paraplegia	72,104,169
72	Spinal Cord Disorders/Injuries	169
82	Respirator Dependence/Tracheostomy Status	83,84
83	Respiratory Arrest	84
86	Acute Myocardial Infarction	87,88
87	Unstable Angina and Other Acute Ischemic Heart Disease	88
99	Cerebral Hemorrhage	100
103	Hemiplegia/Hemiparesis	104
106	Atherosclerosis of the Extremities with Ulceration or Gangrene	107,108,161,189
107	Vascular Disease with Complications	108
110	Cystic Fibrosis	111,112
111	Chronic Obstructive Pulmonary Disease	112
114	Aspiration and Specified Bacterial Pneumonias	115
134	Dialysis Status	135,136,137
135	Acute Renal Failure	136,137
136	Chronic Kidney Disease, Stage 5	137
157	Pressure Ulcer of Skin with Necrosis Through to Muscle, Tendon, or Bone	158,161
158	Pressure Ulcer of Skin with Full Thickness Skin Loss	161
166	Severe Head Injury	80,167

ICD-10	HCC YEAR	HCC	Diagnosis	Override	Risk Score
e11.9	2018	19	Type 2 diabetes mellitus without complications	Y	0.104
e11.00	2018	17	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	N	0.318
e08.341	2018		Type 2 Diabetes due to severe nonproliferative retinopathy with macular edema	N/A	NO RAF
e11.311	2018	18	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Y	0.318
e08.610	2018	18	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy	Y	0.318
e09.39	2018	18	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication	Y	0.318
e09.42	2018	18	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy	Y	0.318
e09.41	2018	18	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy	Y	0.318
e11.59	2018	18	Type 2 diabetes mellitus with other circulatory complications	Y	0.318
2018 Demographic Risk Factor					0.379
2018 HCC Risk Factor					0.318
2018 Total Risk Factor					0.697

ICD-10	HCC YEAR	HCC	Diagnosis	Override	Risk Score
e11.52	2018	106	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	N	1.461
	2018	108	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Y	0.298
	2018	18	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	N	0.318
e11.51	2018	108	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Y	0.298
	2018	18	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Y	0.318
e11.59	2018	18	Type 2 diabetes mellitus with other circulatory complications	Y	0.318
e11.40	2018	18	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Y	0.318
e11.41	2018	18	Type 2 diabetes mellitus with diabetic mononeuropathy	Y	0.318
e11.42	2018	18	Type 2 diabetes mellitus with diabetic polyneuropathy	Y	0.318
E11.9	2018	19	Type 2 diabetes without complications	Y	0.104
g57.90			Mononeuropathy of left lower limb	N/A	NO RAF
g60.9			Hereditary and Idiopathic neuropathy	N/A	NO RAF
I96	2018	106	Gangrene, not elsewhere classified	Y	1.461
I70.0	2018	108	Atherosclerosis of Aorta	Y	0.298
g61.9	2018	75	Inflammatory polyneuropathy, unspecified	N	0.457
2018 Demographic Risk Factor					0.379
2018 HCC Risk Factor					2.236
2018 Total Risk Factor					2.615

ICD-10	HCC YEAR	HCC	Diagnosis	Override	Risk Score
E11.61	2018	18	Type 2 diabetes mellitus with diabetic arthropathy	N/A	No RAF
E11.610	2018	18	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	N	0.318
E11.618	2018	18	Type 2 diabetes mellitus with other diabetic arthropathy	Y	0.318
E11.620	2018	18	Type 2 diabetes mellitus with diabetic dermatitis	Y	0.318
E11.621	2018	161	Type 2 diabetes mellitus with foot ulcer	N	0.535
	2018	18	Type 2 diabetes mellitus with foot ulcer	Y	0.318
E11.622	2018	161	Type 2 diabetes mellitus with other skin ulcer	Y	0.535
	2018	18	Type 2 diabetes mellitus with other skin ulcer	Y	0.318
E11.628	2018	18	Type 2 diabetes mellitus with other skin complications	Y	0.318
E11.630	2018	18	Type 2 diabetes mellitus with periodontal disease	Y	0.318
e11.638	2018	18	Type 2 diabetes mellitus with other oral complications	Y	0.318
e11.63			Type 2 diabetes mellitus with oral complications	N/A	No RAF
E11.9	2018	19	Type 2 diabetes without complications	Y	0.104
2018 Demographic Risk Factor					0.379
2018 HCC Risk Factor					0.853
2018 Total Risk Factor					1.232

PATIENT RAF Score

AVERAGE MEDICARE PATIENT'S RAF IS 1.0

National Average 1.0 = \$9000 non-MA

CMS reimburses 1% HIGHER for every 0.01 RAF increase

Approximately \$900 for every 0.1 RAF increase

DIAGNOSIS CODING DRIVES THE RAF SCORE



RAF SCORE DRIVES THE REIMBURSEMENT



PROPER DOCUMENTATION RETAINS THE REIMBURSEMENT

Adjustments to Risk Score

- Continued Blending of Encounter Data and FFS diagnosis risk scores and RAPS (Risk Adjustment Processing Center) and FFS Diagnoses
 - 25/75 percent split in PY2017
 - 50/50 percent split in PY2018
 - 75/25 percent split in PY2019
 - 100 percent Encounter Data implementation in PY2020
- Normalization Factor
 - Applied to keep average risk score at 1.0
 - For 2018 just slightly over 1.01
- MA Coding Pattern Adjustment
 - Applied to adjust for difference in coding patterns between MA and FFS for 2018 around 5.66% (Risk score x .944)

HCC DOCUMENTATION

VALID HCC DOCUMENTATION REQUIRES (3) POINTS

- ❖ **Diagnosis** - Face to Face Visit
- ❖ **Status** or Condition – Stable condition, worsening, labs or tests ordered, medications adjusted
- ❖ **Plan** of Action – COPD, Stable, continue current medications

Why are documentation and specificity important ?

- **B19.20** Hepatitis C, unspecified (No HCC)
- **B17.10** Hepatitis C, acute (No HCC)
- **B18.2** Hepatitis C, chronic (HCC-29 RAF .165)

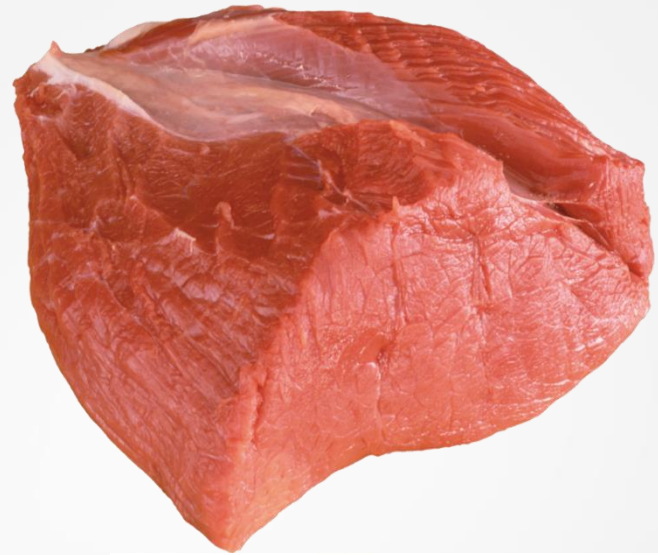
Documentation for Every Diagnosis must have the M.E.A.T.

- **Monitor**—signs, symptoms, disease progression, disease regression
- **Evaluate**—test results, medication effectiveness, response to treatment
- **Assess/Address**—ordering tests, discussion, review records, counseling
- **Treat**—medications, therapies, other modalities

Without the
M.E.A.T.

CMS may find
you guilty of
deceit

This can land
you in their hot
seat



Progress Notes

- MUST EVALUATE EACH DIAGNOSIS ON PROGRESS NOTE
- MUST BE FACE TO FACE
- CAN NOT REFER TO PROBLEM LIST AS DOCUMENTATION

Use:

1. DM with Neuropathy – Stable, meds adjusted,
2. CHF- compensated, continue meds,
3. COPD – PFT ordered, refer to pulmonary
4. HTN- uncontrolled, add medication
5. Hyperlipidemia – stable on meds. Check labs and increase exercise

DIAGNOSIS listed on the progress note without an evaluation or assessment is considered a “problem list” and does not provide correct documentation

PROBABLE , SUSPECTED, POSSIBLE

DO NOT CODE non-definitive conditions

- Probable
- Possible
- Questionable
- Rule out



Code the condition to the highest degree of specificity

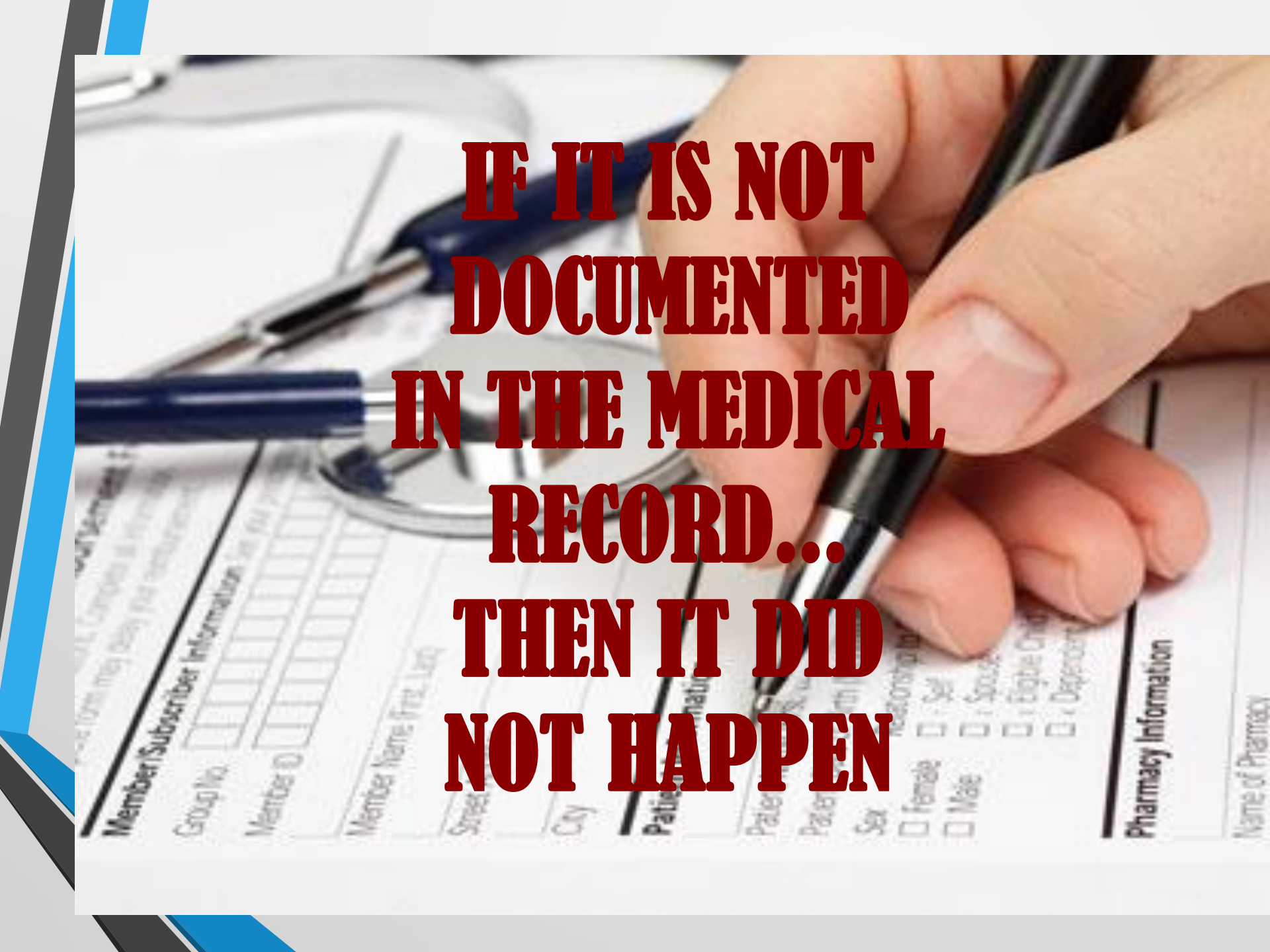
- Signs/Symptoms
- Abnormal test results
- Other reason for the visit

Best Practices: Specificity

History of

- “History of” indicates a condition no longer exists to coders
- Pay special attention to list headers, such as Past Medical History
- Use caution when documenting the terms, “history of”
 - Should not be used for chronic conditions receiving current treatment
 - Instead include current status, dates, treatment, etc. such as:

Instead of Documenting...	Document This...	
History of Diabetes	Patient with DM since 2009	
History of CHF, meds Lasix	Compensated CHF, stable on Lasix	
History of COPD, meds Advair	COPD controlled with Advair	

A close-up photograph of a hand holding a black pen, writing on a medical form. The form contains various fields for patient information, including 'Member/Subscriber Information', 'Patient Information', and 'Pharmacy Information'. A blue stethoscope is visible in the background, resting on the form. The text 'IF IT IS NOT DOCUMENTED IN THE MEDICAL RECORD... THEN IT DID NOT HAPPEN' is overlaid in large, bold, red letters across the center of the image.

**IF IT IS NOT
DOCUMENTED
IN THE MEDICAL
RECORD...
THEN IT DID
NOT HAPPEN**

MUST Create a clear relationship to the diagnosis

- ACCEPTABLE LINKING VERBIAGE

- "due to"
- "because of"
- "related to"



- NOT ACCEPTABLE



- The word "with" does not establish a cause and effect relationship except in the case of "diabetes"

MUST INCLUDE PERMANANT CONDITIONS EACH YEAR

- Transplant status
- Quadriplegia
- Dialysis status
- Current ostomies
- Amputations
- Asymptomatic HIV infection

Table VI-5. RxHCC Model Relative Factors for Continuing Enrollees

Continuing Enrollees (CE) RxHCC Model Segments

Variable	Disease Group	Community, Non-Low Income, Age≥65	Community, Non-Low Income, Age<65	Community, Low Income, Age≥65	Community, Low Income, Age<65	Institutional
Female						
0-34 Years		-	0.290	-	0.423	1.918
35-44 Years		-	0.477	-	0.637	1.886
45-54 Years		-	0.563	-	0.735	1.682
55-59 Years		-	0.543	-	0.710	1.556
60-64 Years		-	0.504	-	0.645	1.414
65-69 Years		0.264	-	0.407	-	1.491
70-74 Years		0.264	-	0.396	-	1.382
75-79 Years		0.251	-	0.385	-	1.285
80-84 Years		0.237	-	0.357	-	1.197
85-89 Years		0.221	-	0.328	-	1.113
90-94 Years		0.183	-	0.268	-	1.002
95 Years or Over		0.126	-	0.178	-	0.813
Male						
0-34 Years		-	0.227	-	0.470	1.660
35-44 Years		-	0.382	-	0.606	1.791
45-54 Years		-	0.498	-	0.660	1.618
55-59 Years		-	0.519	-	0.649	1.450
60-64 Years		-	0.478	-	0.595	1.334
65-69 Years		0.274	-	0.351	-	1.332
70-74 Years		0.279	-	0.353	-	1.275
75-79 Years		0.246	-	0.347	-	1.218
80-84 Years		0.188	-	0.317	-	1.167
85-89 Years		0.149	-	0.289	-	1.098
90-94 Years		0.093	-	0.260	-	1.021
95 Years or Over		0.071	-	0.216	-	0.864
Originally Disabled Interactions with Sex						
Originally Disabled_Female		0.101	-	0.180	-	0.066
Originally Disabled_Male		-	-	0.127	-	0.066
Disease Coefficients						
	Description Label					
RXHCC1	HIV/AIDS	2.913	3.350	3.437	3.881	2.206
RXHCC5	Opportunistic Infections	0.221	0.011	0.145	0.148	0.160
RXHCC15	Chronic Myeloid Leukemia	6.271	6.682	7.000	8.912	4.011
RXHCC16	Multiple Myeloma and Other Neoplastic Disorders	3.405	3.628	2.791	3.246	1.044

Prescription
RX RAF
Scores
Medicare
Part D
For
Medicare
Advantage
not MSSP

ICD-10 that have "O" RAF for HCC but do RAF for RX HCC for MEDs on PART D

- Hypothyroid/Hyperthyroid/Goiter
- Panic Disorder/Phobia/ADD
 - Hypercholesterol
 - General Anxiety
- Dementia/ Alzheimer's
 - Migraine
 - Glaucoma
- Ischemic Cardiomyopathy
 - Carotid Stenosis
- Cerebrovascular Disease/TIA
 - Asthma
 - GERD/Barrett's
 - Osteoporosis
- Coronary disease due to plaque (I25.83)





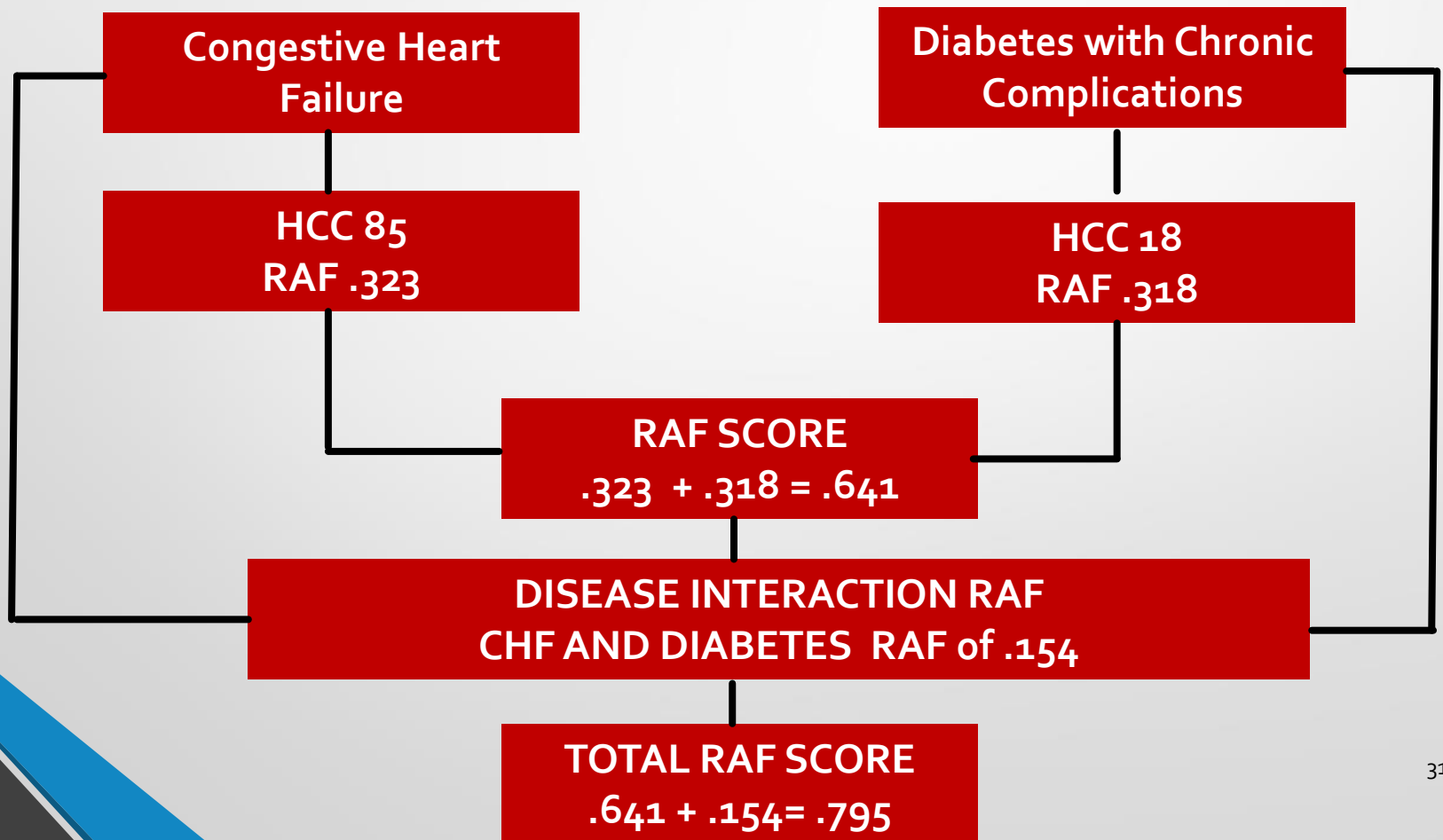
RXHCC RISK SCORES



Chronic Myeloid Leukemia	7.383	Lung, Kidney, and Other Cance	0.294
Multiple Myeloma and Other Neoplastic Disorders	3.946	Atrial Arrhythmias	0.288
Chronic Hepatitis C	3.202	Diabetes without Complication	0.28
Multiple Sclerosis	2.35	Lupus	0.212
Secondary Cancers of Bone, Lung, Brain, and Other Specified Sites; Liver Cancer	1.771	CHF	0.166
Alzheimers Disease	0.476	Major Depression	0.127
Diabetes with Complication	0.425	Hypertension	0.123
COPD	0.334	Thyroid Disorders	0.101
Kidney Transplant Status	0.33	Breast and other cancer and tu	0.096
Diabetic Retinopathy	0.307	Osteoporosis	0.052

Disease Interactions RAF

Some diseases “interact” with each other, causing an increase in care management and a corresponding additional risk factor.



Disease Interaction

CHF and DM = + 0.154

CHF and COPD = + 0.19

CHF and specified Heart Arrhythmias = +.105

CHF and Renal Disease/Failure = +0.27

COPD and Cardiorespiratory Failure = +0.336

Cancer and Disorder of Immunity = +0.893

(SCID , Wiskott-Aldrich , PNP deficiency etc)

Diabetes ICD -10 codes

- E08.xxx - Diabetes due to an underlying condition
- E09.xxx - Drug or Chemical Induced DM
- E10.xxxx - DM type 1
- E11.xxxx - DM type 2
- E13.xxx - Secondary DM
- Z79.4 - Use of Insulin does RAF as HCC 19 = .104

Quality Documentation in Diabetes

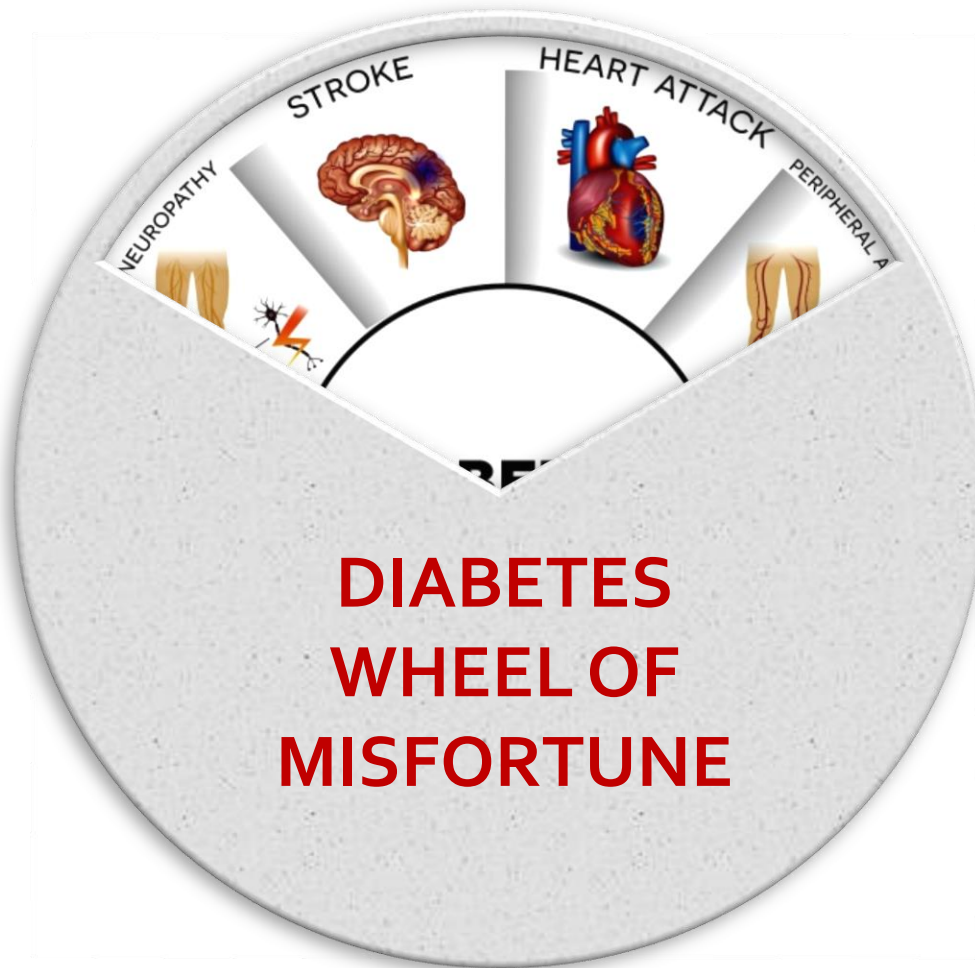
- ◆ Type of diabetes: Type I (E10.xxx) or Type II (E11.xxx)
- ◆ Is there a manifestation/complication? Many diabetics have some manifestation or complication
- ◆ Name the manifestation (next slide) in the system and state manifestation is DUE TO DIABETES
- ◆ Should comment on Controlled or uncontrolled

Manifestations

Every patient with diabetes should be evaluated for the many manifestations, co-morbidities of the disease, and complications with the progress notes and tests showing that this evaluation was done

DIAGNOSIS	ICD-10	HCC WEIGHT
Without complications	E11.9	.104
DM W/Kidney Comp.	E11.2X	.318
DM W/Ophthalmic Comp.	E11.3X	.318
DM W/Neurologic Comp.	E11.4X	.318
DM W/Circulatory Comp.	E11.5X	.318
DM w/Oral Comp.	E11.6X	.318
DM W/CKD	E11.22	0.318

Complications of diabetes are **the most** frequently omitted conditions in physician medical records.



If medical record says only diabetes mellitus (DM) Must use DM uncomplicated ICD 10 code

E11.9

(RAF 0.104)

HCC 19

Diabetes Codes that will not RAF

- DM with ophthalmologic complications
 - E08.3xxx or E11.3xxx except if unspecified .311 or .319
 - NO RAF if you use (<=3 digits)
 - Must have 4 digits
 - E11.321 NO RAF Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema
 - E11.3211 RAF Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
- DM with other complications (hypoglycemia, neuropathy, skin, oral) using <=2 digits. Must use 3 digits
 - E08.61x E08.62x E08.63x E08.64x
 - E11.61x E11.62x E11.63x E11.64x

Differentiate Proliferative vs Non-proliferative vs unspecified retinopathy and with or w/o macular edema

- E11.311 DM 2with **unspecified** diabetic retinopathy **with** macular edema HCC 18 RAF .318
- E11.319 DM 2with **unspecified** diabetic retinopathy **without** macular edema HCC 18 RAF .318
- E11.**321** DM 2 with mild **nonproliferative** diabetic retinopathy **with** macular edema NO RAF
- E11.3212 DM 2 with mild **nonproliferative** diabetic retinopathy **with** macular edema left eye HCC 18 RAF .318
- E11.**351** DM 2 diabetes mellitus with **proliferative** diabetic retinopathy **with** macular edema NO RAF Must specify which eye
- E11.3511 DM 2 diabetes mellitus with **proliferative** diabetic retinopathy **with** macular edema right eye HCC 18 **RAF .318** HCC122 **RAF .217**
- E11.**359** DM 2 diabetes mellitus with **proliferative** diabetic retinopathy **without** macular edema NO RAF
- E11.3591 DM 2 diabetes mellitus with **proliferative** diabetic retinopathy **without** macular edema right eye HCC 18 **RAF .318** HCC122 **RAF .217**

Coding Scenario

Type II Diabetic is seen for a severe full thickness left heel **pressure ulcer into muscle** .

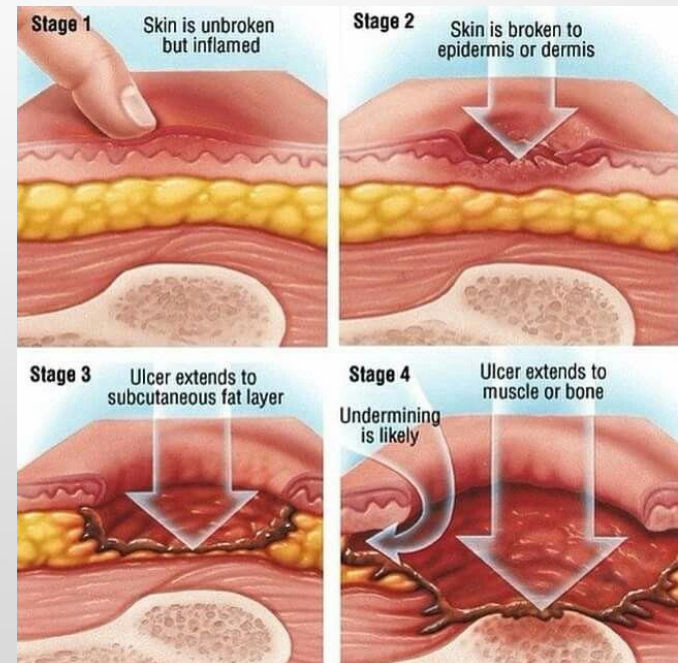
The patient's history clarifies that ulcer is secondary **to Diabetic Peripheral Neuropathy**.

HbA_{1C} is 9.6%. Physical shows very **weak pedal pulses** and purple cold toes with poor capillary refill.

WHAT WOULD YOU DOCUMENT IN THE ASSESSMENT?

- DM W/PVD
- Diabetic Neuropathy
- Diabetic induced pressure ulcer
- Pressure Ulcer

Stage 4



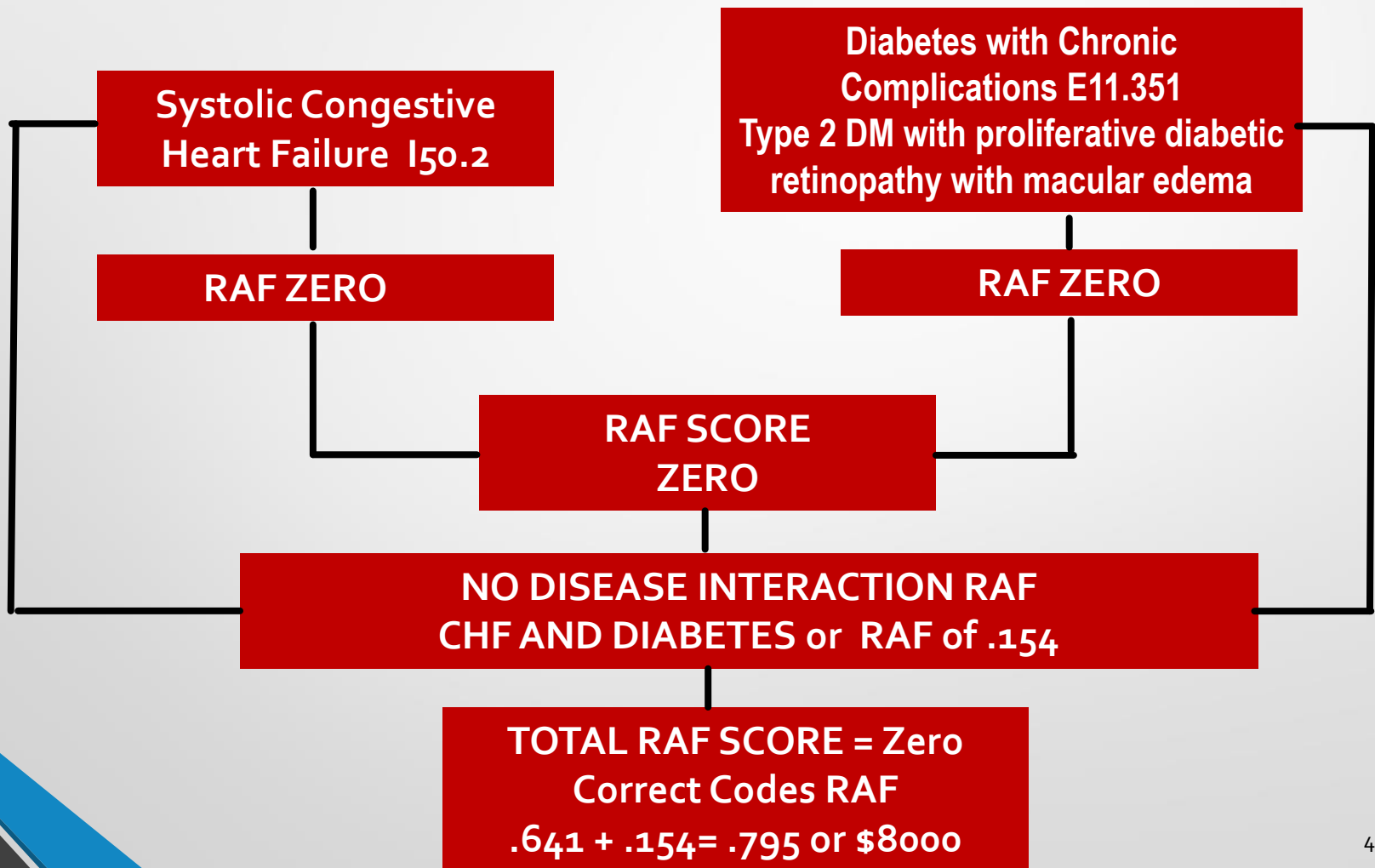
ICD-10	HCC YEAR	HCC	Diagnosis	Override	Risk Score
e11.51	2018	108	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	N	0.298
	2018	18	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	N	0.318
e11.621	2018	161	Type 2 diabetes mellitus with foot ulcer	Y	0.535
	2018	18	Type 2 diabetes mellitus with foot ulcer	Y	0.318
L89.609			Pressure ulcer of heel, stage unspecified	N/A	0
L89.601			Pressure ulcer of heel site, stage 1	N/A	0
L89.602			Pressure ulcer of heel site, stage 2	N/A	0
L89.603	2018	158	Pressure ulcer of heel, stage 3	Y	1.204
L89.604	2018	157	Pressure ulcer of heel, stage 4	N	2.163
L97.409/L97.404	2018	161	Non-pressure chronic ulcer of skin of heel with necrosis of bone (L97.404) unspecified severity (L97.409)	Y	0.535
E11.41			Type 2 diabetes mellitus with diabetic mononeuropathy	Y	0.318
e08.610			Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy	Y	0.318
2018 Demographic Risk Factor					0.379
2018 HCC Risk Factor					2.779
2018 Total Risk Factor					3.158

HCC 157 Pressure Ulcer with necrosis to muscle bone Overrides HCC 158 or 161

HCC 158 Pressure Ulcer Skin with Full Thickness over rides HCC 161 Non-pressure ulcer

NEED TO BE SPECIFIC

62 year old obese (BMI 40) with Type II diabetes with diabetic retinopathy and age-related macular degeneration with CHF



MORE SPECIFIC

Diabetes with Chronic Complications E11.351
Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema



H35.321 Exudative age-related macular degeneration, right eye,



Systolic Congestive Heart Failure 150.2



Obesity E66.9



RAF ZERO

Diabetes with Chronic Complications E11.3511
Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema right eye



RAF 0.217 - HCC122
Proliferative Retinopathy



RAF .318 HCC 18

H35.3211 Exudative age-related macular degeneration, right eye, with active neovascularization



RAF .499 HCC 124

Chronic Congestive Heart Failure Systolic 150.22



RAF .323 HCC 85

RAF .154 Interaction CHF/DM

BMI 40-45 Z68.41



RAF .271 HCC 22

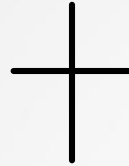
Total RAF 1.752 Approx \$15000

Chronic Kidney Disease

Stage	Severity	GFR Value	ICD-10	HCC Wt
STAGE 1		GFR 90 mL/min with kidney damage (microalbuminuria 1+ proteinuria)	N18.1	0
STAGE 2	Mild	GFR 60-89 mL/min with kidney damage (microalbuminuria 1+ proteinuria)	N18.2	0
STAGE 3	Moderate	GFR 30-59 mL/min	N18.3	0
STAGE 4	Severe	GFR 15-29 mL/min	N18.4	0.237
STAGE 5	Kidney Failure	GFR < 15 mL/min	N18.5	0.237
ESRD	Code with renal dialysis status Z99.2	Requiring chronic dialysis or transplant	N18.6	0.422
CKD Unspecified		CKD Unspec.	N18.9	0

MICROALBUMINURIA or PROTEINURIA

Proteinuria or
Microalbuminuria
documented in chart
secondary to diabetes



Diabetes without
complications
E11.9 RAF = .104



Chronic Kidney Disease
Stage 1 or 2 due to DM II



E11.22 Diabetes with
diabetes chronic kidney
disease



RAF= .318
HCC 18

CARDIOLOGY

- ***Be specific:***
- Avoid less specific terms
 - Coronary artery disease (CAD)
 - Atherosclerotic heart disease (ASHD)
- If patient has more specific diagnosis use:

Angina - treated or untreated with pharmacological treatment or interventional cardiology.

ANGINA **remains active** if pharmacologic RX prescribed

ANGINA resolved with PTCA or CABG and no further medication can not be coded as active

CODING OF MI – ACUTE Vs. OLD

Acute MI – I22.9 for only 4 weeks after diagnosis is made

If you have face-to-face office visit within first 4 weeks then correct code is I22.9

- If a patient is seen after 4 weeks of an acute MI, and has no continued anginal symptoms, the correct code is I25.2 (recent MI, old MI, or history of MI)
- If angina symptoms persist code ANGINA I20.9

RULE- “ACUTE” becomes “OLD”
after 4 weeks

ANGINA

RULE- code for cardiac angina if treating.

If asymptomatic due to pharmacological treatment,
may still continue to code.

DIAGNOSIS	ICD-10	HCC WEIGHT
Angina Pectoris	I20.9	.140
Chronic Ischemic Heart Disease	I25.9	0

CHF and other Chronic Cardiovascular Conditions

- **Chronic cardiovascular conditions:**
 - Document and code ongoing chronic conditions such as “atrial fibrillation” or arrhythmias
 - Symptomatic
 - Asymptomatic because of the need for pharmacological treatment and/or interventional cardiology.
- **Congestive heart failure is always chronic after diagnosis.**
 - After it is diagnosed, CHF is a chronic condition
 - Should be documented, coded, and treated as such.

CHF- You only get credit for one of following

DIAGNOSIS	ICD-10	HCC WEIGHTS
Congestive Heart Failure	I50.9	0.323
Congestive Heart Failure	I50.150.2 I50.3 I50.4 I50.8	NO RAF
Acute on chronic systolic heart failure	I50.23	0.323
Diastolic Heart Failure unspecified	I50.30	0.323
Left Heart Failure	I50.1	0.323
Pulmonary Hypertension	I27.0	0.323

ARRHYTHMIAS

Once an Arrhythmia,
Always an Arrhythmia
unless permanently corrected
without ongoing
pharmacological or
mechanistic intervention

ARRHYTHMIAS

DIAGNOSIS	ICD-10	HCC WEIGHT
Atrial Fibrillation	I48.91	0.268
Atrial Flutter	I48.92	0.268
Sick Sinus Syndrome	I49.5	0.268
Atrioventricular Block, Complete	I44.2	0.268
Paroxysmal Supravent Tach (PSVT)	I47.1	0.268
Paroxysmal Ventricular Tachycardia	I47.2	0.268
Ventricular Fibrillation	I49.01	0.302

Additional 0.105 RAF given for CHF and Arrhythmia interaction

No CHF/Arrhythmia interaction give for PVC's, palpitations, tachycardia, bradycardia dysarrhythmia

VASCULAR

DIAGNOSIS	ICD-10	HCC WEIGHT
Abdominal Aortic Aneurysm -AAA Consider screening males over 65 years of age and patients with risk factors i.e. HTN, smoker, hyperlipidemia	I71.4	0.298
Atherosclerotic disease of coronary artery without angina	I25.10	NO RAF
Aortic Ectasia	I77.819	0.298
Aortic Atherosclerosis As found on CXR, CT	I70.0	0.298
Atherosclerosis Renal Artery	I70.1	NO RAF
Atherosclerosis, Extremities	I70.209	0.298
	I70.2 or I70.20	NO RAF
Peripheral Vascular Disease Clinical Dx in patient with decreased palpable pedal pulses, thin, hairless, lower legs, cool purple toes	I73.9	0.298

RISK ADJUSTMENT

Conditions that DON'T risk adj	Conditions that DO risk adj
Hypertension benign	Hypertensive heart disease- Malignant with heart failure ICD-10 I11.0
Coronary atherosclerosis, unspecified type of vessel	Angina pectoris unspecified ICD 10 I20.9
Atherosclerosis	Atherosclerosis, extremities I70.20 NO RAF I70.29 RAF
Chest Pain	Unstable Angina I20.0 RAF value double Angina Unspecified I20.9
Dysrhythmia	Atrial fibrillation I48.9

PULMONARY

DIAGNOSIS	ICD-10	HCC WEIGHT
Obstructive Chronic Bronchitis Chronic cough or mucus production for at least 3 months out of the year in 2 successive years diagnosed clinically and PFT with obstructive pattern (low FEV, high TLC)	J44.9	0.328
Emphysema Damage to alveoli frequently diagnosed by smoking history, wheezing, CXR findings and obstructive or decreased perfusion capacity PFT	J43.9	0.328
Chronic Obstructive Asthma Chronic asthma characterized by SOB, cough, wheezing, and response to bronchodilators diagnosed clinically or PFT revealed obstructive pattern (FEV1/FVC <80%) reversible with bronchodilators	J44.9	0.328
COPD NEC, NOS/CHR Airway Obstruction Chronic obstructive lung disease often diagnosed with smoking history, wheezing, CXR or PFT showing obstructive pattern (FEV1/FVC<80%)	J44.9	0.328
Simple Chronic Bronchitis	J42	0.328

MAJOR DEPRESSION

- Episodic mood disorders (F32.X) are mental diseases that include mood disturbances such as major depression.
- **Must** carefully document the characteristics of the mood disturbance (e.g. mania, depression, single or recurrent episode) and use specific mental disorder terminology in the final diagnosis.
- **NO** descriptor terms such as “major” or “recurrent”, the code F32.9 is used which has **NO HCC weight**.

MAJOR DEPRESSION

DIAGNOSIS	ICD-10	HCC WEIGHT
Major Depressive Disorder, Single Episode One episode of major depression (must have depressed mood and/or loss of interest plus 4 out of the following: change in appetite, sleep disturbance, behavior change, decrease in energy, guilt, inability to concentrate, suicidal ideation)	F32.0	0.395
Major Depressive Disorder, Recurrent Episode Recurrent episodes of major depression	F33.0	0.395
Major Depressive Disorder In remission	F33.40	0.395
Bipolar	F31.9	0.395
Schizophrenia	F20.9	0.608

ICD-10	HCC YEAR	HCC	Diagnosis	Override	Risk Score
f32.0	2018	58	Major depressive disorder, single episode, mild		0.395
f32.1	2018	58	Major depressive disorder, single episode, moderate	Y	0.395
f32.3	2018	58	Major depressive disorder, single episode, severe with psychotic features	Y	0.395
f32.4	2018	58	Major depressive disorder, single episode, in partial remission	Y	0.395
f32.5	2018	58	Major depressive disorder, single episode, in full remission	Y	0.395
f32.8			Other depressive episodes	N/A	NO RAF
f32.9			Major Depressive Disorder unspecified	N/A	NO RAF

PSYCHIATRY

DIAGNOSIS	ICD-10	HCC WEIGHT
Alcohol Dependence/Alcoholism Once an alcoholic, always an alcoholic, even if sober for years. Code annually.	F10.20	0.383
Drug Dependence Consider opioid or benzodiazepine dependence in patients who have maladaptive pattern of substance use and without the medication would have signs or symptoms of physical or psychological withdrawal and would seek refills. i.e. patients with chronic pain syndromes on morphine ER, oxycontin, fentanyl patches.	F11.X	0.383
Opioid Dependence	F11.20	0.383
Benzodiazepine dependence	F13.20	0.383

Alcohol DEPENDENCE

- Drinking more or for longer periods of time than intended
- More than once wanting to cut down or stop but being unable to do so
- Spending lots of time drinking, or getting over the effects of drinking
- Wanting a drink so badly that you can't think of anything else
- Drinking or the effects of drinking interferes with the ability to care for family or causes problems on the job or at school
- Giving up other interests or activities in order to drink
- Continued drinking even when it causes problems with friends or family
- Continued drinking even though it causes health or emotional problems or a blackout
- Having to drink more than you once did to achieve the same effects
- More than once gotten into potentially harmful situations during or after drinking
- Experienced withdrawal symptoms when the effects of alcohol wear off

Mild – 2 to 3 of criteria Moderate 4-5 Severe 6 or more criteria

Opioid Dependence

Long term opioid treatment Z79.891 NO RAF

Opioid dependence F11.20 RAF 0.383

A maladaptive pattern of substance use, leading to clinical impairment or distress as manifested by 3 of the following:

- Tolerance
- Withdrawal symptoms
- Increased usage over a longer period than intended
- Desire or unsuccessful effort to cut down on use
- Excess time spent in activities to obtain the substance
- Continued use despite doctor advice or patient knowledge of physical or psychological problem related to the substance use

NO RAF SCORES

- F10.10 Alcohol Dependence Unspecified
- Opioid abuse, uncomplicated (F11.10)
- Unspecified opioid use, uncomplicated (F11.90)

MALNUTRITION

- ICD-10 Codes E44.x - **Malnutrition is often underreported**
- Conditions often seen in the senior patient that limit nutrient ingestion and absorption:
 - ◆ Cancer
 - ◆ Pancreatitis
 - ◆ Alcohol abuse and/or dependence
 - ◆ Liver Disease, Alcoholic hepatitis, cirrhosis
 - ◆ Obesity
 - ◆ CHF, COPD
 - ◆ ESRD
 - ◆ Celiac Disease
 - ◆ Cystic fibrosis
 - ◆ Depression / Dementia

MALNUTRITION

DIAGNOSIS	ICD-10	HCC WEIGHT
Unspecified malnutrition Wt loss of 5% in 3 months or 10% in 6 months, or BMI <17.9 and low albumin	E46	0.545
Mild malnutrition BMI 16-17.9 Albumin <3.5	E44.1	0.545
Moderate malnutrition BMI <16.0 Albumin <3.5	E44.0	0.545

MORBID OBESITY

DIAGNOSIS	ICD-10	HCC WEIGHT
Morbid Obesity BMI > 40	E66.01	0.273
BMI 40-44.9	Z68.41	0.273
BMI 45-49.9	Z68.42	0.273
BMI 50-59.90	Z68.43	0.273
BMI 60-69.9	Z68.44	0.273
BMI 70 or more	Z68.45	0.273
Morbid Obesity w/CoMorbid Conditions BMI>35 (Be sure to link to co morbid Condition) Arthritis, Sleep Apnea, HTN, Hyperlipidemia, Diabetes	Use Z-code for BMI 35-39.9 Z68.35-.39	RXHCC

Coding of Strokes

- Strokes are an acute event, and should only be coded when the patient is having the stroke in front of you.
- Code as history of stroke but to get RAF you must code any applicable late effects of the stroke

NEUROLOGY

DIAGNOSIS	ICD-10	HCC WEIGHT
Late EF-Hemiplegia Side NOS Nonspecific persistent hemiparesis from CVA diagnosed clinically (paralysis of one side of the body)	169.359	0.538
Late EF Other paralytic syndrome Non specific persistent weakness as a result of a CVA diagnosed clinically	169.369	0.538
Late EF Monoplegia Lower limb Persistent weakness involving one lower limb as a result of CVA diagnosed clinically	169.349	0.395
Late EF Monoplegia Upper limb	169.339	0.395

NEUROLOGY

DIAGNOSIS	ICD-10	HCC WEIGHT
<p>Seizures/Epilepsy Be sure to document and code annually</p>	G40.89	0.309
<p>Parkinsons Consider Parkinsons in patients with resting tremor of head, hands, arms, and possible muscle rigidity, slowness of movement, or postural instability</p>	G20	0.674
<p>Alzheimer's Dementia Lewy Body Dementia Dementia with behavioral Multiple Sclerosis</p>	<p>G30.x G31.83 F02.81 G35</p>	<p>NO RAF NO RAF NORAF .441</p>

ONCOLOGY

- Under ICD-10 guidelines, malignancies are only coded until the patient has **completed definitive treatment**:
 - ◆ Definitive treatment means surgery, chemotherapy and/or radiation therapy aimed at eradicating the malignancy
 - ◆ Patients who do not receive definitive treatment for the their malignancy continue to be coded for the malignancy diagnosis
- Patients on Adjuvant therapy like for Breast and Prostate CA patients
(Examples Taxanes, Trastuzumab, Aromatase Inhibitors, Docetaxol) are coded as if they have **active disease**

ONCOLOGY DOCUMENTATION PITFALLS

SURVEILLANCE

Patients who have completed therapy can only be coded with a “personal history of cancer” diagnosis code

This includes patients undergoing surveillance for re-occurrence of the malignancy

METASTATIC DISEASE

- Has a separate section in the ICD-10, and a separate CMS-HCC payment group. This is an instance where lack of specificity in documentation leads to a lower payment rate.
- It is important to indicate when metastatic disease is present, as a **secondary malignant neoplasm.**

- **C00-C14**

Malignant neoplasms of lip, oral cavity and pharynx

- **C15-C26**

Malignant neoplasms of digestive organs

- **C30-C39**

Malignant neoplasms of respiratory and intrathoracic organs

- **C40-C41**

Malignant neoplasms of bone and articular cartilage

- **C43-C44**

Melanoma and other malignant neoplasms of skin

- **C45-C49**

Malignant neoplasms of mesothelial and soft tissue

- **C50-C50**

Malignant neoplasms of breast

- **C51-C58**

Malignant neoplasms of female genital organs

- **C60-C63**

Malignant neoplasms of male genital organs

- **C64-C68**

Malignant neoplasms of urinary tract

- **C69-C72**

Malignant neoplasms of eye, brain and other parts of central nervous system

- **C73-C75**

Malignant neoplasms of thyroid and other endocrine glands

c18.7	2018	9	Malignant neoplasm of upper lobe, left bronchus or lung		0.97
C15.5	2018	9	Malignant neoplasm of lower third of esophagus	Y	0.97
c81.19	2018	10	Nodular sclerosis Hodgkin lymphoma, lymph nodes of head, face, and neck	Y	0.677
c50.212	2018	10	Malignant neoplasm of left ovary	Y	0.677
C91.90	2018	10	Lymphoid leukemia, unspecified not having achieved remission	Y	0.677
C91.10	2018	10	Chronic lymphocytic leukemia of B-cell type not having achieved remission	Y	0.677
c71.7	2018	10	Malignant neoplasm of brain stem	Y	0.677
c81.11	2018	11	Malignant neoplasm of sigmoid colon	Y	0.301
c34.12	2018	11	Malignant neoplasm of laryngeal cartilage	Y	0.301
c56.2	2018	11	Malignant neoplasm of left renal pelvis	Y	0.301
c32.3	2018	12	Malignant melanoma of right upper limb, including shoulder	Y	0.146
c43.61	2018	12	Malignant neoplasm of upper-inner quadrant of left female breast	Y	0.146
C73	2018	12	Malignant neoplasm of thyroid gland	Y	0.146

Metastatic Disease

c18.7	2018	9	Malignant neoplasm of upper lobe, left bronchus or lung	Y	0.97
C15.5	2018	9	Malignant neoplasm of lower third of esophagus	Y	0.97
c81.19	2018	10	Nodular sclerosis Hodgkin lymphoma, lymph nodes of head, face, and neck	Y	0.677
c50.212	2018	10	Malignant neoplasm of left ovary	Y	0.677
C91.90	2018	10	Lymphoid leukemia, unspecified not having achieved remission	Y	0.677
C91.10	2018	10	Chronic lymphocytic leukemia of B-cell type not having achieved remission	Y	0.677
c71.7	2018	10	Malignant neoplasm of brain stem	Y	0.677
c81.11	2018	11	Malignant neoplasm of sigmoid colon	Y	0.301
c34.12	2018	11	Malignant neoplasm of laryngeal cartilage	Y	0.301
c56.2	2018	11	Malignant neoplasm of left renal pelvis	Y	0.301
c32.3	2018	12	Malignant melanoma of right upper limb, including shoulder	Y	0.146
c43.61	2018	12	Malignant neoplasm of upper-inner quadrant of left female breast	Y	0.146
C73	2018	12	Malignant neoplasm of thyroid gland	Y	0.146
c79.51	2018	8	Secondary malignant neoplasm of bone		2.625
c79.31	2018	8	Secondary malignant neoplasm of brain	Y	2.625
c78.00	2018	8	Secondary malignant neoplasm of unspecified lung	Y	2.625
c80.0	2018	8	Disseminated malignant neoplasm, unspecified	Y	2.625
c78.7	2018	8	Secondary malignant neoplasm of liver and intrahepatic bile duct	Y	2.625
c79.60	2018	8	Secondary malignant neoplasm of unspecified ovary	Y	2.625

Breast Cancer

- Breast Cancer HCC 12
- ICD 10 --- C50.510 RAF 0.146
- Breast Cancer that has spread to lymph nodes
 - ~~ICD 10 --- C50.510~~
 - Overridden by ICD 10 --- C77.8
 - Spread of cancer to lymph nodes
 - RAF 2.625

Diagnosis specificity impact on CMS HCCs and RAF scores

Specificity impact	Diagnoses	Examples
Additional specificity does not change the HCC/RAF score	<ul style="list-style-type: none"> • Secondary cancers • Malnutrition • Hepatic failure unspecified • Cirrhosis • Chronic hepatitis • Osteomyelitis • Osteonecrosis • Rheumatoid arthritis • Schizophrenia • Epilepsy • Respiratory failure • Atrial fibrillation/flutter • COPD • Emphysema • Heart failure 	<ul style="list-style-type: none"> • Severe, moderate, mild and unspecified malnutrition all fall under HCC 21 "Protein-Calorie Malnutrition" • 27 different ICD-10 codes related to respiratory failure fall under HCC 84 "Cardio-Respiratory Failure and Shock," including acute, chronic, acute and chronic, and unspecified respiratory failure
Additional specificity does change the HCC/RAF score	<ul style="list-style-type: none"> • Diabetes • Angina • Pneumonia • Renal failure unspecified • Chronic kidney disease unspecified • Pressure ulcer unspecified 	<ul style="list-style-type: none"> • Chronic kidney disease stages 1, 2 and 3 are not classified as HCCs; however, stage 4 (HCC 136), stage 5 (HCC 137) and ESRD are HCCs • There are different HCCs for diabetes with acute complications (HCC 17), chronic complications (HCC 18) and without complications (HCC 19)

Example of a CMS Payment to an MA Plan

No Diagnoses Reported		Some Diagnoses Reported		All Diagnoses Reported	
68 year old male	.300	68 year old male	.300	68 year old male	.300
Dual eligible	.192	Dual eligible	.192	Dual eligible	.192
Type 2 DM, not coded		Type 2 DM, no complications	.104	Type 2 DM with other skin ulcer	.853
Congestive Heart Failure, not coded		Congestive Heart Failure, not coded		Congestive Heart Failure, coded	.323
				Disease interaction (DM+CHF)	.105
Risk Adjustment Factor	.492	Risk Adjustment Factor	.596	Risk Adjustment Factor	1.773
PMPM base payment	\$814	PMPM base payment	\$814	PMPM base payment	\$814
PMPM for this patient	\$418	PMPM for this patient	\$630	PMPM for this patient	\$1,438
Annual payment	\$5016	Annual payment	\$6079	Annual payment	\$17256

Case Study: Medical Record Example (Fictional)

DOS: 02/24/16

Justin Tyme, DOB: 01/04/1950

Chief Complaint & HPI

Medicare Wellness Visit, 66 yr. old male here for annual wellness visit with known history of diabetes, neuropathy, and major depression.

Past Medical History

DM, Neuropathy, MDD, Congestive Heart Failure, Traumatic toe amputation (2011)

ROS

As noted in HPI, all other systems negative

Vitals

Ht 64 in, Wt 240 lbs, BMI: 42.5

Exam

General appearance: Patient is obese, ENMT: Normal, Abdomen: No abdominal tenderness, and Musculoskeletal : Foot exam reveals decreased sensation, great toe amputation

Assessment/Plan

1. Medical Screening Exam- preventive care discussed
2. DM II- stable, continue current treatment plan
3. Neuropathy- stable, continue current treatment plan
4. Major Depression- stable, continue treatment plan

Electronically signed by: Phil N. Good, MD on 02/24/16

NON-SPECIFIC VS. SPECIFIC CODING OF CASE STUDY

	ICD 10	HCC	RAF		ICD 10	HCC	RAF
66 yr old Male			0.288	66 yr old Male			0.288
DM Uncomplicated	E11.9	19	0.104	DM with neuropathy	E11.40	18	0.318
Nueropathy	G62.9		N/A	Morbid Obesity (BMI 42)	E66.01	22	0.365
Major Depression	F32.9		N/A	Major Depression major	F33.2	58	0.33
Obesity	E66.9		N/A	Systolic Congestive Heart Failure	I50.22	85	0.368
Great Toe Amputation	z89.419	22	0.779	Great Toe Amputation	z89.419	22	0.779
				CHF and DM Interaction			0.182
Risk Score			1.171	Risk Score			2.63

Diagnosis	Model	HCC	Description	Override	2018 Score	2016 Score	Difference
E11.21	2018	18	Type 2 diabetes mellitus with diabetic nephropathy		0.318	0.368	-0.05
E11.39	2018	18	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Y	0.318	0.368	-0.05
N18.4	2018	137	Chronic kidney disease, stage 4 (severe)		0.237	0.224	0.013
I48.2	2018	96	Chronic Afib		0.268	0.295	-0.027
I27.0	2018	85	Primary pulmonary hypertension (in same category as CHF)		0.323	0.368	-0.045
I70.0	2018	108	Atherosclerosis of aorta		0.298	0.299	-0.001
J44.9	2018	111	Chronic obstructive pulmonary disease, unspecified		0.328	0.346	-0.018
F31.9	2018	58	Bipolar disorder, unspecified		0.395	0.33	0.065
E66.01	2018	22	Morbid (severe) obesity due to excess calories		0.273	0.365	-0.092
Z289.512	2018	189	Acquired absence of left leg below knee		0.588	0.779	-0.191
2018 Demographic Risk Factor					0.379	0.356	0.023
2018 HCC Risk Factor					3.747	4.132	-0.385
Interaction: Congestive Heart Failure*Diabetes Group					0.154	0.259	-0.105
Interaction: Congestive Heart Failure*Chronic Obstructive Pulmonary Disease Group					0.19	0.317	-0.127
Interaction: Congestive Heart Failure*Renal Group					0.27	0.182	0.088
Interaction: Congestive Heart Failure*Specified Heart Arrhythmias					0.105	0	0.105
2018 Total Risk Factor					4.126	4.488	-0.362

9 Different HCC Categories RAF scores for this patient
4 different disease interactions with CHF

Diagnosis	Model	HCC	Description	Override	2018 Score	2016 Score	Difference
e11.21	2018	18	Type 2 diabetes mellitus with diabetic nephropathy		0.318	0.368	-0.05
e11.621	2018	161	Type 2 diabetes mellitus with foot ulcer		0.535	0	0.535
	2018	18	Type 2 diabetes mellitus with foot ulcer	Y	0.318	0.368	-0.05
n18.4	2018	137	Chronic kidney disease, stage 4 (severe)		0.237	0.224	0.013
I48.2	2018	96	Chronic AFib		0.268	0.295	-0.027
I27.0	2018	85	Primary pulmonary hypertension		0.323	0.368	-0.045
I70.0	2018	108	Atherosclerosis of aorta		0.298	0.299	-0.001
J44.9	2018	111	Chronic obstructive pulmonary disease, unspecified		0.328	0.346	-0.018
F31.9	2018	58	Bipolar disorder, unspecified		0.395	0.33	0.065
E66.01	2018	22	Morbid (severe) obesity due to excess calories		0.273	0.365	-0.092
Z89.512	2018	189	Acquired absence of left leg below knee		0.588	0.779	-0.191
2018 Demographic Risk Factor					0.379	0.356	0.023
2018 HCC Risk Factor					3.942	3.730	.212
Interaction: Congestive Heart Failure*Diabetes Group					0.154	0.259	-0.105
Interaction: Congestive Heart Failure*Chronic Obstructive Pulmonary Disease Group					0.19	0.317	-0.127
Interaction: Congestive Heart Failure*Renal Group					0.27	0.182	0.088
Interaction: Congestive Heart Failure*Specified Heart Arrhythmias					0.105	0	0.105
2018 Total Risk Factor					4.661	4.488	0.173

10 HCC Category RAF Scores with 9 RAF ICD-10 Codes
4 Interactions for RAF with CHF

If you remove the DM with foot ulcer (E11.621) but add the appropriate code for non-pressure ulcer you maintain the .535 RAF for HCC 161 that you had with E11.621. If you use L97.50 or less than 3 digits with L97 you don't get any RAF

Diagnosis	Model	HCC	Description	Override	2018 Score	2016 Score	Difference
E11.21	2018	18	Type 2 diabetes mellitus with diabetic kidney complication		0.318	0.368	-0.05
L97.509	2018	161	Non pressure chronic ulcer of unspecified foot with unspecified severity		.535	0.536	-.001
n18.4	2018	137	Chronic kidney disease, stage 4 (severe)		0.237	0.224	0.013
I48.2	2018	96	Chronic Afib		0.268	0.295	-0.027
I27.0	2018	85	Primary pulmonary hypertension		0.323	0.368	-0.045
I70.0	2018	108	Atherosclerosis of aorta		0.298	0.299	-0.001
J44.9	2018	111	Chronic obstructive pulmonary disease, unspecified		0.328	0.346	-0.018
F31.9	2018	58	Bipolar disorder, unspecified		0.395	0.33	0.065
E66.01	2018	22	Morbid (severe) obesity due to excess calories		0.273	0.365	-0.092
Z89.512	2018	189	Acquired absence of left leg below knee		0.588	0.779	-0.191
2018 Demographic Risk Factor					0.379	0.356	0.023
2018 HCC Risk Factor					3.942	4.266	-0.385
Interaction: Congestive Heart Failure*Diabetes Group					0.154	0.259	-0.105
Interaction: Congestive Heart Failure*Chronic Obstructive Pulmonary Disease Group					0.19	0.317	-0.127
Interaction: Congestive Heart Failure*Renal Group					0.27	0.182	0.088
Interaction: Congestive Heart Failure*Specified Heart Arrhythmias					0.105	0	0.105
2018 Total Risk Factor					4.661	5.024	-0.363

Add Gangrene and HCC 106 trumps HCC 108 and 189

Diagnosis	Model	HCC	Description	Override	2018 Score	2016 Score	Difference
e11.21	2018	18	Type 2 diabetes mellitus with diabetic nephropathy		0.318	0.368	-0.05
i96	2018	106	Gangrene, not elsewhere classified		1.461	1.413	0.048
n18.4	2018	137	Chronic kidney disease, stage 4 (severe)		0.237	0.224	0.013
i48.2	2018	96	Chronic Afib		0.268	0.295	-0.027
i27.0	2018	85	Primary pulmonary hypertension		0.323	0.368	-0.045
i70.0	2018	108	Atherosclerosis of aorta	Y	0.298	0.299	-0.001
j44.9	2018	111	Chronic obstructive pulmonary disease, unspecified		0.328	0.346	-0.018
f31.9	2018	58	Bipolar disorder, unspecified		0.395	0.33	0.065
e66.01	2018	22	Morbid (severe) obesity due to excess calories		0.273	0.365	-0.092
z89.512	2018	189	Acquired absence of left leg below knee	Y	0.588	0.779	-0.191
2018 Demographic Risk Factor					0.379	0.356	0.023
2018 HCC Risk Factor					4.322	4.467	-0.145
Interaction: Congestive Heart Failure*Diabetes Group					0.154	0.259	-0.105
Interaction: Congestive Heart Failure*Chronic Obstructive Pulmonary Disease Group					0.19	0.317	-0.127
Interaction: Congestive Heart Failure*Renal Group					0.27	0.182	0.088
Interaction: Congestive Heart Failure*Specified Heart Arrhythmias					0.105	0	0.105
2018 Total Risk Factor					4.701	4.823	-0.122

To practice risk scores go to
<http://www.hccuniversity.com/risk-score-calculator/>

QUESTIONS?

