

Advanced Risk Management and HCC Coding for Value-Based Payments



2020 Advanced Risk Management and HCC Coding for Value-Based Payments

Friday, October 2nd 2020

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Kameron Gifford, CPC
CEO, ERM Consulting Inc.

Kameron is the founder and Chief Executive Officer of ERM Consulting and mHealth Games, an online learning company. Over the last 17 years she has worked hand in hand with physicians, managed care organizations, hospitals and health plans to develop efficient billing practices, implement value added processes and improve the entire experience of care for their patients. Kameron is passionate about risk adjustment and a strong advocate for frontline staff.

Kameron is also a primary author of the following national risk adjustment workshops presented by RISE and Healthcare Education Associates:

- Risk Adjustment 101
- HCC Coding Accuracy

And Co-author of the new RISE Workshop

- Advanced HCC Coding



Todd Gifford, MBA, Ph.D, CRC
Managing Director, mHealth Games

Prior to joining ERM, Todd was the Director of Finance for a large Medicare Advantage MSO based in Miami, Florida. He joined them in 2007 as Managing Director of Health Solutions UK, a joint venture with Humana. During his two and a half years in London he worked hand in hand with the NHS to transform the way care was delivered. From 2010 to 2012, Todd oversaw the start-up expansion into Texas. In this role, he was responsible for 12,500 MA members and a budget of \$75m.

Todd graduated from the University of Arkansas with a B.A. in 1991, and received his MBA from Webster University in 2001. He was awarded a Ph.D in Business from Woodfield University in 2013.

In addition, Todd is also the Co-founder of mHealth Games, an innovative technology company headquartered in Miami, Florida.

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Advanced Risk Management and HCC Coding for Value-Based Payments

Clinical Content Reviewed and Approved By

J.M. McCullough, MD

Dr. McCullough is the inspiration behind ERM's work and our proprietary model of care "The Preventist".

He graduated from Universidad Autonoma de Guadalajara in 1974 and began his internship at St. Joseph's in Houston, Texas. A few years later he relocated to Corpus Christi to accept a family practice residency at Spohn Memorial Hospital .

In 1976 he started his private practice just 15 miles away from where he completed his residency. For almost 40 years Dr. McCullough proudly served his patients by providing the highest quality of care and his community through various executive leadership roles.

In 2014, Dr. McCullough sold his practice and "semi-retired." Today, he continues to see patients 4 days a week in addition to his work as an Associate Medical Director for Driscoll Health plan.

His leadership and guidance was essential in creating a vehicle for the "Next Generation of Patient-Centered Care".



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Advanced Risk Management and HCC Coding for Value-Based Payments

Today's Agenda...

Risk Adjustment and VBP Models

CMS-HCC Risk Adjustment Model

Rules of the Road

Deep Dive into HCCs

Change Management and Physician Buy-In

Risk Adjustment Resources

Leveraging the Frontline for Success

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Advanced Risk Management and HCC Coding for Value-Based Payments

Risk Adjustment and Value Based Payments

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Like Two Peas in a Pod...



VBP RA

You wouldn't want one without the other!

“Value Based Payment (VBP) is a concept by which purchasers of health care (government, employers, and consumers) and payers (public and private) hold the health care delivery system at large (physicians and other providers, hospitals, etc.) accountable for both quality and cost of care...”

- AAFP

Instead of payment that asks, “How much did you do?” Value based payments clearly move us toward payment that asks, “How well did you do?”, and more importantly, “How well did the patient do?”

“Risk adjustment is a statistical process used to identify and adjust for variation in patient outcomes that stem from differences in patient characteristics (or risk factors) across health care organizations...”

- Joint Commission

“Risk adjustment model means an actuarial tool used to predict health care costs based on the relative actuarial risk of enrollees in risk adjustment covered plans...”

- 45 CFR 153.20

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Rewarding Value and Outcomes

CMS was required by MACRA to implement a quality payment incentive program which rewards value and outcomes in one of two ways:

1. **Merit-based Incentive Payment System (MIPS)**
 - If you're a MIPS eligible clinician, you'll be **subject to a performance-based payment adjustment** through MIPS.
2. **Advanced Alternative Payment Models (APMs)**
 - If you decide to take part in an Advanced APM, you may **earn a Medicare incentive payment** for sufficiently participating in an innovative payment model.

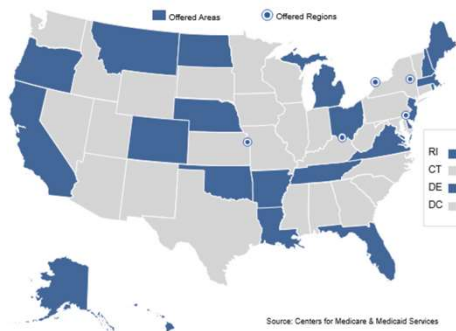
2020 MIPS APMs Include:

- ✓ Comprehensive Primary Care Plus (CPC+) Model
- ✓ Bundled Payments for Care Improvement Advanced Model (BPCI Advanced)
- ✓ Comprehensive ESRD Care (CEC) Model *
- ✓ Medicare Shared Savings Program (Track 1, Track 1+ ACO Model, Track 2, Track 3, Basic and Enhanced)
- ✓ Next Generation ACO Model
- ✓ Oncology Care Model (OCM) *
- ✓ Vermont Medicare ACO Initiative (as part of the Vermont All-Payer ACO Model)
- ✓ Maryland Primary Care Program
- ✓ Independence at Home Demonstration

* Includes models with one-sided and two-sided risk arrangements

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Primary Care First Model



Primary Care First Model Options will be offered in 26 regions for a 2021 start date: Alaska (statewide), Arkansas (statewide), California (statewide), Colorado (statewide), Delaware (statewide), Florida (statewide), Greater Buffalo region (New York), Greater Kansas City region (Kansas and Missouri), Greater Philadelphia region (Pennsylvania), Hawaii (statewide), Louisiana (statewide), Maine (statewide), Massachusetts (statewide), Michigan (statewide), Montana (statewide), Nebraska (statewide), New Hampshire (statewide), New Jersey (statewide), North Dakota (statewide), North Hudson-Capital region (New York), Ohio and Northern Kentucky region (statewide in Ohio and partial state in Kentucky), Oklahoma (statewide), Oregon (statewide), Rhode Island (statewide), Tennessee (statewide), and Virginia (statewide).

Primary Care First Model Options is a set of voluntary five-year payment options that reward value and quality by offering an innovative payment structure to support delivery of advanced primary care.

Primary Care First is based on the underlying principles of the existing CPC+ model design: prioritizing the doctor-patient relationship; enhancing care for patients with complex chronic needs and high need, seriously ill patients, reducing administrative burden, and focusing financial rewards on improved health outcomes.

The Total Primary Care Payment is a hybrid payment that incentivizes advanced primary care while compensating practices with higher-risk patients.

Population-Based Payment		Flat Primary Care Visit Fee	
Payment for service in or outside the office, adjusted for practices caring for higher risk populations. This base rate is the same for all patients within a practice.		Payment for in-person treatment that reduces billing and revenue cycle burden.	
		\$40.82	
		per face-to-face encounter	
		<i>Payment amount does not include copayment or geographic adjustment</i>	
Practice Risk Group	Payment (per beneficiary per month*)	99201-99205	
Group 1: Average Hierarchical Condition Category (HCC) <1.2	\$28	99211-99215	
Group 2: Average HCC 1.2-1.5	\$45	99354-99355	
Group 3: Average HCC 1.5-2.0	\$100	99495-99496	
Group 4: Average HCC >2.0	\$175	99324-99328, 99334-99337, 99339-99345, 99347-99350	
		99497, 99498	
		G0402, G0438, G0439	
Payment will be reduced through calculating a "leakage adjustment" if beneficiaries seek primary care services outside the practice.			

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Observed to Expected (O/E) Ratio

The rates for each indicator are calculated as follows:

- Observed rate = Observed events / Eligible population
- Expected rate = Expected events / Eligible population
- Risk-adjusted rate = (Observed events / Expected events) * reference population rate
- Smoothed rate = Risk-adjusted rate * weight + reference population rate * (1 - weight)

The counts that are used to calculate the rates of each indicator are determined as follows:

- Eligible population = for each QI indicator, the total number of a hospital's discharges that qualified for the eligible population for that specific indicator
- Observed events = for each QI indicator, the total sum of events that occurred in the eligible population for that specific indicator
- Expected events = for each QI indicator, the total sum of events expected to occur for that specific indicator if the hospital had average performance comparable to the reference population, considering its case mix

Appendix. Formulas and Uses for the Four Types of QI Rates

Type of Rate	Brief Description	Way To Use It
Observed rate	Raw rate generated by the QI software using a hospital's discharge data. Formula: $R^k = \frac{\sum_j Y_j^k}{\sum_j D_j^k}$ where k indexes the QIs, j indexes the hospital's annual discharges, Y_j^k is a 0/1 variable taking the value 1 if discharge j meets the criteria for QI k, and D_j^k is a 0/1 variable taking the value 1 if discharge j is eligible for QI k.	Used to identify QI areas of strength and those needing improvement; and for comparison with expected rates to identify QI areas of strength and need for improvement.
Expected rate	Rate the hospital would have if it had performed the same as the reference population given the provider's actual case mix (e.g., age, gender, DRG, and comorbidity categories). Formula: $E^k = \frac{\sum_j \hat{e}_j^k}{\sum_j D_j^k}$ where in addition to the symbols defined above, $\hat{e}_j^k = \hat{\beta}^k X_j^k$ the predicted probability of QI k occurring on discharge j given the risks (X_j^k) present in discharge j where $\hat{\beta}^k$ is a vector of parameter estimates from a regression of the risks on occurrences of QI k in the SID.	Used for comparison with the observed rate within the same hospital to identify QI areas of strength and need for improvement.
Risk-adjusted rate	Rate the hospital would have if it had the same case mix as the SID given the hospital's actual performance. Formula: $A^k = \frac{\sum_j Y_j^k}{\sum_j \hat{e}_j^k} * (R_{SID}^k)$ where in addition to the symbols defined above, R_{SID}^k is the raw rate for QI k in the entire SID.	Used for comparison to benchmarks (other hospitals or sets of hospitals) to assess performance relative to others.
Smoothed rate	Weighted average of the hospital's risk-adjusted rate and the reference population rate, where the weight reflects the reliability of the hospital's risk-adjusted rate (a function of the number of eligible discharges). Formula: $S^k = w^k * A^k + (1 - w^k) * R_{SID}^k$ where in addition to the symbols defined above, w^k is a measure of the reliability of the hospital's risk-adjusted rate.	Used for comparison with the risk-adjusted rate within the same hospital to determine the reliability of the risk-adjusted rate over time. Also used instead of the risk-adjusted rate for comparing to benchmarks if the risk-adjusted rate is not reliable over time.

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CMS-HCCs Drive the VBPM Reform

Fee-for-Service

	Annual Capitated Payment (Medicare Advantage, HIX)	RAF scores are payment multipliers for PMPM payments
	Bundled Payments (CMS CJR)	HCCs adjust bundled payments to account for severity of illness
	Pay-for-Performance (MACRA, Commercial Contracts)	HCCs risk adjust VBP performance metrics
	ACO Shared Savings (MSSP, ACOs)	HCCs risk adjust financial benchmarks and savings targets
	Medical Homes (CMS CPC+, PCMH)	RAF for a physician's panel determines care management fees.

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CMS-HCC Risk Adjustment

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The Old Payment Equation

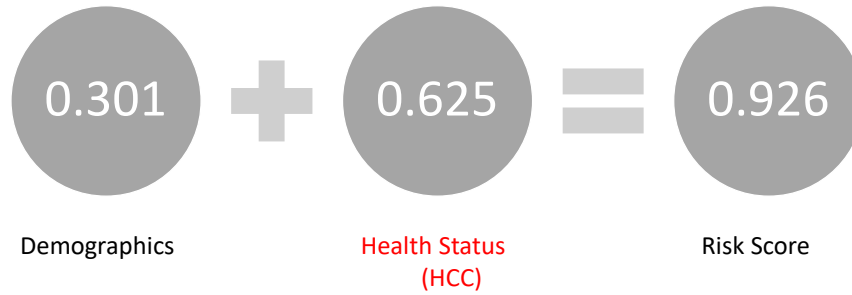
Fee Schedule

CPT	2020
99202	\$78.35
99203	\$121.32
99204	\$159.24
99205	\$197.45
99212	\$41.83
99213	\$79.91
99214	\$102.78
99215	\$137.81

What is the reimbursement for a 99214?

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The New Payment Equation

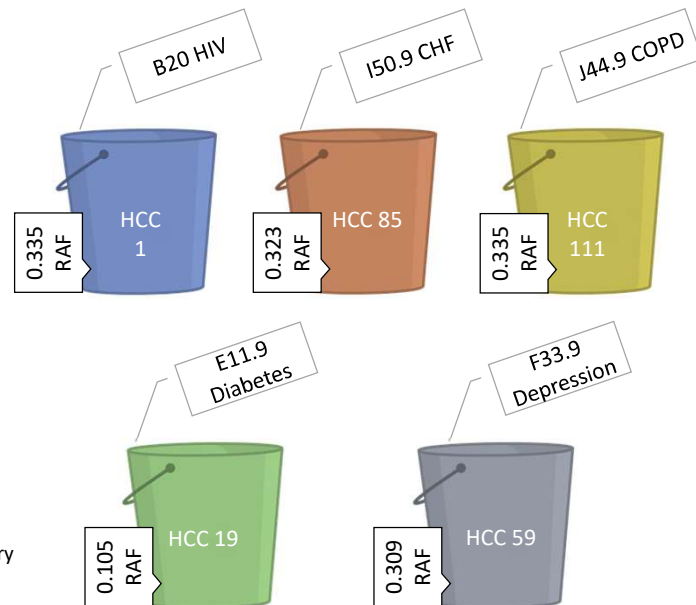


What is the reimbursement for a 0.926?

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Hierarchical Condition Category (CMS-HCC)

- ▶ For **2019**, there were approximately **10,828** ICD-10-CM diagnoses that map to **83** Hierarchical Condition Categories (HCCs)
- ▶ For **2020**, there are approximately **9,700** ICD-10-CM diagnoses that map to **86** Hierarchical Condition Categories (HCCs)
- ▶ For **2021**, there are **9,757** ICD-10-CM diagnoses that map to **86** HCCs
- ▶ A coefficient or “weight” is assigned to each category




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CMS-HCC Risk Adjustment Model

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CMS-HCC Risk Adjustment

Announcements and Documents

These documents comprise the Medicare Advantage (MA), and Medicare+Choice (M+C) advance notices of methodological changes, announcements issued with MA or M+C rates, and special reports.

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Rate Year	Document Title	Release Date
2021	2021 Announcement	2020-04-06
2021	2021 Advance Notices	2020-01-06
2021	2021 Early Preview	2019-12-03
2020	2020 Announcement	2019-04-01
2020	2020 Advance Notices	2018-12-20
2020	2020 Early Preview	2018-11-27
2019	2019 Announcement	2018-04-02
2019	2019 Advance Notices	2017-12-27
2019	2019 Early Preview	2017-11-27
2018	2018 Announcement	2017-04-03

Final Announcement is Published First Monday in April

Risk Adjustment

Medicare risk adjustment information, including:

- Evaluation of the CMS-HCC Risk Adjustment Model
- Model diagnosis codes
- Risk Adjustment model software (HCC, RxHCC, ESRD)
- Information on customer support for risk adjustment

[Report to Congress](#)

[Other Model-Related Documents](#)

[Medicare Risk Adjustment Eligible CPT/HCPCS Codes](#)

[Diagnoses from Telehealth Services for Risk Adjustment](#)

[2021 Model Software/ICD-10 Mappings](#)

[2020 Model Software/ICD-10 Mappings](#)

[2019 Model Software/ICD-10 Mappings](#)

Encounter Data Filtering Logic

ICD-10 Mappings

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

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CMS-HCC Model for PY2020

On **April 1, 2019**, CMS published the 2020 Announcement, which finalized the use of the following risk adjustment models for PY2020:

CMS-HCC (Part C) Risk Adjustment Models:

- The updated CMS-HCC alternative payment condition count model (i.e., 2020 CMS-HCC model) will be used to calculate the encounter data-based portion of the risk score.
- The 2017 CMS-HCC model will be used to calculate the RAPS-based portion of the risk score.

CMS-HCC ESRD Risk Adjustment Models:

- The updated ESRD dialysis and functioning graft models (i.e., 2020 ESRD models) will be used to calculate the encounter data-based portion of the risk score.
- The 2019 ESRD dialysis and functioning graft models will be used to calculate the RAPS-based portion of the risk score.

RxHCC (Part D) Model:

- The recalibrated 2020 RxHCC model using 2014/2015 data will be used to calculate the encounter data-based and RAPS-based risk scores.

PACE:

- The 2017 CMS-HCC model will be used to calculate Part C risk scores for PACE organizations.

Blended Risk Scores

- 50% of the risk score calculated with the PY2020 CMS-HCC model, using diagnoses from encounter data, RAPS inpatient records, and FFS;
- Summed with 50% of the risk score calculated with the 2017 CMS-HCC model, using diagnoses from RAPS and FFS.

For PACE organizations, Part C risk scores will be calculated using the 2017 CMS-HCC model with diagnoses from encounter data, RAPS and FFS.

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CMS-HCC Model for PY2021

On **April 6, 2020**, CMS published the 2021 Announcement, which finalized the use of the following risk adjustment models for PY2021:

CMS-HCC (Part C) Risk Adjustment Models:

- The 2020 CMS-HCC model will be used to calculate the encounter data-based portion of the risk score.
- The 2017 CMS-HCC model will be used to calculate the RAPS-based portion of the risk score.

CMS-HCC ESRD Risk Adjustment Models:

- The 2020 ESRD dialysis and functioning graft models will be used to calculate the encounter databased portion of the risk score.
- The 2019 ESRD dialysis and functioning graft models will be used to calculate the RAPS-based portion of the risk score.

RxHCC (Part D) Model:

- The 2020 RxHCC model will be used to calculate the encounter data-based and RAPS-based risk scores.

PACE:

- The 2017 CMS-HCC model will be used to calculate Part C risk scores for PACE organizations.
- The 2019 ESRD model will be used to calculate ESRD risk scores for PACE organizations.
- The 2020 RxHCC model will be used to calculate Part D risk scores for PACE organizations.

Blended Risk Scores

- 75% of the risk score calculated with the PY2020 CMS-HCC model, using diagnoses from encounter data, RAPS inpatient records, and FFS;
- Summed with 25% of the risk score calculated with the 2017 CMS-HCC model, using diagnoses from RAPS and FFS.

For PACE organizations, Part C risk scores will be calculated using the 2017 CMS-HCC model with diagnoses from encounter data, RAPS and FFS.

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CMS-HCC Model for PY2022

Advance Notice - Part One

- On September 14, 2020 CMS released Part I of the Contract Year (CY) 2022 Advance Notice of Methodological Changes for Medicare Advantage Capitation Rates and Part C and Part D Payment Policies (the Advance Notice), which contains key information about the Part C CMS-Hierarchical Condition Categories (HCC) risk adjustment model and the use of encounter data for CY 2022.

2022 Part C Risk Adjustment Model

100%

For CY 2022, CMS is proposing to **fully phase in** the CMS-HCC model first implemented for CY 2020 (i.e., the 2020 CMS-HCC model), as required by the 21st Century Cures Act. Specifically, per the 21st Century Cures Act, the 2020 model adds variables that count conditions in the risk adjustment model (“payment conditions”) and includes for payment additional conditions for mental health, substance use disorder, and chronic kidney disease. This represents a change from the blend for 2021 of 75% of the risk score calculated using the 2020 CMS-HCC model and 25% of the risk score calculated using the older 2017 CMS-HCC model.

Also, for CY 2022, CMS is proposing to discontinue the policy (used for CY 2019, CY 2020, and CY 2021) of **supplementing diagnoses from encounter data with diagnoses from inpatient records submitted to RAPS** for calculating beneficiary risk scores.

FYI: The CY 2022 Advance Notice is being published in two parts due to requirements in the 21st Century Cures Act that mandate certain changes to Part C risk adjustment and a 60-day comment period for these changes. Other changes to payment methodologies for 2022 that are typically contained in the Advance Notice only require a 30-day comment period and will be released at a later time in accordance with that requirement. **The payment policies for 2022, discussed in both Part I and Part II of the Advance Notice, will be finalized in the CY 2022 Rate Announcement, which the statute requires be published no later than April 5, 2021.**

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New Enrollees

4 Factors – Based on Medicaid and OREC

2020 Alternative Payment Condition Count Model

- Relative Factors for Aged and Disabled New Enrollees (**Female**)
- For payment purposes, a new enrollee is a beneficiary who did not have 12 months of Part B eligibility in the data collection year.
- CMS New Enrollee Models are not based on diagnoses, but include factors for different age and sex combinations by Medicaid and OREC.

The denominator is \$9,365.50



Variable	Non-Medicaid & Non-Originally Disabled	Medicaid & Non-Originally Disabled	Non-Medicaid & Originally Disabled	Medicaid & Originally Disabled
Female				
0 – 34 Years	0.804	0.969	-	-
35 – 44 Years	0.947	1.202	-	-
45 – 54 Years	1.016	1.306	-	-
55 – 59 Years	1.017	1.307	-	-
60 – 64 Years	1.122	1.408	-	-
65 Years	0.520	0.993	1.122	1.462
66 Years	0.515	0.897	1.174	1.887
67 Years	0.544	0.920	1.174	1.887
68 Years	0.598	0.951	1.174	1.887
69 Years	0.600	0.951	1.174	1.887
70 – 74 Years	0.690	0.985	1.174	1.887
75 – 79 Years	0.860	1.134	1.174	1.887
80 – 84 Years	1.014	1.353	1.174	1.887
85 – 89 Years	1.293	1.536	1.293	1.887
90 – 94 Years	1.293	1.701	1.293	1.887
95 Years +	1.293	1.701	1.293	1.887

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New Enrollees

4 Factors – Based on Medicaid and OREC

2020 Alternative Payment Condition Count Model

- Relative Factors for Aged and Disabled New Enrollees (Male)
- For payment purposes, a new enrollee is a beneficiary who did not have 12 months of Part B eligibility in the data collection year.
- CMS New Enrollee Models are not based on diagnoses, but include factors for different age and sex combinations by Medicaid and OREC.

The denominator is \$9,365.50



Variable	Non-Medicaid & Non-Originally Disabled	Medicaid & Non-Originally Disabled	Non-Medicaid & Originally Disabled	Medicaid & Originally Disabled
Male				
0 – 34 Years	0.422	0.734	-	-
35 – 44 Years	0.657	1.059	-	-
45 – 54 Years	0.864	1.353	-	-
55 – 59 Years	0.904	1.418	-	-
60 – 64 Years	0.921	1.551	-	-
65 Years	0.518	1.144	0.921	1.811
66 Years	0.533	1.094	1.071	2.199
67 Years	0.582	1.151	1.123	2.199
68 Years	0.626	1.202	1.123	2.199
69 Years	0.690	1.202	1.320	2.199
70 – 74 Years	0.786	1.298	1.408	2.199
75 – 79 Years	1.060	1.407	1.408	2.199
80 – 84 Years	1.247	1.555	1.408	2.199
85 – 89 Years	1.498	1.777	1.498	2.199
90 – 94 Years	1.498	1.777	1.498	2.199
95 Years +	1.498	1.777	1.498	2.199

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CMS Demographic Factors

2020 Alternative Payment Condition Count Model Relative Factors for Continuing Enrollees

7 Demographic Factors – Based on Enrollment in Medicare

Sex



Variable	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
Female							
0 – 34 Years	-	0.241	-	0.349	-	0.383	0.902
35 – 44 Years	-	0.315	-	0.349	-	0.414	1.105
45 – 54 Years	-	0.348	-	0.347	-	0.418	1.043
55 – 59 Years	-	0.379	-	0.434	-	0.414	1.065
60 – 64 Years	-	0.428	-	0.490	-	0.412	1.067
65 – 69 Years	0.323	-	0.441	-	0.359	-	1.245
70 – 74 Years	0.386	-	0.519	-	0.406	-	1.150
75 – 79 Years	0.451	-	0.593	-	0.476	-	1.014
80 – 84 Years	0.528	-	0.716	-	0.550	-	0.882
85 – 89 Years	0.641	-	0.865	-	0.653	-	0.798
90 – 94 Years	0.783	-	0.987	-	0.783	-	0.668
95 Years +	0.787	-	1.041	-	0.873	-	0.501

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CMS Demographic Factors

2020 Alternative Payment Condition Count Model Relative Factors for Continuing Enrollees

← 7 Demographic Factors – Based on Enrollment in Medicare →

Sex

↑ Age Groups ↓

Variable	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
Male							
0 – 34 Years	-	0.156	-	0.240	-	0.389	1.101
35 – 44 Years	-	0.199	-	0.235	-	0.282	1.002
45 – 54 Years	-	0.241	-	0.307	-	0.313	0.965
55 – 59 Years	-	0.287	-	0.402	-	0.340	1.017
60 – 64 Years	-	0.330	-	0.526	-	0.373	1.061
65 – 69 Years	0.308	-	0.494	-	0.370	-	1.288
70 – 74 Years	0.394	-	0.600	-	0.427	-	1.329
75 – 79 Years	0.473	-	0.710	-	0.500	-	1.317
80 – 84 Years	0.556	-	0.803	-	0.544	-	1.207
85 – 89 Years	0.686	-	1.000	-	0.659	-	1.122
90 – 94 Years	0.841	-	1.142	-	0.834	-	0.989
95 Years +	0.986	-	1.267	-	1.047	-	0.821

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2020 CMS Disease Coefficients

← 7 Factors – Based on Enrollment in Medicare →

Disease Coefficients	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
HCC 1	HIV / AIDS	0.335	0.287	0.595	0.396	0.482	0.200	1.722
HCC 2	Septicemia, Sepsis, SIRS	0.352	0.414	0.453	0.530	0.316	0.297	0.324
HCC 6	Opportunistic Infections	0.424	0.740	0.572	0.803	0.318	0.658	0.534
HCC 8	Metastatic Cancer and Acute Leukemia	2.659	2.714	2.566	2.801	2.455	2.659	1.303
HCC 9	Lung and Other Severe Cancers	1.024	0.910	1.010	1.001	1.001	0.880	0.623
HCC 10	Lymphoma and Other Cancers	0.675	0.663	0.717	0.756	0.648	0.667	0.461
HCC 11	Colorectal, Bladder, and Other Cancers	0.307	0.345	0.317	0.355	0.330	0.351	0.294
HCC 12	Breast, Prostate, and Other Cancers and Tumors	0.150	0.212	0.158	0.212	0.154	0.181	0.210
HCC 17	Diabetes with Acute Complications	0.302	0.351	0.340	0.423	0.326	0.373	0.440
HCC 18	Diabetes with Chronic Complications	0.302	0.351	0.340	0.423	0.087	0.373	0.440
HCC 19	Diabetes without Complications	0.105	0.124	0.107	0.145	0.457	0.122	0.178
HCC 21	Protein-Calorie Malnutrition	0.455	0.674	0.693	0.723	0.233	0.679	0.267
HCC 22	Morbid Obesity	0.250	0.183	0.383	0.297	0.174	0.204	0.455
HCC 23	Other Significant Endocrine and Metabolic Dis	0.194	0.378	0.211	0.299	0.729	0.319	0.379

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2020 CMS Disease Coefficients

7 Factors – Based on Enrollment in Medicare

Disease Coefficients	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
HCC 27	End Stage Liver Disease	0.882	1.065	1.111	1.101	0.729	0.887	0.874
HCC 28	Cirrhosis of Liver	0.363	0.334	0.411	0.365	0.403	0.341	0.485
HCC 29	Chronic Hepatitis	0.147	0.314	0.042	0.292	0.181	0.238	0.485
HCC 33	Intestinal Obstruction / Perforation	0.219	0.503	0.258	0.538	0.232	0.552	0.352
HCC 34	Chronic Pancreatitis	0.287	0.580	0.349	0.762	0.371	0.597	0.422
HCC 35	Inflammatory Bowel Disease	0.308	0.523	0.275	0.551	0.275	0.543	0.355
HCC 39	Bone / Joint / Muscle Infections / Necrosis	0.401	0.378	0.558	0.682	0.443	0.435	0.401
HCC 40	RA and Inflammatory Connective Tissue Disease	0.421	0.367	0.371	0.328	0.347	0.264	0.292
HCC 46	Severe Hematological Disorders	1.372	3.566	1.214	4.309	1.234	4.138	0.799
HCC 47	Disorders of Immunity	0.665	0.860	0.452	0.691	0.674	0.594	0.576
HCC 48	Coagulation Defects / Hematological Disorders	0.192	0.312	0.221	0.298	0.186	0.330	0.190
HCC 51	Dementia with Complications	0.346	0.224	0.453	0.256	0.420	0.257	---
HCC 52	Dementia without Complications	0.346	0.224	0.453	0.256	0.420	0.257	---
HCC 54	Substance Use with Psychotic Complications	0.329	0.543	0.538	0.896	0.372	0.679	0.178

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2020 CMS Disease Coefficients

7 Factors – Based on Enrollment in Medicare

Disease Coefficients	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
HCC 55	Substance Use Disorder, Moderate / Severe	0.329	0.279	0.538	0.356	0.372	0.275	0.178
HCC 56	Substance Use Disorder, Mild (Except Alcohol and Cannabis)	0.329	0.247	0.538	0.348	0.372	0.275	0.178
HCC 57	Schizophrenia	0.524	0.352	0.570	0.381	0.495	0.309	0.187
HCC 58	Reactive and Unspecified Psychosis	0.393	0.352	0.570	0.231	0.449	0.239	0.187
HCC 59	Major Depression, Bipolar & Paranoid Disorders	0.309	0.164	0.299	0.127	0.306	0.109	0.187
HCC 60	Personality Disorders	0.309	0.108	0.299	0.100	0.255	0.065	---
HCC 70	Quadriplegia	1.242	1.001	1.038	1.000	1.000	1.134	0.549
HCC 71	Paraplegia	1.068	0.739	0.921	0.957	1.000	0.933	0.492
HCC 72	Spinal Cord Disorders / Injuries	0.481	0.369	0.532	0.377	0.512	0.336	0.289
HCC 73	Amyotrophic Lateral Sclerosis and Other Dis.	0.999	1.132	1.101	1.245	0.687	0.933	0.476
HCC 74	Cerebral Palsy	0.339	0.098	---	---	0.114	---	---
HCC 75	Myasthenia Gravis / Myoneural Disorders	0.472	0.481	0.407	0.404	0.287	0.314	0.332
HCC 76	Muscular Dystrophy	0.518	0.621	0.413	0.597	---	0.286	0.356
HCC 77	Multiple Sclerosis	0.423	0.566	0.742	0.789	0.276	0.460	---

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2020 CMS Disease Coefficients

7 Factors – Based on Enrollment in Medicare

Disease Coefficients	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
HCC 78	Parkinson's and Huntington's Disease	0.606	0.501	0.601	0.443	0.536	0.430	0.159
HCC 79	Seizure Disorders and Convulsions	0.220	0.196	0.237	0.139	0.257	0.169	0.065
HCC 80	Coma, Brain Compression Anoxic Damage	0.486	0.274	0.511	0.105	0.729	0.134	---
HCC 82	Respirator Dependence / Tracheostomy Status	1.000	0.781	2.183	1.465	0.836	0.769	1.622
HCC 83	Respiratory Arrest	0.354	0.400	0.902	0.531	0.361	0.769	0.511
HCC 84	Cardio-Respiratory Failure and Shock	0.282	0.385	0.492	0.531	0.361	0.343	0.313
HCC 85	Congestive Heart Failure	0.331	0.447	0.371	0.486	0.336	0.422	0.203
HCC 86	Acute Myocardial Infarction	0.195	0.264	0.377	0.425	0.293	0.379	0.366
HCC 87	Unstable Angina and Other Ischemic Heart Dis.	0.195	0.264	0.302	0.425	0.276	0.379	0.366
HCC 88	Angina Pectoris	0.135	0.111	0.034	0.152	0.149	0.149	0.366
HCC 96	Specified Heart Arrhythmias	0.268	0.262	0.384	0.308	0.264	0.281	0.252
HCC 99	Intracranial Hemorrhage	0.230	0.170	0.380	0.486	0.230	0.163	0.111
HCC 100	Ischemic or Unspecified Stroke	0.230	0.146	0.380	0.324	0.230	0.163	0.111
HCC 103	Hemiplegia / Hemiparesis	0.437	0.281	0.487	0.296	0.438	0.310	---

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2020 CMS Disease Coefficients

7 Factors – Based on Enrollment in Medicare

Disease Coefficients	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
HCC 104	Monoplegia, Other Paralytic Syndromes	0.331	0.270	0.345	0.258	0.300	0.164	---
HCC 106	Atherosclerosis of the Ext. w/ Ulcer & Gangrene	1.488	1.521	1.724	1.748	1.504	1.525	0.867
HCC 107	Vascular Disease with Complications	0.383	0.464	0.565	0.653	0.463	0.450	0.299
HCC 108	Vascular Disease	0.288	0.301	0.294	0.267	0.297	0.314	0.093
HCC 110	Cystic Fibrosis	0.510	2.676	0.509	3.516	0.392	3.051	0.593
HCC 111	Chronic Obstructive Pulmonary Disease	0.335	0.246	0.430	0.331	0.358	0.267	0.311
HCC 112	Fibrosis and Other Chronic Lung Diseases	0.219	0.237	0.161	0.275	0.200	0.229	0.110
HCC 114	Aspiration and Other Bacterial Pneumonias	0.517	0.236	0.641	0.375	0.514	0.198	0.156
HCC 115	Pneumococcal Pneumonia, Empyema, Abscess	0.130	---	0.258	---	0.093	0.082	0.156
HCC 122	Proliferative Diabetic Retinopathy	0.222	0.231	0.271	0.269	0.182	0.201	0.394
HCC 124	Exudative Macular Degeneration	0.521	0.314	0.298	0.145	0.393	0.158	0.217
HCC 134	Dialysis Status	0.435	0.406	0.683	0.594	0.446	0.480	0.468
HCC 135	Acute Renal Failure	0.435	0.406	0.683	0.594	0.446	0.480	0.468
HCC 136	Chronic Kidney Disease, Stage 5	0.289	0.231	0.260	0.323	0.280	0.261	0.245

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2020 CMS Disease Coefficients

7 Factors – Based on Enrollment in Medicare

Disease Coefficients	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
HCC 137	Chronic Kidney Disease, Stage 4	0.289	0.105	0.260	0.138	0.280	0.039	0.201
HCC 138	Chronic Kidney Disease, Stage 3	0.069	0.021	0.017	---	0.043	---	0.092
HCC 157	Pressure Ulcer w/ Necrosis to Muscle / Tendon	2.028	2.097	2.463	2.582	2.028	2.512	0.854
HCC 158	Pressure Ulcer w/ Full Thickness Skin Loss	1.069	1.212	1.471	1.380	1.162	0.925	0.322
HCC 159	Pressure Ulcer w/ Partial Thickness Skin Loss	0.656	0.628	0.863	0.467	0.649	0.824	0.322
HCC 161	Chronic Ulcer of Skin, Except Pressure	0.515	0.592	0.727	0.583	0.541	0.542	0.294
HCC 162	Severe Skin Burn or Condition	0.224	0.506	0.162	0.308	---	0.324	---
HCC 166	Severe Head Injury	0.486	0.274	0.511	0.105	0.729	0.134	---
HCC 167	Major Head Injury	0.077	---	0.144	0.025	0.034	0.019	---
HCC 169	Vertebral Fractures without Spinal Cord Injury	0.476	0.369	0.532	0.377	0.512	0.336	0.250
HCC 170	Hip Fracture / Dislocation	0.350	0.394	0.409	0.469	0.354	0.333	---
HCC 173	Traumatic Amputations and Complications	0.208	0.172	0.221	0.525	0.176	0.180	0.092
HCC 176	Complications of Specified Implanted Device	0.582	0.911	0.680	0.982	0.520	0.832	0.469
HCC 186	Major Organ Transplant	0.832	0.445	0.728	0.865	0.438	0.613	1.046

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2020 CMS Disease Coefficients

7 Factors – Based on Enrollment in Medicare

Disease Coefficients	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
HCC 188	Artificial Openings for Feeding or Elimination	0.534	0.755	0.724	0.770	0.520	0.732	0.514
HCC 189	Amputation Status, Lower Limb / Complications	0.519	0.437	0.795	0.934	0.697	0.626	0.357

New HCC's added for PY 2019

HCC	Description
HCC 54	Substance Use with Psychotic Complications
HCC 55	Substance Use Disorder Moderate or Severe
HCC 56	Substance Use Disorder, Mild, Except Alcohol and Cannabis
HCC 60	Personality Disorders
HCC 138	CKD Stage 3

New HCC's added for PY 2020

HCC	Description
HCC 51	Dementia with Complications
HCC 52	Dementia without Complications
HCC 159	Pressure Ulcer of Skin, with Partial Thickness Skin Loss

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2020 CMS-HCC Trump Chart

Hierarchical Condition Category (HCC)	If the Disease Group is Listed in this column... (HCC Label)	...Then drop the Disease Group(s) listed in this column
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
51	Dementia with Complications	52
54	Substance Use with Psychotic Complications	55, 56
55	Substance Use Disorder, Moderate / Severe, or Substance Use with Complications	56
57	Schizophrenia	58, 59, 60
58	Reactive and Unspecified Psychosis	59, 60
70	Quadriplegia	71, 72, 103, 104, 169
71	Paraplegia	72, 104, 169
72	Spinal Cord Disorders / Injuries	169
82	Respiratory Dependence / Tracheostomy Status	83, 84

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2020 CMS-HCC Trump Chart

Hierarchical Condition Category (HCC)	If the Disease Group is Listed in this column... (HCC Label)	...Then drop the Disease Group(s) listed in this column
83	Respiratory Arrest	84
86	Acute Myocardial Infarction	97, 88
87	Unstable Angina and Acute Ischemic Heart Disease	88
99	Intracranial Hemorrhage	100
103	Hemiplegia / Hemiparesis	104
106	Atherosclerosis of the Ext w/ Ulceration and 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, 138
135	Acute Renal Failure	136, 137, 138
136	Chronic Kidney Disease, Stage 5	137, 138
137	Chronic Kidney Disease, Stage 4	138
157	Pressure Ulcer of Skin w/ Necrosis to Muscle / Tendon / Bone	158, 159, 161
158	Pressure Ulcer of Skin w/ Full Thickness Skin Loss	159, 161
159	Pressure Ulcer of Skin w/ Partial Thickness Skin Loss	161
166	Severe Head Injury	80, 167

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2020 CMS Disease Groups

<p>■ 30 “Stand Alone” HCCs – Never trumped</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;">1. HCC 1</td><td style="width: 50%;">16. HCC 76</td></tr> <tr><td>2. HCC 2</td><td>17. HCC 77</td></tr> <tr><td>3. HCC 6</td><td>18. HCC 78</td></tr> <tr><td>4. HCC 21</td><td>19. HCC 79</td></tr> <tr><td>5. HCC 22</td><td>20. HCC 85</td></tr> <tr><td>6. HCC 23</td><td>21. HCC 96</td></tr> <tr><td>7. HCC 33</td><td>22. HCC 122</td></tr> <tr><td>8. HCC 34</td><td>23. HCC 124</td></tr> <tr><td>9. HCC 35</td><td>24. HCC 162</td></tr> <tr><td>10. HCC 39</td><td>25. HCC 170</td></tr> <tr><td>11. HCC 40</td><td>26. HCC 173</td></tr> <tr><td>12. HCC 47</td><td>27. HCC 176</td></tr> <tr><td>13. HCC 73</td><td>28. HCC 186</td></tr> <tr><td>14. HCC 74</td><td>29. HCC 188</td></tr> <tr><td>15. HCC 75</td><td>30. HCC 189</td></tr> </table>	1. HCC 1	16. HCC 76	2. HCC 2	17. HCC 77	3. HCC 6	18. HCC 78	4. HCC 21	19. HCC 79	5. HCC 22	20. HCC 85	6. HCC 23	21. HCC 96	7. HCC 33	22. HCC 122	8. HCC 34	23. HCC 124	9. HCC 35	24. HCC 162	10. HCC 39	25. HCC 170	11. HCC 40	26. HCC 173	12. HCC 47	27. HCC 176	13. HCC 73	28. HCC 186	14. HCC 74	29. HCC 188	15. HCC 75	30. HCC 189	<p>■ 19 “Base” HCCs – Bottom of the hierarchy</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;">1. HCC 12</td><td style="width: 50%;">11. HCC 100</td></tr> <tr><td>2. HCC 19</td><td>12. HCC 104</td></tr> <tr><td>3. HCC 29</td><td>13. HCC 108</td></tr> <tr><td>4. HCC 48</td><td>14. HCC 112</td></tr> <tr><td>5. HCC 52</td><td>15. HCC 115</td></tr> <tr><td>6. HCC 56</td><td>16. HCC 138</td></tr> <tr><td>7. HCC 60</td><td>17. HCC 161</td></tr> <tr><td>8. HCC 80</td><td>18. HCC 167</td></tr> <tr><td>9. HCC 84</td><td>19. HCC 169</td></tr> <tr><td>10. HCC 88</td><td></td></tr> </table>	1. HCC 12	11. HCC 100	2. HCC 19	12. HCC 104	3. HCC 29	13. HCC 108	4. HCC 48	14. HCC 112	5. HCC 52	15. HCC 115	6. HCC 56	16. HCC 138	7. HCC 60	17. HCC 161	8. HCC 80	18. HCC 167	9. HCC 84	19. HCC 169	10. HCC 88		<p>■ 37 “Trump” HCCs – Trumps at least one HCC</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;">1. HCC 8</td><td style="width: 50%;">20. HCC 83</td></tr> <tr><td>2. HCC 9</td><td>21. HCC 86</td></tr> <tr><td>3. HCC 10</td><td>22. HCC 87</td></tr> <tr><td>4. HCC 11</td><td>23. HCC 99</td></tr> <tr><td>5. HCC 17</td><td>24. HCC 103</td></tr> <tr><td>6. HCC 18</td><td>25. HCC 106</td></tr> <tr><td>7. HCC 27</td><td>26. HCC 107</td></tr> <tr><td>8. HCC 28</td><td>27. HCC 110</td></tr> <tr><td>9. HCC 46</td><td>28. HCC 111</td></tr> <tr><td>10. HCC 51</td><td>29. HCC 114</td></tr> <tr><td>11. HCC 54</td><td>30. HCC 134</td></tr> <tr><td>12. HCC 55</td><td>31. HCC 135</td></tr> <tr><td>13. HCC 57</td><td>32. HCC 136</td></tr> <tr><td>14. HCC 58</td><td>33. HCC 137</td></tr> <tr><td>15. HCC 59</td><td>34. HCC 157</td></tr> <tr><td>16. HCC 70</td><td>35. HCC 158</td></tr> <tr><td>17. HCC 71</td><td>36. HCC 159</td></tr> <tr><td>18. HCC 72</td><td>37. HCC 166</td></tr> <tr><td>19. HCC 82</td><td></td></tr> </table>	1. HCC 8	20. HCC 83	2. HCC 9	21. HCC 86	3. HCC 10	22. HCC 87	4. HCC 11	23. HCC 99	5. HCC 17	24. HCC 103	6. HCC 18	25. HCC 106	7. HCC 27	26. HCC 107	8. HCC 28	27. HCC 110	9. HCC 46	28. HCC 111	10. HCC 51	29. HCC 114	11. HCC 54	30. HCC 134	12. HCC 55	31. HCC 135	13. HCC 57	32. HCC 136	14. HCC 58	33. HCC 137	15. HCC 59	34. HCC 157	16. HCC 70	35. HCC 158	17. HCC 71	36. HCC 159	18. HCC 72	37. HCC 166	19. HCC 82	
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CMS Disease Interactions

2020 CMS-HCC Disease Interactions

Disease interactions **provide additional coefficients** or “weight” to help with offsetting the additional cost burden of caring for these **members with multiple chronic conditions**.

► CMS applies these coefficients annually, based on diagnosis data captured within the collection year.




Interaction	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 (HCC 47) and Cancer	0.838	0.460	0.853	0.679	0.656	0.601	-
CHF and Diabetes	0.121	0.024	0.192	0.043	0.113	---	0.169
CHF and COPD	0.155	0.121	0.230	0.154	0.158	0.141	0.191
CHF and Renal	0.156	0.411	0.187	0.461	0.186	0.382	---
COPD and CRF	0.363	0.379	0.528	0.455	0.392	0.479	0.414
HCC 85 and HCC 96	0.085	0.282	0.138	0.361	0.101	0.303	---
Substance Use Disorder and Psychiatric	---	0.138	---	0.191	---	0.201	---

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Payment HCC Counts for PY 2020

Counts conditions included in the model for payment after the application of hierarchies.

Description	Non-Dual Aged	Non-Dual Disabled	FB Dual Aged	FB Dual Disabled	PB Dual Aged	PB Dual Disabled
4 Payment HCCs	0.006	----	----	----	----	----
5 Payment HCCs	0.042	0.043	----	0.055	0.037	0.083
6 Payment HCCs	0.077	0.131	0.040	0.167	0.071	0.117
7 Payment HCCs	0.126	0.201	0.057	0.269	0.080	0.291
8 Payment HCCs	0.214	0.441	0.095	0.424	0.125	0.452
9 Payment HCCs	0.258	0.441	0.156	0.549	0.402	0.499
10 Payment HCCs	0.505	0.897	0.373	1.056	0.548	0.893

Disabled  Disabled  Disabled 

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Advanced Risk Management and HCC Coding for Value-Based Payments

Risk Adjustment Process

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Risk Adjustment Data

CMS requires that MA organizations collect and submit RA data from:

- Hospital inpatient facilities
- Hospital outpatient facilities
- Physicians

Unacceptable Services

- Laboratory Services
- Ambulance
- Durable Medical Equipment
- Prosthetics
- Orthotics
- Supplies
- Radiology Services

Hospital Inpatient

- A hospital inpatient service is one provided by a hospital during which a patient is admitted to the facility for at least one overnight stay.

Hospital Outpatient

- Hospital outpatient services are therapeutic and rehabilitative services provided for sick or injured persons who do not require inpatient hospitalization or institutionalization.

Acceptable Facilities

- Short-term (general and specialty)
- Hospitals
- Religious Health Care Institutions
- Long-term Hospitals
- Rehabilitation Hospitals
- Children's Hospitals
- Psychiatric Hospitals
- Medical Assistance Facilities/
- Critical Access Hospitals

Unacceptable Facilities

- Skilled Nursing Facilities (SNFs)
- Hospital Inpatient Swing Bed
- Components
- Intermediate Care Facilities
- Respite Care
- Hospice

* These are examples and not a comprehensive list.

Acceptable Facilities

- Short-term (general and specialty)
- Hospitals
- Critical Access Hospitals
- Community Mental Health Centers
- Federally Qualified Health Centers
- Religious Health Care Institutions
- Long-term Hospitals
- Rehabilitation Hospitals
- Children's Hospitals
- Psychiatric Hospitals
- Rural Health Clinic

Unacceptable Facilities

- Free-standing Ambulatory Surgical
- Centers (ASCs)
- Home Health Care
- Free-standing Renal Dialysis
- Facilities

* These are examples and not a comprehensive list.

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Acceptable Physician Specialty Types

For 2020 Payment Year
(2019 Dates of Service)

CODE	SPECIALTY	CODE	SPECIALTY	CODE	SPECIALTY
1	General Practice	28	Colorectal Surgery (formerly Proctology)	79	Addiction Medicine
2	General Surgery	29	Pulmonary Disease	80	Licensed Clinical Social Worker
3	Allergy/Immunology	33*	Thoracic Surgery	81	Critical care (intensivists)
4	Otolaryngology	34	Urology	82	Hematology
5	Anesthesiology	35	Chiropractic	83	Hematology/Oncology
6	Cardiology	36	Nuclear Medicine	84	Preventive Medicine
7	Dermatology	37	Pediatric Medicine	85	Maxillofacial Surgery
8	Family Practice	38	Geriatric Medicine	86	Neuropsychiatry
9	Interventional Pain Management (IPM)	39	Nephrology	89*	Certified Clinical Nurse Specialist
10	Gastroenterology	40	Hand Surgery	90	Medical Oncology
11	Internal Medicine	41	Optometry	91	Surgical Oncology
12	Osteopathic Manipulative Medicine	42	Certified Nurse Midwife	92	Radiation Oncology
13	Neurology	43	Certified Registered Nurse Anesthetist	93	Emergency Medicine
14	Neurosurgery	44	Infectious Disease	94	Interventional Radiology
15	Speech Language Pathologist	46*	Endocrinology	97*	Physician Assistant
16	Obstetrics/Gynecology	48*	Podiatry	98	Gynecologist/Oncologist
17	Hospice And Palliative Care	50*	Nurse Practitioner	99	Unknown Physician Specialty
18	Ophthalmology	62*	Psychologist	C0	Sleep Medicine
19	Oral Surgery (dentists only)	64*	Audiologist	C3	Interventional Cardiology
20	Orthopedic Surgery	65	Physical Therapist	C5	Dentist
21	Cardiac Electrophysiology	66	Rheumatology	C6	Hospitalist
22	Pathology	67	Occupational Therapist	C7	Advanced Heart Failure And Transplant Cardiology
23	Sports Medicine	68	Clinical Psychologist	C8	Medical Toxicology
24	Plastic And Reconstructive Surgery	72*	Pain Management	C9	Hematopoietic Cell Transplantation And
25	Physical Medicine And Rehabilitation	76*	Peripheral Vascular Disease	D3*	Medical Genetics and Genomics
26	Psychiatry	77	Vascular Surgery	D4	Undersea and Hyperbaric Medicine
27	Geriatric Psychiatry	78	Cardiac Surgery		

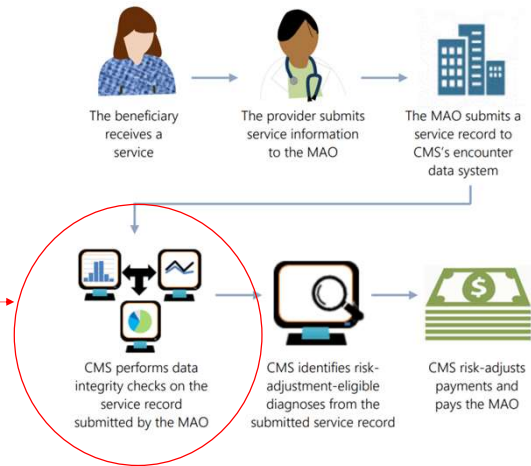
* Indicates that a number has been skipped.

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Risk Adjustment Process

1. **MA Risk-Adjusted Payments**
For each beneficiary enrolled, MAOs receive a monthly capitated payment that reflects CMS’s predicted cost of providing care to an MA beneficiary. CMS risk-adjusts payments to pay MAOs more for beneficiaries with higher expected healthcare costs. CMS bases risk adjustments on MA beneficiaries’ demographic information and diagnoses from the prior year. As outlined in Exhibit 1, CMS’s risk-adjustment process relies on diagnoses reported by MAOs.
2. **MAOs Report Diagnoses to CMS.** The risk-adjustment process begins when the beneficiary receives a service or medical item from a provider. The provider submits claims information, including diagnoses, to the MAO based on the service or medical item provided. The MAO submits a record of the service (hereafter service record) to CMS’s MA encounter data system that contains this claims information, including the diagnoses. **CMS began collecting encounter data from MAOs in 2012 as part of an effort to improve MA payment accuracy and better perform MA quality reviews.**
3. **CMS Performs Activities To Safeguard the Integrity of Reported Diagnoses.** CMS requires MAOs to certify the accuracy, completeness, and truthfulness of their encounter data submissions. In addition, CMS performs activities to safeguard the integrity of the encounter data. **During the data submission process, CMS performs automated checks, or edits, that reject service records containing incorrect information (e.g., service records with improperly formatted data or missing fields) that CMS deems key to MA program payment and data integrity. After records pass these edits, CMS conducts analyses to review the stored data.** If these analyses identify data errors, CMS may perform outreach to MAOs or introduce new edits to prevent incorrect data from being included in the encounter data.

Exhibit 1: MA risk-adjustment process



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Data Submission and Payment Deadlines

The Centers for Medicare and Medicaid Services (CMS) observes the following **three** deadlines each calendar year when calculating and delivering funding payments to MAOs:

- All risk adjustment data (Risk Adjustment Processing System Data and Encounter Data System Data) that will be included in the listed risk score runs need to be submitted by 8pm ET by the date in the table below.



Risk Score Run	Dates of Service	Deadline for Submission to CMS	Average IPA / MSO Deadline
PY 2020 Mid-Year	1/1/2019 – 12/31/2019	Friday – March 6 th 2020	Thursday, February 6 th 2020
PY 2021 Initial	7/1/2019 – 6/30/2020	Friday – September 4 th 2020	Tuesday, August 4 th 2020
PY2020 Interim Final	1/1/2019 – 12/31/2019	Monday – February 1 st 2021	Thursday, December 31 st 2020
PY 2021 Mid-Year	01/01/2020-12/31/2020	Friday – March 5 th 2021	Friday, February 5 th 2021
PY 2020 Final	1/1/2019 – 12/31/2019	Monday – August 2 nd 2021	Friday, July 2 nd 2021
PY2022 Initial	07/01/2020 – 06/30/2021	Friday, September 3, 2021	Friday, August 6 th 2021

- Data received by CMS by **January 31st** is considered a **final reconciliation** and the **payment is received by the plan in June. (final year run)**
- Data received by CMS by the first **Friday in March** affects the **July funding payment; (mid-year run)**
- Data received by CMS by the first **Friday in September** affects the **January funding payment; (initial run)**

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Calculating Risk Scores and Payments

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Meet Mildred...

78 year-old woman who divorced 25 years ago.

She splits her time between Jacksonville and New York.

She is non-compliant with diet and medications.

She was a heavy drinker and smoker in her younger days.

Has a history of depression, stable on Zoloft for 9 years.

She is unable to exercise due to limited mobility

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Calculating Mildred's Risk Score



Active Problems

- Dermatitis
- Major Depression
- Low back pain
- GERD
- Hypertension
- Heart Attack (2014)
- Hyperlipidemia
- Anxiety with Depression
- Diabetes
- Vitamin D deficiency
- Peripheral Vascular Disease
- Headache
- Renal Insufficiency
- Cirrhosis of the Liver
- Cough
- Knee pain
- History of Alcoholism
- Cardiomyopathy
- Diabetic Retinopathy
- Diabetic Neuropathy
- Morbid Obesity
- Heart Failure
- Atherosclerosis of the aorta
- Chronic Bronchitis

Assessment or Claim is limited to 8 Diagnoses...	
#1	
#2	
#3	
#4	
#5	
#6	
#7	
#8	

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Calculating Mildred's Risk Score

- Dermatitis
- Major Depression
- Low back pain
- GERD
- Hypertension
- Heart Attack (2014)
- Hyperlipidemia
- Anxiety with Depression
- Diabetes
- Vitamin D deficiency
- Peripheral Vascular Disease
- Headache
- Renal Insufficiency
- Cirrhosis of the Liver
- Cough
- Knee pain
- History of Alcoholism
- Cardiomyopathy
- Diabetic Retinopathy
- Diabetic Neuropathy
- Morbid Obesity
- Heart Failure
- Atherosclerosis of the aorta
- Chronic Bronchitis

Assessment or Claim is limited to 8 Diagnoses...		HCC Version 24
#1 Major depression	→	59 - Major Depression
#2 Peripheral vascular disease	→	108 - Vascular Disease
#3 Cirrhosis of the liver	→	28 - Cirrhosis of the Liver
#4 Alcoholism in remission	→	55 - SUD Moderate or Severe
#5 Diabetic neuropathy	→	18 - Diabetes With Complications
#6 BMI 42	→	22 - Morbid Obesity
#7 Hypertensive heart disease w/ heart failure	→	85 - Congestive Heart Failure
#8 Chronic bronchitis	→	111 - COPD

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Calculating Mildred's Risk Score...



2020 CMS HCC V24

FACTOR	DESCRIPTION	RISK SCORE
Female 75 -79	Demographic	0.451
HCC 111	COPD	0.335
HCC 55	Drug / Alcohol Dependence	0.329
HCC 108	Vascular Disease	0.288
HCC 85	Heart Failure	0.331
HCC 22	Morbid Obesity	0.250
HCC 28	Cirrhosis of the Liver	0.363
HCC 59	Major Depressive / Bipolar	0.309
HCC 18	Diabetes w/ Chronic Complications	0.302
Interaction	CHF – Diabetes	0.121
Interaction	CHF – COPD	0.155
Payment Count	8 payment HCCs	0.241
Raw Risk Score		3.475

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Calculating Mildred's Payment

Mildred is living in Hillsborough County and enrolled in a Medicare Advantage Plan

- **Raw Risk Score** 3.475
- Normalization Factor 3.475 / 1.069 = 3.251
- Coding Adjustment 3.251 (1 – 0.059) = 3.059
 - **Payment Risk Score:** 3.059
 - Hillsborough County Rate \$977.85

PAYMENT/MO: (\$977.85 x 3.059) = **\$2,991.24**

OR

\$34,894.88 – allocated for annual cost of care

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CMS-HCC Risk Score Calculation PY2020

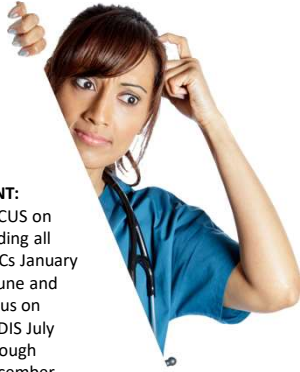
Demographics / Disease Factors / Payment Count	2017 CMS-HCC model (RAPS & FFS)	2020 CMS-HCC model (ED, RAPS inpatient & FFS)
Male, Age 82 (aged), FB-Dual, Community	0.816	0.803
Diabetes w/o complications (HCC19)	0.097	0.107
COPD (HCC111)	0.422	0.430
2 Payment HCCs (for the 2020 CMS-HCC model)	n/a	0.00
Total Raw Risk Score	1.335	1.340

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Normalization and Coding Intensity Adjustments	2017 CMS-HCC model (RAPS & FFS)	2020 CMS-HCC model (ED, RAPS inpatient & FFS)
Total Raw Risk Score	1.335	1.340
Normalization factor	$1.335 / 1.075 = 1.24186$	$1.340 / 1.069 = 1.25351$
Round to three decimal places...	1.242	1.254
Coding Intensity (5.90%)	$1.242 \times (1 - 0.0590) = 1.16872$	$1.254 \times (1 - 0.0590) = 1.18001$
Round to three decimal places...	1.169	1.180
Blend the risk scores	$1.169 \times 0.50 = 0.5845$	$1.180 \times 0.50 = 0.5900$
Round to three decimal places...	0.585	0.590
Payment Risk Score	$0.585 + 0.590 = 1.175$	
Calculating the Annual Payment Duval County Rate = \$998.31	$(\$998.31 \times 1.175) \times 12 = \$11,979.72$	

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CMS Has No Inherent Memory



HINT:
FOCUS on
Coding all
HCCs January
– June and
focus on
HEDIS July
through
December

January 1 – It all Starts Over

- Amputations grow back!
- Diseased lungs return to normal!
- Pancreases regenerate!
- Kidney function is restored!
- Get the picture?



Demographic Only - 0.451

Why ?

From a **risk adjustment payment** perspective –

- **Treatment** (within the current year) is **evidence of diagnoses.**



Demographic Only – 0.803

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Advanced Risk Management and HCC Coding for Value-Based Payments

Risk Adjustment Rules of The Road

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Diagnoses from Telehealth Visits



[Back to Risk Adjustment](#)

Diagnoses from Telehealth Services for Risk Adjustment

Year

Diagnoses from Telehealth Services for Risk Adjustment

Downloads

[Applicability of Diagnoses from Telehealth Services for Risk Adjustment 4.10.2020 \(PDF\)](#)

<https://www.cms.gov/medicarehealth-plansmedicareadvantagestatesrisk-adjustors/diagnoses-telehealth-services-risk-adjustment>

The **2019 Coronavirus Disease (COVID-19) pandemic** has resulted in an urgency to expand the use of virtual care to reduce the risk of spreading the virus; CMS is stating that Medicare Advantage (MA) organizations and other organizations that submit diagnoses for risk adjusted payment are able to submit diagnoses for risk adjustment that are from telehealth visits when those visits meet all criteria for risk adjustment eligibility, which include being from an allowable inpatient, outpatient, or professional service, and from a face-to-face encounter.

- This use of diagnoses from telehealth services applies both to submissions to the Risk Adjustment Processing System (RAPS), and those submitted to the Encounter Data System (EDS).
- Diagnoses resulting from telehealth services can meet the risk adjustment face-to-face requirement when the services are provided using an interactive audio and video telecommunications system that permits real-time interactive communication

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Coding Guidelines Impacting the CMS-HCC Model

- The 2008 Risk Adjustment Participant Guide
- The 2021 Official ICD-10-CM Coding Guidelines and Conventions
 - ✓ Standard ICD-10-CM coding practices support the CMS-HCC model.
 - ✓ In all cases, the documentation must support the code selected and substantiate that the proper coding guidelines were followed.
- AHA Coding Clinic
- Contract-Level Risk Adjustment Data Validation
 - ✓ Medical Record Reviewer Guidance - In effect as of 03/20/2019



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CMS 2008 Risk Adjustment Data Technical Assistance Participant Guide

- Co-existing conditions include chronic, ongoing conditions such as *diabetes, congestive heart failure, atrial fibrillation, and chronic obstructive pulmonary disease*. These diseases are generally managed by ongoing medication and have the potential for acute exacerbations if not treated properly, particularly if the patient is experiencing other acute conditions. **It is likely that these diagnoses would be part of a general overview of the patient's health when treating co-existing conditions for all but the most minor of medical encounters.**
- Co-existing conditions also include ongoing conditions such as *multiple sclerosis, hemiplegia, rheumatoid arthritis and Parkinson's disease*. Although they may not impact every minor healthcare episode, **it is likely that patients having these conditions would have their general health status evaluated** within a data reporting period, and these **diagnoses would be documented and reportable** at that time.

http://www.csscooperations.com/internet/Cssc.nsf/files/2008-resource-guide_060109.pdf?File/2008-resource-guide_060109.pdf

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2021 ICD-10 Coding Guidelines

- ◆ List first the ICD-10-CM code for the diagnosis, condition, problem, or other reason for encounter/visit shown in the medical record to be **chiefly responsible for the visit**.
- ◆ The **documentation must support the code selected** and substantiate that proper coding guidelines were followed
- ◆ **Chronic diseases** treated on an ongoing basis **may be coded and reported as many times as the patient receives treatment and care for the condition(s)**
- ◆ **Code all documented conditions that coexist at the time of the encounter/visit, and require or affect patient care, treatment or management.** Do not code conditions that were previously treated and no longer exist.
- ◆ **History codes** (ICD-10: Z80-Z87) **personal and family history codes** may be used as secondary codes if the historical condition or family history has an impact on current care or influences treatment.
- ◆ Codes that describe **signs and symptoms**, as opposed to diagnoses, are acceptable for reporting purposes when **a diagnosis has not been established** (confirmed) by the provider. Chapter 18 of ICD-10-CM, *Symptoms, Signs, and Abnormal Clinical and Laboratory Findings Not Elsewhere Classified (codes R00-R99)* contain many, but not all codes for symptoms.
- ◆ **Do not code** diagnoses documented as **"probable," "suspected," "questionable," "rule out," or "working diagnosis"** or other similar terms indicating uncertainty. Rather, code the condition(s) to the highest degree of certainty for that encounter/visit, such as symptoms, signs, abnormal test results, or other reason for the visit.

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2021 ICD-10 Updates

The final update includes hundreds of new ICD-10-CM codes including (but not limited to):

- 128 additions to Chapter 19: Injury, poisoning and certain other consequences of external causes for adverse effects and poisoning by fentanyl and tramadol as well as other synthetic narcotics.
- 125 additions to Chapter 20: External causes of morbidity, including more specific codes for collisions involving electric scooters and other nonmotor vehicle accidents.
- 57 musculoskeletal codes, including several in category M24.- (other specific joint derangements) for other articular cartilage disorders, disorders of ligament, pathological dislocation, recurrent dislocation, contracture, and ankylosis.
- 21 codes to describe withdrawal from substances including alcohol, cocaine, and opioids.
- 18 detailed codes for sickle cell anemia. New codes such as D57.213 (sickle-cell/Hb-C disease with cerebral vascular involvement) and D57.431 (sickle-cell thalassemia beta zero with acute chest syndrome) specify complications related to the condition.
- Three codes to capture stage 3 chronic kidney disease (CKD) in two new sub-stages. The new codes are: N18.30 (CKD, stage 3 unspecified), N18.31 (CKD, stage 3a), and N18.32 (CKD, stage 3b).
- The new Chapter 22: Codes for Special Purposes (U00-U85) so far includes just two codes: U07.0 (vaping-related disorder) and U07.1 (COVID-19), which took effect in the early part of this year.
- The final update deletes code Q51.20 (other doubling of uterus, unspecified) and all codes within subcategory T40.4X- (poisoning by adverse effect of and underdosing of other synthetic narcotics), without code replacements.

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Encounter Documentation Examples

HPI:
Hx. of dementia, per wife. Not on any medications.
Records requested from neurologist.

Assessment and Plan:

1. F03.90 – Dementia
Follow up clinically



History of Present Illness:
Elevated fasting blood sugar in the office today.
Probable new onset diabetes. Hgb A1c ordered.

Assessment and Plan:

1. E11.9 – Type 2 diabetes with out complications



History of Present Illness:
Hospital follow up

Assessment and Plan:

1. B18.2 - Chronic Hepatitis C.
H/O Hep C – s/p treatment
Check LFTs



HPI:
Complains of a persistent cough and SOB that started last week. CXR today. Call for results at 4:00 PM.

Assessment and Plan:

1. J18.9, Pneumonia – Suspected CAP. CXR today.



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The Gift of With

ICD-10 Guidelines

15. "With"

The word "with" or "in" should be interpreted to mean "associated with" or "due to" when it appears in a code title, the Alphabetic Index (**either under a main term or subterm**), or an instructional note in the Tabular List. The classification presumes a causal relationship between the two conditions linked by these terms in the Alphabetic Index or Tabular List. These conditions should be coded as related even in the absence of provider documentation explicitly linking them, unless the documentation clearly states the conditions are unrelated or when another guideline exists that specifically requires a documented linkage between two conditions (e.g., sepsis guideline for "acute organ dysfunction that is not clearly associated with the sepsis").

FYI: The "with" guideline does not apply to "not elsewhere classified (NEC)" index entries that cover broad categories of conditions. **Specific conditions must be linked by the terms "with," "due to" or "associated with."**

AHA Coding Clinic Second Quarter 2018, pages 6-7

Diabetes, diabetic (mellitus) (sugar) E11.9
with
amyotrophy E11.44
arthropathy NEC E11.618
autonomic (poly) neuropathy E11.43
cataract E11.36
Charcot's joints E11.610
chronic kidney disease E11.22
circulatory complication NEC E11.59
complication E11.9
specified NEC E11.69
dermatitis E11.620
foot ulcer E11.621
gangrene E11.52
gastroparesis E11.43
glomerulonephrosis, intracapillary E11.21
glomerulosclerosis, intracapillary E11.21
hyperglycemia E11.65
hyposmolality E11.00
with coma E11.01
hypoglycemia E11.649
with coma E11.641
kidney complications NEC E11.29
Kimmelsteil-Wilson disease E11.21
loss of protective sensation (LOPS) - see Diabetes, by type, with neuropathy
mononeuropathy E11.41
myasthenia E11.44
necrobiosis lipoidica E11.620
neuropathy E11.21
neuralgia E11.42
neurologic complication NEC E11.49
neuropathic arthropathy E11.610
neuropathy E11.40
ophthalmic complication NEC E11.39
oral complication NEC E11.638
periodontal disease E11.630
peripheral angiopathy E11.51
with gangrene E11.52
polyneuropathy E11.42
renal complication NEC E11.29
renal tubular degeneration E11.29
retinopathy E11.319
with macular edema E11.311
nonproliferative E11.329
with macular edema E11.321
mild E11.329
with macular edema E11.321
moderate E11.339
with macular edema E11.331
severe E11.349
with macular edema E11.341
proliferative E11.359
with macular edema E11.351
skin complication NEC E11.628
skin ulcer NEC E11.622

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Application of 7th Characters in Chapter 19

ICD-10 Guidelines

Chapter 19: Injury, poisoning, and certain other consequences of external causes (S00-T88)

a. Application of 7th Characters in Chapter 19

Most categories in chapter 19 have a 7th character requirement for each applicable code. Most categories in this chapter have three 7th character values (with the exception of fractures): A, initial encounter, D, subsequent encounter and S, sequela. Categories for traumatic fractures have additional 7th character values. While the patient may be seen by a new or different provider over the course of treatment for an injury, assignment of the 7th character is based on whether the patient is undergoing active treatment and not whether the provider is seeing the patient for the first time.

For complication codes, active treatment refers to treatment for the condition described by the code, even though it may be related to an earlier precipitating problem. For example, code T84.50XA, Infection and inflammatory reaction due to unspecified internal joint prosthesis, initial encounter, is used when active treatment is provided for the infection, even though the condition relates to the prosthetic device, implant or graft that was placed at a previous encounter.

7th Character "A" is used for each encounter where the patient is receiving active treatment for the condition.

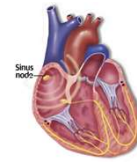
Example: T84.84XA



7th character "A", initial encounter is used for each encounter where the patient is receiving active treatment for the condition.

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Sick Sinus with Cardiac Devices



Question: How does one code **SSS** or **other significant heart rhythm abnormality** in the presence of a pacemaker?

Answer: It is appropriate to code the specific condition and the presence of the cardiac device.

- ▶ Although the pacemaker is controlling the heart rate, it does not cure SSS and the condition is still being managed/monitored

AHA Coding Clinic :
First Quarter 2019, pp. 33–34

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Uncertain Diagnosis “Concern for”

- Coding Clinic has confirmed that documentation of “concern for” should be treated as an acceptable “uncertain diagnosis” which, in the **inpatient setting** can be coded if the diagnosis is documented as such at the time of discharge.
- In addition to “probable,” “suspected,” “likely,” “questionable,” “possible,” or “still to be ruled out,” coders can now accept “concern for...”
- For example, if the attending documents on the discharge summary: “CT chest was concerning for pneumonia”, it should be captured as a final diagnosis

AHA Coding Clinic 1st Quarter 2018



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Each Encounter Stands Alone

AHA Coding Clinic :

Volume 30, Third Quarter,
Number 3, 2013, Page 27

- ▶ Documentation for the current encounter should clearly reflect those diagnoses that are current and relevant for that encounter.
- ▶ Conditions documented on previous encounters may not be clinically relevant on the current encounter
- ▶ The provider is responsible for documenting all relevant conditions.
- ▶ When reporting recurring conditions and the recurring condition is still valid for the current encounter, the recurring condition should be documented in the encounter.
- ▶ If the condition is not documented in the current encounter, it can not be coded from a problem list.

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Contract-Level RADV Medical Record Reviewer Guidance

* This guidance will be used for audits commencing after 09/27/2017

ICD-10 Code Lists

- ◆ It is not appropriate for providers to list the code number or select a code number from a list of codes in place of a written diagnostic statement.
- ◆ It is the provider's responsibility to provide clear and legible documentation of a diagnosis, which is then translated to a code for external reporting purposes."

RADV Guidance

Clinical Lab Test Results

Clinical lab test results, when submitted alone, are not acceptable for RADV purposes. If the only medical record documentation submitted is a clinical lab report, the medical record is considered "Invalid."

Examples of the types of documentation that are unacceptable, when submitted alone, include the following:

- ◆ CBC blood count report; Chemistry profile report
- ◆ Hepatitis antigen/antibody tests
- ◆ Pleural fluid analysis report
- ◆ Rheumatoid factor
- ◆ Urinalysis report, Urine culture report
- ◆ Urine pregnancy test
- ◆ Wound culture report

NOTE: The above list is not all inclusive.

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Should the Medical Record Be Addended?

It's ethical and proper to addend a visit note when it's done to better document the management for existing diagnoses related to that visit, or for new diagnoses resulting from tests ordered during that encounter. Guidance from CMS and other clinical documentation improvement (CDI) organizations acknowledges the need for addendums and agrees on their content. All recommend that organizations develop an internal addendum policy.

**2004 Risk Adjustment Regional Training for Medicare Advantage Organizations
Questions & Answers session:**

Only the attending physician can correct the medical record. The correction should be within 30 days of the initial documentation, and substantial reasoning must be provided for the change.

The amendment should be based on an observation of the patient on the date of service and signed by the observing physician (e.g., a follow-up note based on a diagnostic test ordered and test results received subsequent to the patient visit).

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Advanced Risk Management and HCC Coding for Value-Based Payments

Risk Adjustment Resources

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GAP Report from Health Plan A

Example – for illustrative purposes only.

Provider IPA Group Name	Chronic Indicator	HCC Description	HCC	HCCFirstDOS	HCC Last DOS	HCC Model Versic	HCC Statu	Member Name	Member DOB	Sex	Age	ESRD	Part C Risk
IPA 107	Chronic	Lymphoma and Other Cancers	10	2/28/2018	9/14/2018	V22	DROP	Patient 1	10/14/1938	F	81	N	2.841
IPA 107	Chronic	Disorders of Immunity	47	8/15/2018	8/22/2018	V22	DROP	Patient 1	10/14/1938	F	81	N	2.841
IPA 107	Chronic	Diabetes with Chronic Complications	18	8/2/2018	8/22/2018	V22	DROP	Patient 1	10/14/1938	F	81	N	2.841
IPA 107	Chronic	Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	122	11/29/2017	11/29/2017	V22	DROP	Patient 2	9/4/1954	M	65	N	1.673
IPA 107	Chronic	Diabetes with Chronic Complications	18	3/16/2018	12/3/2018	V22	DROP	Patient 2	9/4/1954	M	65	N	1.673
IPA 107	Chronic	Diabetes without Complication	19	2/2/2018	3/16/2018	V22	DROP	Patient 2	9/4/1954	M	65	N	1.673
IPA 107	Chronic	Diabetes with Chronic Complications	18	3/16/2018	3/16/2018	V22	DROP	Patient 3	10/20/1945	F	74	N	0.625
IPA 107	Chronic	Diabetes with Chronic Complications	18	9/28/2018	12/31/2018	V22	DROP	Patient 4	7/20/1938	F	81	N	0.708
IPA 107	Chronic	Chronic Obstructive Pulmonary Disease	111	6/5/2018	7/19/2018	V22	DROP	Patient 5	10/17/1961	F	58	N	0.67
IPA 107	Chronic	Diabetes without Complication	19	8/13/2018	8/13/2018	V22	DROP	Patient 6	7/21/1953	F	66	N	0.943
IPA 107	Chronic	Major Depressive, Bipolar, and Paranoid Disorders	58	12/31/2018	12/31/2018	V22	DROP	Patient 6	7/21/1953	F	66	N	0.943
IPA 107	Chronic	Diabetes without Complication	19	2/27/2018	2/27/2018	V22	DROP	Patient 7	12/19/1934	M	85	N	0.792
IPA 107	Chronic	Diabetes with Chronic Complications	18	2/2/2018	11/26/2018	V22	DROP	Patient 7	12/19/1934	M	85	N	0.792
IPA 107	Chronic	Major Depressive, Bipolar, and Paranoid Disorders	58	3/1/2018	3/1/2018	V22	DROP	Patient 8	1/25/1952	F	67	N	1.548
IPA 107	Chronic	Diabetes with Chronic Complications	18	5/23/2018	8/21/2018	V22	DROP	Patient 9	4/22/1952	F	67	N	0.583
IPA 107	Chronic	Other Significant Endocrine and Metabolic Disorders	23	9/18/2017	9/18/2017	V22	DROP	Patient 10	4/17/1952	M	67	N	0.964
IPA 107	Chronic	Diabetes without Complication	19	1/19/2018	11/16/2018	V22	DROP	Patient 10	4/17/1952	M	67	N	0.964
IPA 107	Chronic	Diabetes with Chronic Complications	18	1/19/2018	4/20/2018	V22	DROP	Patient 10	4/17/1952	M	67	N	0.964

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MOR Model Output Report

RA "Aging" Report

MOR Report includes all diagnoses within 3 years...

HEALTH PLAN 1
HEALTHPLAN 2019 HCC 3 YEARS COMPARISON REPORT
 As of 01/04/2019
 *This data is based upon the most recent RAPS submission to CMS, it may not include recent encounters.
 **P under the DOS fields stands for "PRE-EXISTING CONDITION PROVIDED BY CMS" MOR file"

Plan	PCP Name	Member ID	Member Name	Birth	Model	Group	Category	Description	2019 DOS	2018 DOS	2017 DOS
MA008	PCP 1	0	Patient 1	07/12/1946	RX	045	Metabolic	Disorders of Lipoid Metabolism	E785		
MA008	PCP 1	0	Patient 1	07/12/1946	HCC	010	Neoplasm	Lymphoma and Other Cancers	P	P	
MA008	PCP 1	0	Patient 1	07/12/1946	RX	135	Psychiatric	Anxiety Disorders	F411		
MA008	PCP 1	0	Patient 1	07/12/1946	RX	133	Psychiatric	Specified Anxiety, Personality, and Behavior Disorders	F4312		
MA009	PCP 1	0	Patient 2	12/16/1950	RX	042	Metabolic	Thyroid Disorders	E039	E039	
MA009	PCP 1	0	Patient 2	12/16/1950	RX	087	Musculoskeletal	Osteoporosis, Vertebral and Pathological Fractures	M810	M810	
MA009	PCP 1	0	Patient 2	12/16/1950	RX	134	Psychiatric	Depression	F3289		
MA009	PCP 1	0	Patient 3	06/02/1957	RX	045	Metabolic	Disorders of Lipoid Metabolism	E782		
MA009	PCP 1	0	Patient 4	05/09/1957	HCC	018	Diabetes	Diabetes with Chronic Complications	E1165		
MA009	PCP 1	0	Patient 4	05/09/1957	RX	030	Diabetes	Diabetes with Complications	E1165		
MA009	PCP 1	0	Patient 4	05/09/1957	RX	187	Heart	Hypertension	I10		
MA009	PCP 1	0	Patient 4	05/09/1957	HCC	167	Injury	Major Head Injury	S069X6S		
MA008	PCP 1	0	Patient 5	04/14/1951	RX	187	Heart	Hypertension	I10		
MA009	PCP 2	1	Patient	05/14/1948	HCC	018	Diabetes	Diabetes with Chronic Complications	E1122, E113513, E11319, E113553, E1165	E1122, E1140, E11649, E1165	

If it's not in the MOR report... it's not included in the risk score!

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Additional CMS-HCC Resources

Chronic Conditions Data Warehouse

Your source for national CMS Medicare and Medicaid research data

<https://www.ccwdata.org>

The Chronic Conditions Data Warehouse (CCW)

The CCW is a research database designed to make Medicare, Medicaid, Assessments, and Part D Prescription Drug Event data more readily available to support research designed to improve the quality of care and reduce costs and utilization.

MEDPAC *Advising the Congress on Medicare issues*

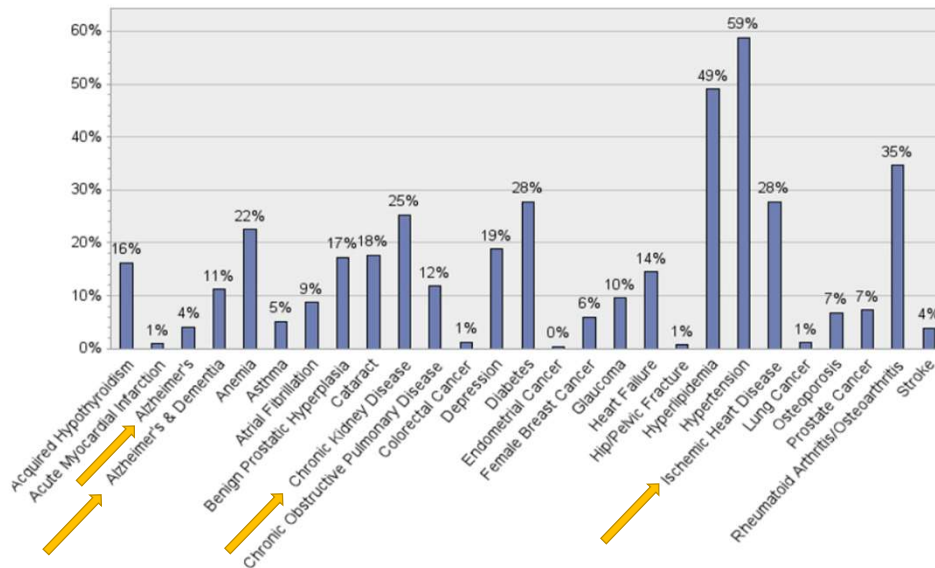
<http://medpac.gov/>

Data Book

The MedPAC annual data book, "Health Care Spending and the Medicare Program," is a chart book that provides tables and graphs describing the Medicare program, Medicare beneficiaries and their utilization of health care services, and Medicare's payment systems. MedPAC also produces occasional data books on selected topics.

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Medicare - CCW Condition Period Prevalence, 2018

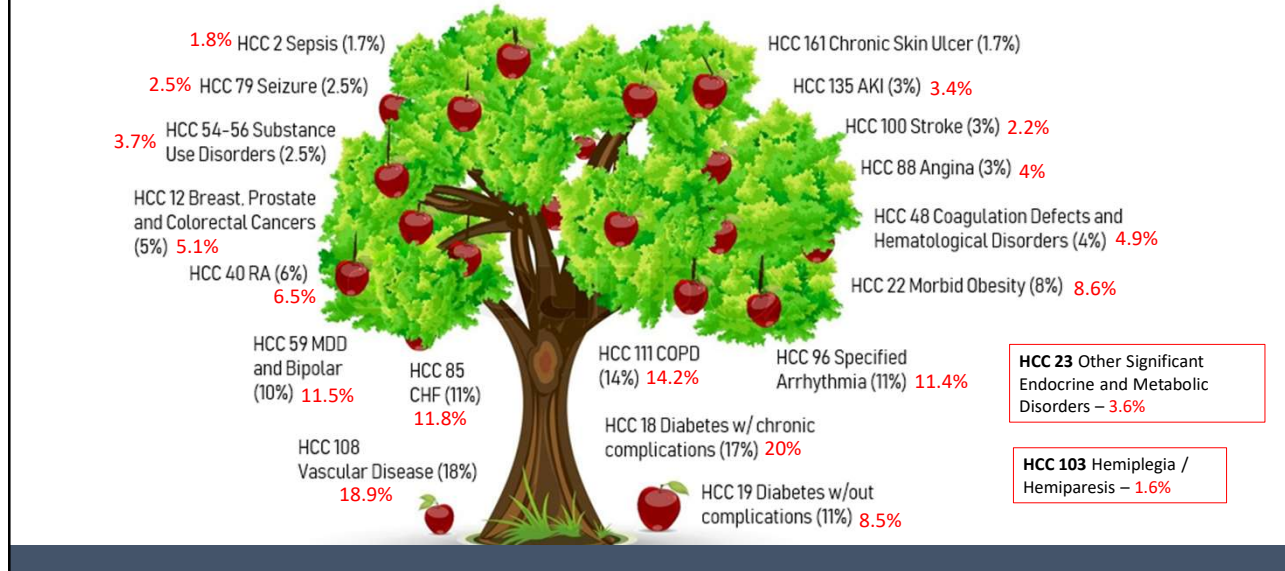


<https://www.ccwdata.org>

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What are the Most Common HCCs?

MedPAC Data Book
June 2018 - 2019



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Advanced Risk Management and HCC Coding for Value-Based Payments

Deep Dive into HCCs

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HCC 8, 9, 10, 11 and 12: Neoplasms and Other Tumors

Translating Clinical Documentation into Risk...

*Based on 2020 Community, Non-Dual, Aged

** Based on 2020 Hillsborough County, FL Rate (3.5% Bonus)

Diagnosis Code	Description	HCC Category	RAF*	Est. Annual Value**
C79.51	Secondary malignant neoplasm of bone	8	2.659	\$31,201.24
C34.92	Malignant neoplasm of unspecified part of left bronchus or lung	9	1.024	\$12,015.82
C91.11	CLL , in remission	10	0.675	\$7,920.59
C18.9	Malignant neoplasm of colon , unspecified	11	0.307	\$3,602.40
C50.912	Malignant neoplasm of unspecified site of left female breast	12	0.150	\$1,760.13
C61	Malignant neoplasm of prostate	12	0.150	\$1,760.13
Z85.3	History of breast cancer	n/a	n/a	n/a

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2021 ICD-10 Guidelines – Neoplasms and Other Tumors

ICD-10 Guidelines: When a primary malignancy has been **previously excised or eradicated** from its site and there is **no further treatment** directed to that site and there is **no evidence of any primary existing malignancy**, a code from category **Z85**, a personal history of malignant neoplasm, should be used to indicate the former site.

- **Active treatment** includes
 - ✓ Surgery
 - ✓ Chemotherapy
 - ✓ Radiation therapy
 - ✓ Adjuvant hormonal therapies
- **Metastases** – Document both the primary and secondary site.
 - ✓ **Example:** _____ metastasis associated with history of primary _____.
 - ✓ **Example:** Treatment of _____ metastasis with current primary _____.

Patients who opt of treatment – still coded as active

Examples:

- ✓ Low grade prostate cancer, patient opts for no treatment at this time. Will continue to monitor every 6 months for progression of disease. We will reassess treatment options at that time.
- ✓ Prostate cancer diagnosed 2 years ago, treatment declined by patient. Will re-evaluate in 6 months for disease progression

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Chronic Lymphocytic Leukemia (CLL)

(HCC 10, RAF 0.675)

FYI: Chronic lymphocytic leukemia (CLL), reported using ICD-10-CM code **C91.10** Chronic lymphocytic leukemia of B-cell type not having achieved remission, is the most common type of adult leukemia in the US.

There had been a general belief that CLL is an indolent disease associated with a prolonged (ie, 10 to 20 years) clinical course, and that the eventual cause of death may be unrelated to CLL. However, this observation is true for **less than 30%** of all CLL cases.

- The natural history of CLL is extremely variable, with survival times from initial diagnosis that range from approximately 2 to 20 years, and a median survival of approximately 10 years.

The most commonly used clinical staging system (in the USA) for chronic lymphocytic leukemia (CLL) is the **RAI staging system** developed by Dr. Kanti Rai in 1975 and is still useful today. **Staging is based simply on the blood tests and physical exam.** Imaging at the time of diagnosis is most often not necessary.

Stage	Criteria
0	Lymphocytosis (high blood count of lymphocytes) and no enlargement of the lymph nodes, spleen, or liver, and with near normal red blood cell and platelet counts .
I	Lymphocytosis plus enlarged lymph nodes. The spleen and liver are not enlarged, and the red blood cell and platelet counts are normal or only slightly low.
II	Lymphocytosis plus an enlarged spleen (and possibly an enlarged liver), with or without enlarged lymph nodes. The red blood cell and platelet counts are normal or only slightly low.
III	Lymphocytosis plus anemia (too few red blood cells), with or without enlarged lymph nodes, spleen, or liver. Platelet counts are near normal.
IV	Lymphocytosis plus thrombocytopenia (too few platelets), with or without anemia, enlarged lymph nodes, spleen, or liver.

- Stage 0 is low-risk.
- Stages I and II are intermediate-risk.
- Stages III and IV are high-risk.

Signs and symptoms commonly associated with CLL include:

- Weakness – M62.81 Muscle weakness (generalized)
- Fatigue – R53.83 Other fatigue
- Weight loss – R63.4 Abnormal weight loss
- Chills – R68.83 Chills (without fever)
- Fever – R50.9 Fever, unspecified
- Night sweats – R61 Generalized hyperhidrosis
- Swollen lymph nodes – R59.9 Enlarged lymph nodes
- Hepatomegaly – R16.0 Hepatomegaly, NEC
- Splenomegaly – R16.1 Splenomegaly, NEC

<https://cilsociety.org/2016/03/rai-staging-cll-chronic-lymphocytic-leukemia/>

<https://www.aapc.com/blog/43398-43398/>

<https://www.uptodate.com/contents/staging-and-prognosis-of-chronic-lymphocytic-leukemia>

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Is CLL “in Remission” or “History of” ?

- Per ICD-10 rules, “History of” and “In remission” are **NOT** the same codes.
- Code assignment is based on provider documentation.

Z85.6 - History of CLL

- “History of” means CLL is eradicated. It is rare to eradicate CLL. Usually it is in long-term remission.

C91.11 - CLL in remission

- ✓ In most instances since CLL is usually in remission, CLL should be documented as “CLL of B-cell type in remission” rather than using “history of CLL” if the clinical evidence supports such documentation.

Remission is when the blood counts have returned to “normal”, leukemia cells cannot be found in a bone marrow sample when examined under the microscope, and there are no signs or symptoms.

HPI: 66 year-old male with CLL in for routine follow up. Doing well. No complaints today.

Assessment: CLL in remission. Neutrophil count has returned to pre-CLL levels.

ICD-10 Code: C91.11 Chronic lymphocytic leukemia of B-cell type in remission.

Plan: Recheck CBC in 6 months

HPI: 55 year-old female with leukemia.

Assessment: CLL in remission B cell type, remains stable.
ICD-10 Code: C91.11 Chronic lymphocytic leukemia of B-cell type in remission.

Plan: Follow-up with hematology as planned.

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Hodgkin and Non-Hodgkin Lymphomas

(HCC 10, RAF 0.675)

- Lymphomas do not "metastasize" or spread to secondary sites in the same manner as solid tumors.
- They are not confined to a single site and spread to other sites in the hematopoietic and lymphatic system.
- This spread is not considered metastatic and will always be classified as a primary neoplasm.

Lymphomas are divided into 2 major groupings: Hodgkin’s Lymphoma and Non-Hodgkin’s Lymphoma.

Hodgkin’s Lymphoma

- Symptoms: fever, weight loss, night sweats and lymphadenopathy
- **Treatment – cure likely**
- **Bone marrow transplant (Z94.81 – HCC 186, RAF 0.832)**

Per AHA Coding Clinic, 1992, Q2,

“Lymphomas are classified in categories 200--202, depending upon the type of the lymphoma, with fifth digit subclassifications for the site(s) involved... **Lymphoma patients who are in remission are still considered to have lymphoma** and should be assigned the appropriate code from categories 200--202.”

Non-Hodgkin’s Lymphoma

- Heterogeneous group of malignant lymphomas
- Common feature – absence of the giant Reed-Sternberg cells typical in Hodgkin’s disease.
- Over 30 sub-types of non-Hodgkin’s lymphoma, including Mantle cell, mucosa associated lymphoid tissue [MALT] and primary central nervous system lymphoma
- Treatment Indolent – treat to control
- **Treatment may not be curative, but long-term control likely**

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Melanoma (HCC 12, RAF 0.150)

C43.0	Malignant melanoma of lip
C43.111	Malignant melanoma of right upper eyelid, including canthus
C43.112	Malignant melanoma of right lower eyelid, including canthus
C43.21	Malignant melanoma of right ear and external auricular canal
C43.22	Malignant melanoma of left ear and external auricular canal
C43.31	Malignant melanoma of nose
C43.39	Malignant melanoma of other parts of face
C43.4	Malignant melanoma of scalp and neck
C43.52	Malignant melanoma of skin of breast
C43.59	Malignant melanoma of other part of trunk

* Not a complete list

D03.0	Melanoma in situ of lip
D03.39	Melanoma in situ of other parts of face
D03.4	Melanoma in situ of scalp and neck
D03.52	Melanoma in situ of breast (skin) (soft tissue)
D03.59	Melanoma in situ of other part of trunk
D03.61	Melanoma in situ of right upper limb, including shoulder
D03.62	Melanoma in situ of left upper limb, including shoulder
D03.72	Melanoma in situ of left lower limb, including hip

* Not a complete list

Medical Record Review...

Assessment and Plan:

1. **Melanoma of the back– C43.59**
Story: bx 2/28/20 – excised by dermatology



Assessment and Plan:

1. **Melanoma of the back– C43.59**
Story: bx 6/3/20 – scheduled for excision on 9/1/2020 with dermatology.



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Common Opportunities in Oncology...

Disorders of Immunity

(HCC 47, RAF: 0.665)

D61.810	Antineoplastic chemotherapy induced pancytopenia
D61.811	Other drug-induced pancytopenia
D61.818	Other pancytopenia
D70.1	Agranulocytosis secondary to cancer chemotherapy
D70.8	Other neutropenia
D70.9	Neutropenia, unspecified
D84.9	Immunodeficiency, unspecified

Major Organ Transplant or Replacement

(HCC 186, RAF: 0.832)

Z94.81	Bone marrow transplant
Z94.84	Stem cells transplant status

Protein Calorie Malnutrition

(HCC 21, RAF: 0.455)

E44.1	Mild protein-calorie malnutrition
R64	Cachexia

Artificial Openings for Feeding or Elimination

(HCC 188, RAF: 0.534)

Z93.1	Gastrostomy status
Z93.2	Ileostomy status
Z93.3	Colostomy status
Z93.4	Other artificial openings of gastrointestinal tract status
Z93.50	Unspecified cystostomy status
Z93.6	Other artificial openings of urinary tract status

Myasthenia Gravis / Guillain-Barre Syndrome / Inflammatory Neuropathy

(HCC 75, RAF: 0.472)

G62.0	Drug-induced polyneuropathy
G62.2	Polyneuropathy due to other toxic agents
G62.81	Critical illness polyneuropathy
G62.82	Radiation-induced polyneuropathy

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Risk Adjustment Data Validation...

The following are examples of HCCs that were not supported by the documentation that PacifiCare (California) submitted to us for medical review:

- For a beneficiary, PacifiCare (California) submitted the diagnosis code for “malignant neoplasm of the prostate.” CMS used the HCC associated with this diagnosis in calculating the beneficiary’s risk score. However, the documentation that PacifiCare provided appeared to describe suture removal and left shoulder bursitis/tendonitis. The documentation did not mention prostate cancer or indicate that prostate cancer had affected the care, treatment, or management provided during the encounter.

<https://oig.hhs.gov/oas/reports/region9/90900045.pdf>

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Risk Adjustment Data Validation

The documentation that PacifiCare (Texas) submitted to us for medical review **did not support the diagnoses** associated with 57 HCCs.

The following are examples of HCCs that were **not supported** by PacifiCare's documentation.

- For a third beneficiary, PacifiCare (Texas) submitted the diagnosis code for "malignant neoplasm of the brain, cerebrum, except for lobes and ventricles." CMS used the HCC associated with this diagnosis in calculating the beneficiary's risk score. **However, the documentation that PacifiCare provided referenced benign prostatic hypertrophy. The documentation did not mention brain cancer or indicate that brain cancer had affected the care, treatment, or management provided during the encounter.**

<https://oig.hhs.gov/oas/reports/region6/60900012.pdf>

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Diabetes Trivia

1. By coding more diabetic complications, my risk score will my higher, right?
2. It is okay to code E11.9 and E11.21 on the same encounter?
3. Should "uncontrolled" be coded as hyperglycemia?

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Diabetic Complications that map to only HCC 18	Diabetic Complications that map to other HCC's
DM with Nephropathy (E11.21)	DM with CKD (E11.22) - Code also for stage of CKD
DM with Cataract (E11.36) DM with Non-Proliferative Retinopathy (E11.319)	DM with Proliferative Retinopathy (E11.3551 – E11.3553)
DM with Neuropathy (E11.40 – E11.43)	DM with PAD / PVD (E11.51)
DM with Other Circulatory Complications (E11.59) 1. Complication must be linked to diabetes 2. Code also for specific complication - CAD* - Erectile Dysfunction*	DM with Foot Ulcer (E11.621) - Code also for the site and stage of ulcer L97.--
DM with Hypoglycemia (E11.649)	DM with Other Skin Ulcer (E11.622) - Code also for the site and stage of ulcer L97.--
DM with Hyperglycemia (E11.65)	*These conditions do not have an "assumed relationship" with diabetes. Documentation must link the complication to diabetes.
DM with Other Specified Complication (E11.69) 1. Complication must be linked to diabetes 2. Code also for specific complication - Hyperlipidemia*	

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HCC 18 and 19 Diabetes with and without Complications

*Based on 2020 Community, Non-Dual, Aged
** Based on 2020 Hillsborough County, FL Rate (3.5% Bonus - \$977.85 / \$11,734.20)

#1 HCC 18
#2 HCC 19 Per MedPAC

Translating Clinical Documentation into Risk... **400 ICD-10 Codes in HCC 18** **6 ICD-10 Codes in HCC 19**

Clinical Documentation	ICD-10 Code	HCC Category	RAF	Value (Per Month) (3.5 % Bonus– Aged)
"diabetes"	E11.9	HCC 19	0.105	\$102.67
"diabetes with hyperglycemia"	E11.65	HCC 18	0.302	\$295.31
"diabetes with CKD stage 3"	E11.22 + N18.3	HCC 18, HCC 138	0.302 + 0.069	\$361.80
"diabetes with PVD"	E11.51 + I73.9	HCC 18, HCC 108	0.302 + 0.288	\$576.93
"diabetes with R foot ulcer"	E11.621 + L97.409	HCC 18, HCC 161	0.302 + 0.515	\$798.90
"history of diabetes"	Z86.39	n/a	n/a	n/a

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Medical Record Review...

Chief Complaint

1. Medication reaction to methotrexate.
2. Cat scratch on left hand. Cat is an indoor cat and belongs to her roommate.

History of Present Illness

DM: HgbA1c status is well controlled. Side effects of the medications none. Associated conditions: none. DM teaching done today. Referrals made to podiatry and ophthalmologist for DRE.

Assessment and Plan:

1. Cellulitis, unspecified – L03.90
 - Doxycycline 100 mg BID x 10 days
2. DM 2 with hyperglycemia – E11.65 ←
 - Continue current DM Mx.
3. Hyperlipidemia – E78.5
 - Continue statin.
4. Rheumatoid arthritis – M06.9 ←
 - Stable with no acute issues

The "hyperglycemia" must be documented by the provider

"Uncontrolled" is not the same as hyperglycemia.

- Coding Clinic for ICD-10-CM, Q3 2013; Q1, 2017

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Medical Record Review...

CC:

3 month f/u - diabetes

HPI:

FBS today is 137. Home BS reviewed. Last Hgb A1c was 7.3. Admits to eating ice cream and drinking a "few sodas". Complications from diabetes include neuropathy, CKD stage 3 and PAD.

Vitals:

Wt. 213 lbs., Ht. 64 in., BMI 36.36, BP 145/68 Oxygen sat 96%

Exam:

GENERAL APPEARANCE: pleasant, well nourished, in no acute distress. Morbidly obese. LUNGS: prolonged expiratory phase, diminished breath sounds through out. CHEST: Normal shape and expansion. ABDOMEN: soft, non-tender. Bowel sounds present. EXTREMITIES: no clubbing, cyanosis, or edema. Bilateral hair loss and hyperpigmentation. Pedal pulse 1+ bil. NEUROLOGIC: non-focal, motor strength normal. Monofilament bilateral diminished sensation.

A/P:

- ✓ E11.51, Diabetes with PAD – Stable. Continue ASA.
- ✓ E11.22, Diabetes with CKD – Avoid NSAIDS. Stay hydrated.
- ✓ N18.3, CKD stage 3 – Repeat eGFR in 6 months.
- ✓ E11.40, Diabetes with neuropathy – Continue Gabapentin. Rx for Diabetic shoes given.

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Diabetes with Neuropathy

Diabetes causes a wide variety of acute, chronic, focal, and diffuse neuropathy syndromes.

Diabetic Polyneuropathy (DPN)

- Accounts for **75%** of diabetic neuropathy
- Has a lifetime prevalence of approximately **50%**, the most common diabetic complication
- Pain, is the most common disabling symptom, occurs in **20% to 30%** of patients

Total Annual Medical Costs

- The total annual medical costs for **diabetes** is \$6,632 per patient.
- Those with **diabetic polyneuropathy** experience a **twofold increase** in health-care costs \$12,492
- Those with severe painful **peripheral neuropathy** experience a **fourfold increase** \$30,755

Monofilament testing is an inexpensive, easy-to-use, and portable test for assessing the loss of protective sensation, and it is recommended by several practice guidelines to detect peripheral neuropathy in otherwise normal feet.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2775618/>



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Diabetes with PAD / PVD

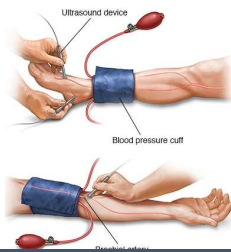
- The risk of peripheral vascular disease (PVD) is increased in diabetic patients, occurs earlier and is often more severe and diffuse.

Prevalence of PAD in people with diabetes >40 years of age to be 20%

Prevalence of PAD in people with diabetes >50 years of age to be 29%

- Peripheral Arterial Disease in People With Diabetes
- American Diabetes Journal

- The presence of PVD, apart from its **increased risk of claudication, ischemic ulcers, gangrene and possible amputation**, is also a marker for generalized atherosclerosis and a **strong predictor for cardiovascular ischemic events**.



Making the Diagnosis

- ✓ The **ankle-brachial index (ABI)** which involves measuring the systolic blood pressures in the ankles (dorsalis pedis and posterior tibial arteries) and arms (brachial artery) using a hand-held Doppler and then calculating a ratio.
- ✓ The test is noninvasive, cost effective and simple to perform in the office.
- ✓ When compared with an assessment of pulses or a medical history, the ABI has been found to be more accurate.

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Diabetic Foot Ulcers

- The **lifetime risk of developing a foot ulcer** for someone with diabetes is **25%**.
- **Diabetic neuropathy** alone causes between **45-60% of diabetic foot ulcers**
- Between **10-15%** of diabetic foot ulcers **do not heal**.
- Of diabetic foot ulcers that do not heal, **25% will require amputation**.
- In the United States, the **cost to care** for diabetic foot ulcers is about **\$11 billion per year**.
- Approximately **20% of hospital admissions** in people with diabetes are **due to foot ulcers**.
- A foot ulcer is the **initial event in more than 85% of major amputations** that are performed on people with diabetes.
- Up to **50%** of diabetic foot ulcer cases **can be prevented** with appropriate education focused on teaching people with diabetes how to care for their feet.

While documenting ulcers, be sure to document the **type** of ulcer, the **site** of ulcer, **laterality** of ulcer and the **severity** of ulcer.



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Medical Record Review...

Maria is here for follow up of DM, HTN, HLD, GERD and CKD, stage 3. Random BS is 165 today. Last Hgb A1c was 10.3. Never picked up Glipizide from the pharmacy. Taking statin. eGFR stable at 51. ABI's were positive. She saw the podiatrist last week for diabetic shoes. Chronic ulcer on R heel continues to improve. Needs new eye exam.

Assessment and Plan:

- Diabetes without complications, pick up Glipizide today. Rt. in 2 weeks.
- GERD, refill omeprazole
- Overweight, diet and exercise discussed

- ☒ Diabetes with chronic kidney disease
- ☒ CKD stage 3
- ☒ Diabetes with hyperglycemia
- ☒ Diabetes with PAD
- ☒ Diabetes with chronic skin ulcer
- ☒ Chronic R heel ulcer

ICD-10 Code	HCC Category	RAF
E11.9	HCC 19	0.105
E11.65	HCC 18	0.302
E11.22 + N18.3	HCC-18 + HCC 138	-0.302 + 0.069
E11.51 + I73.9	HCC-18 + HCC 108	-0.302 + 0.288
E11.621 + I97.409	HCC-18 + HCC 161	-0.302 + 0.515

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HCC 21: Protein Calorie Malnutrition

Diagnosis Code	Description	10 ICD-10 Codes
<input type="checkbox"/> HCC 21 0.455		
E43	Unspecified severe protein-calorie malnutrition	
E44.0	Moderate protein-calorie malnutrition	
E44.1	Mild protein-calorie malnutrition	
E45	Retarded development following protein-calorie malnutrition	
E46	Unspecified protein-calorie malnutrition	
E64.0	Sequelae of protein-calorie malnutrition	
R64	Cachexia	

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Protein Calorie Malnutrition

Protein Calorie Malnutrition

- Malnutrition is defined as a **lack of** dietary intake to **adequately provide** for bodily maintenance and growth.
- A **BMI less than 18.5** or **5% or greater weight loss** in a short period of time **could** indicate the possibility of malnutrition.

The ASPEN Severity Scale for Diagnosis of Malnutrition

The ASPEN severity of malnutrition scale is based on **six** characteristics, and the patient **must meet two of the six**:

- Insufficient energy intake
- Weight loss
- Loss of muscle mass
- Loss of subcutaneous fat
- Localized or generalized fluid accumulation that may sometimes mask weight loss
- Diminished functional status as measured by hand grip strength

Clinical Documentation

1. Document subjective and objective findings that are consistent with the diagnosis of malnutrition.
2. Specify the time frame and context that denotes the patient's BMI decline.
3. Be specific with the description of the diagnosis, such as severe, moderate, or mild malnutrition.
4. The diagnosis of malnutrition should be consistent with an appropriate treatment and follow-up plan.

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Cachexia

Cachexia is a condition that causes extreme weight loss as well as muscle wasting.

- The name comes from two Greek words: kakos, meaning "bad," and hexis, meaning "condition."

The condition is a symptom or side effect of chronic conditions, such as:

- AIDS
- Cancer
- Chronic obstructive pulmonary disease (COPD)
- Chronic renal failure
- Congestive heart failure
- Crohn's disease
- Cystic fibrosis
- Rheumatoid arthritis



- ✓ Older individuals with "**failure to thrive**" syndrome may also develop cachexia.
 - According to one study, an estimated **5 million** Americans have the condition.

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HCC 22: Morbid Obesity

8% – 8.6%

#8 per MedPAC

Diagnosis Code	Description	7 ICD-10 Codes
□ HCC 22 0.250		
E66.01	Morbid (severe) obesity due to excess calories	
E66.2	Morbid (severe) obesity with alveolar hypoventilation	
Z68.41	Body mass index (BMI) 40.0-44.9 , adult	
Z68.42	Body mass index (BMI) 45.0-49.9 , adult	
Z68.43	Body mass index (BMI) 50-59.9 , adult	
Z68.44	Body mass index (BMI) 60.0-69.9 , adult	
Z68.45	Body mass index (BMI) 70 or greater , adult	

HEDIS: Adult Body Mass Index Assessment (ABA)

- Percentage of members ages 18–74 who had an outpatient visit and whose body mass index (BMI) was documented during the measurement year or the year prior to the measurement year.
- Plans: Commercial, Medicaid and Medicare
- Quality Program(s) Affected: CMS Star Ratings, CMS Quality Rating System, NCOA Accreditation, NCOA Health Plan Ratings

2020 ICD-10-CM Coding Instructions

- E66.01** Morbid (severe) obesity due to excess calories
- **Excludes 1:** morbid (severe) obesity with alveolar hypoventilation ([E66.2](#))

E66

Excludes1:
 adiposogenital dystrophy ([E23.6](#))
 lipomatosis NOS ([E88.2](#))
 lipomatosis dolorosa [Dercum] ([E88.2](#))
 Prader-Willi syndrome ([Q87.11](#))

Code first obesity complicating pregnancy, childbirth and the puerperium, if applicable ([O99.21-](#))

Use additional code to identify body mass index (BMI) ([Z68.-](#))

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Classification of Obesity

Obesity is defined and classified by both the United States Preventive Task Force and The National Institutes of Health and National Heart, Lung, and Blood Institute using the following classification:

Classification of Overweight and Obesity by BMI, Waist Circumference, and Associated Disease Risks

	BMI (kg/m ²)	Obesity Class	Disease Risk* Relative to Normal Weight and Waist Circumference	
			Men 102 cm (40 in) or less Women 88 cm (35 in) or less	Men > 102 cm (40 in) Women > 88 cm (35 in)
Underweight	< 18.5		-	-
Normal	18.5–24.9		-	-
Overweight	25.0–29.9		Increased	High
Obesity	30.0–34.9	I	High	Very High
	35.0–39.9	II	Very High	Very High
Extreme Obesity	40.0 +	III	Extremely High	Extremely High

* Disease risk for type 2 diabetes, hypertension, and CVD.

+ Increased waist circumference also can be a marker for increased risk, even in persons of normal weight.

Obesity is divided into three classes. The third class, extreme obesity, also called severe obesity, is synonymous with the term "morbid obesity" and is diagnosed based on a BMI of 40.0 or greater.

According to the NHLBI: A person with a BMI (body mass index) value of 40 or greater would be considered morbidly obese. An adult who has a BMI of 30 or higher is considered merely "obese." Grade 3 overweight (commonly called severe or morbid obesity) is a BMI greater than or equal to 40 kg/m².

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What if the BMI is Below 40?

- **Question:** When the BMI is below 40, but morbid obesity is documented by the anesthesiologist (no other documentation regarding the patient's obesity is recorded in the health record), is it appropriate to code morbid obesity or is a query recommended?
- **Answer:** Codes for overweight, obesity, or morbid obesity are assigned based on the provider's documentation of these conditions.
 - **Therefore, if morbid obesity is documented, assign code E66.01, Morbid (severe) obesity due to excess calories.**
 - While the BMI is used as a screening tool for patients who are overweight or obese, there is no coding rule that defines what BMI values correspond to obesity or morbid obesity, since the conditions are coded only when diagnosed and documented by the provider or another physician involved in the patient's care.

Coding Clinic, Fourth Quarter 2018, pp. 79–80

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HCC 23 #14 per MedPAC

HCC 23: Other Significant Endocrine and Metabolic Disorders

Diagnosis Code	Description	225 ICD-10 Codes
☐ HCC 23 0.194		
E21.0	Primary hyperparathyroidism	
E21.1	Secondary hyperparathyroidism, not elsewhere classified	
E21.3	Hyperparathyroidism, unspecified	
E24.2	Drug-induced Cushing's syndrome	
E24.4	Alcohol-induced pseudo-Cushing's syndrome	
E26.09	Other primary hyperaldosteronism	
E26.1	Secondary hyperaldosteronism	
N25.81	Secondary hyperparathyroidism of renal origin	

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Primary Hyperparathyroidism

FYI: Common (More than 200,000 cases per year in US)

Primary hyperparathyroidism is the most frequent **cause of hypercalcemia in ambulatory patients**, and is **most common in postmenopausal women**, although it can occur in persons of all ages, including pregnant women.

- In 85% of patients with primary hyperparathyroidism, the underlying cause is an adenoma in a single parathyroid gland

Diagnostic Criteria:

- Persistent **hypercalcemia** and an **elevated serum parathyroid hormone level** are the diagnostic criteria for primary hyperparathyroidism.

Symptoms:

- **Asymptomatic primary hyperparathyroidism accounts for 75% to 80% of cases.** Signs and symptoms that may be present but are not clearly associated with primary hyperparathyroidism include hypertension, left ventricular hypertrophy, valvular or myocardial calcification, peptic ulcer disease, pancreatitis, gout or pseudogout, normocytic normochromic anemia, weakness, easy fatigability, lassitude, anxiety, cognitive difficulties, somatic complaints, and clinical depression.

Treatment:

- **Parathyroidectomy** is the definitive treatment for primary hyperparathyroidism. When performed by experienced endocrine surgeons, the procedure has success rates of 90 to 95 percent and a low rate of complications.
 - ✓ Asymptomatic patients who decline surgery and meet criteria for medical management must commit to conscientious long-term monitoring. Any unexplained elevation of the serum calcium level should be evaluated promptly to prevent complications from hypercalcemia.

<https://www.aafp.org/afp/2004/0115/p333.html>

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Secondary And Tertiary Hyperparathyroidism

- **Secondary hyperparathyroidism** is the result of a physiologic or pathophysiologic parathyroid response to hypocalcemia in an attempt to maintain calcium homeostasis.
- The condition can occur because of vitamin D deficiency or low calcium intake. The serum PTH level is elevated, and the serum calcium level may be normal or low, because of a diet that is limited in vitamin D or calcium, or because of deficiency secondary to malabsorption.
- **In most instances, secondary hyperparathyroidism is caused by chronic renal failure**, which results in a low concentration of 1,25-dihydroxyvitaminD3 because of decreased renal production.

	Primary Hyperparathyroidism	Secondary Hyperparathyroidism	Tertiary Hyperparathyroidism
Calcium	↑	↓/N	↑
PTH	↑	↑	↑↑
Phosphate	↓	↑/N	↑

- **Tertiary hyperparathyroidism** occurs because of prolonged hypocalcemia (usually secondary to chronic renal failure) that causes parathyroid gland hyperplasia. Autonomous over-secretion of PTH by the parathyroid glands results in hypercalcemia.
- Whenever possible, the underlying cause of secondary hyperparathyroidism should be removed. The goal of medical management is to normalize calcium levels. Supplementation of vitamin D and calcium is necessary. Patients with end-stage renal disease also need phosphate binders to decrease hyperphosphatemia.

<https://www.aafp.org/afp/2004/0115/p333.html>

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Primary Hyperaldosteronism

E26.09 Primary hyperaldosteronism

- Hyperaldosteronism is a disorder in which the adrenal gland releases too much of the hormone aldosterone into the blood.
- Primary hyperaldosteronism is due to a problem of the adrenal glands themselves, which causes them to release too much aldosterone.
- Most cases of primary hyperaldosteronism are caused by a noncancerous (benign) **tumor of the adrenal gland**. The condition mostly affects people 30 to 50 years old.

Epidemiology

- **Primary hyperaldosteronism** can be seen in about 10% of hypertensive patients. However, some studies have shown an overestimation of cases. The prevalence of primary hyperaldosteronism has varied from 4.6 % to 16.6 % in different studies, depending on patient selection, diagnostic methods, and severity of hypertension.

Symptoms

Primary and secondary hyperaldosteronism have common symptoms, including:

- High blood pressure
- Low level of potassium in the blood
- Feeling tired all the time
- Headache
- Muscle weakness
- Numbness

<https://www.ncbi.nlm.nih.gov/books/NBK499983/>

<https://medlineplus.gov/ency/article/000330.htm>

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Secondary Hyperaldosteronism

E26.1 Secondary hyperaldosteronism

Any condition reducing renal perfusion can lead to secondary hyperaldosteronism.

Decreased blood flow to the kidneys results from:

- –impaired cardiac function in heart failure

Or

- –portal hypertension in cirrhosis

In both cases, secondary hyperaldosteronism (SHA) occurs due to the excess stimulation of the renin-angiotensin-aldosterone system RAAS.

Potential Treatment Options:

- Patients with secondary hyperaldosteronism may benefit from loop diuretics.
- Certain patients may benefit from aldosterone receptor blockade by spironolactone or eplerenone.
- Close monitoring for hyperkalemia is necessary

Secondary hyperaldosteronism **can be diagnosed** if one of the following is present:

- Class III or IV heart failure with or without edema
- Class I or II heart failure with edema or diuretic use/prescription
- Cirrhosis with ascites, edema or diuretic use/prescription
- Unexplained hypokalemia in the presence of cirrhosis or heart failure while not on a diuretic

*Secondary hyperaldosteronism is diagnosed less often than primary hyperaldosteronism and presents more frequently in women.

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CDI Tips for Secondary Hyperaldosteronism

- Document the **clinical findings** which lead to the diagnosis of the **primary condition** responsible for the aldosteronism and its status, **the diagnosis** (*secondary aldosteronism/hyperaldosteronism*), and a **plan of care**.
- *Secondary aldosteronism* and *secondary hyperaldosteronism* have the same code in ICD-10-CM (E26.1) so either may be documented.
- As with most secondary diagnoses due to an underlying primary condition, the **causal condition** should be **identified and documented, if known**.

Examples:

- Secondary aldosteronism (E26.1) due to heart failure (I50.9)
- Alcoholic cirrhosis of liver with ascites (K70.31) and secondary hyperaldosteronism (E26.1)
- Aldosteronism, secondary (E26.1) due to severe renal artery stenosis (I70.1)

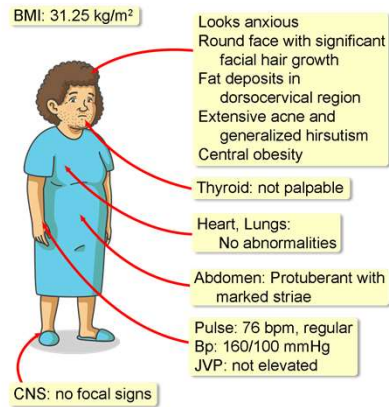
<https://www.uptodate.com/contents/use-of-mineralocorticoid-receptorantagonists-in-heart-failure-with-reduced-ejection-fraction>
http://www.heart.org/HEARTORG/Conditions/HeartFailure/AboutHeartFailure/Classes-of-Heart-Failure_UCM_306328_Article.jsp#.WMmGMofruUm

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Pseudo-Cushing's Syndrome

→ Some frequently occurring illnesses can induce a phenotype that largely overlaps with Cushing syndrome and is accompanied by hypercortisolism.

- **Alcohol-induced pseudo-Cushing's syndrome (E24.4)** refers to a reversible physiologic change of the hypothalamic-pituitary-adrenal axis resulting in hypercortisolism and caused by the consumption of excess alcohol.
- Other causes of pseudo-Cushing's syndrome include **depression** and **anorexia nervosa**. These latter two syndromes, however, are not associated with the clinical features of excess Cortisol secretion.
- The physical changes we associate with true Cushing's syndrome also occur when alcohol consumption is severe.



→ **Overuse of corticosteroids** can result in **drug-induced Cushing's syndrome (E24.2)**

While endogenous Cushing syndrome is a rare disease, iatrogenic (drug-related or exogenous) Cushing syndrome from glucocorticoid products is commonly seen in clinical practice. Widely used in diseases ranging from rheumatologic conditions such as **arthritis and lupus to asthma and myasthenia gravis**. Their immunosuppressive effects are used to prevent graft rejection in transplant patients and to help treat hematologic based cancers such as **leukemia and lymphoma**.

<https://csrf.net/doctors-articles/med-induced-cushings/medication-induced-cushings/>

<https://emedicine.medscape.com/article/124718-overview>

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Liver Disease and Hepatitis

Diagnosis Code	Description
<input type="checkbox"/> HCC 27 0.882	End Stage Liver Disease 14 ICD-10 Codes
I85.00	Esophageal varices without bleeding
I85.01	Esophageal varices with bleeding
K72.10	Chronic hepatic failure without coma
<input type="checkbox"/> HCC 28 0.363	Cirrhosis of Liver 10 ICD-10 Codes
K70.30	Alcoholic cirrhosis of liver without ascites
K70.9	Alcoholic liver disease, unspecified
<input type="checkbox"/> HCC 29 0.147	Chronic Hepatitis 11 ICD-10 Codes
B18.2	Chronic viral hepatitis C
K73.9	Chronic hepatitis, unspecified

* HCC 27 trumps HCC 28 and HCC 29

* HCC 28 trumps HCC 29

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Hepatitis

Hepatitis occurs when there is an inflammation of the liver due to a variety of different causes, such as:

- Drugs (e.g., alcohol or statin drugs)
- Infections (e.g., hepatitis A, B, or C; infectious mononucleosis; cytomegalovirus; tuberculosis; or HIV)
- Autoimmune diseases (e.g., lupus or other idiopathic illnesses)
- Other conditions (e.g., sarcoidosis or non-alcoholic steatohepatitis)

Alcoholic hepatitis refers to hepatitis that is due to alcohol.

ICD-10 Codes

- K70.10 without ascites
- K70.11 with ascites

Acute hepatitis C virus (HCV) infection becomes chronic in 70% - 85% of patients, which represents a high rate of chronicity for a viral infection. Most patients with chronic hepatitis C are asymptomatic or may have nonspecific symptoms such as fatigue or malaise in the absence of hepatic synthetic dysfunction.

Hepatitis viruses are the most common **cause of acute liver failure**, but drugs like acetaminophen and toxins such as carbon tetrachloride or Amanita mushrooms are also important causes. Complications of acute liver failure may include acid-base and electrolyte disorders, cerebral edema, and pulmonary edema. **Acute kidney injury commonly occurs in patients with acute liver failure.**

Coding and Documentation Tips for Hepatitis

- Document the type of hepatitis
- Document the acuity – chronic, acute, with/without hepatic coma, with/without delta agent
- Document behavior that led to the acquisition of hepatitis
- Refrain from using the term “History of” if a patient still has an active viral infection.
- Document treatment and follow up.
- For patients who have had a liver transplant, document and report the appropriate transplant status code and document any anti-rejection drugs if appropriate

<https://emedicine.medscape.com/article/177792-clinical>

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Chronic Hepatitis C HCC 29

FYI: This US medically insured HCV population is highly comorbid – with 99% reporting at least one comorbid condition.

Hepatitis C virus (HCV) infection is the **most common chronic bloodborne infection** in the United States. Most infected persons are younger than 50 years old, and almost half are unaware they are infected.

Comorbidities negatively affect the course and outcome of liver disease and many may significantly influence the response to antiviral therapy.

- The most important comorbidities **affecting the course** of chronic hepatitis C include hepatitis B virus coinfection, **metabolic syndrome**, and intestinal bacterial overgrowth.
- Comorbidities **affecting the course and response to therapy** include schistosomiasis, iron overload, **alcohol dependence**, and excessive smoking.
- Comorbidities **affecting response to antiviral therapy** include **depression**, anemia, **cardiovascular disease**, and **renal failure**.

Metabolic syndrome (MS)

- MS is a cluster of abnormalities, including obesity, insulin resistance, type 2 diabetes mellitus, dyslipidemia, and hypertension. Moreover, patients with chronic HCV infection have **increased prevalence of insulin resistance and of type 2 diabetes** compared with age-, sex-, and liver disease-matched controls.

Depression

- **Depression is significantly more prevalent** in chronically HCV-infected patients than in the general population, which negatively affect patients' functional health, ability to work, self-perceived health, health-related quality of life (HRQL) and well being.

Cardiomyopathy

- HCV RNAs were found in the hearts of patients with **cardiomyopathies**, and negative strands of HCV RNA were also detected in the hearts, suggesting that HCV replicates in myocardial tissues

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768876/>

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Cirrhosis

HCC 28

- Cirrhosis is **permanent** scarring of the liver due to chronic hepatitis. This can occur when a patient persistently consumes alcohol (resulting in alcoholic cirrhosis) or has ongoing chronic persistent or active hepatitis (e.g., from hepatitis C).
- It is estimated that up to 10% of all patients with NASH will progress to liver cirrhosis.

Other Manifestations of Cirrhosis

- All chronic liver diseases that progress to cirrhosis **have in common the histologic features of hepatic fibrosis and nodular regeneration**. However, the patients' signs and symptoms may vary, depending on the underlying etiology of the disease.
- As an example, patients with end-stage liver disease caused by hepatitis C may develop profound muscle wasting, marked ascites, and severe hepatic encephalopathy, with only mild jaundice.
- In contrast, patients with end-stage primary biliary cirrhosis may be deeply icteric, with no evidence of muscle wasting.

FYI: **Hepatic encephalopathy** (HE) is the second most common major complication in cirrhotics, following ascites

FYI: Common (More than 200,000 cases per year in US)



Alcoholic cirrhosis of liver

- K70.30 without ascites
- K70.31 with ascites

*Code Also, if applicable, viral hepatitis (acute) (chronic) (B15-B19)

CDI TIPS:

Correct coding for chronic liver disease is dependent on the physician documentation in the progress note.

- For example, it cannot be assumed that documented "cirrhosis" is due to alcoholism unless so specified in the medical record.

FYI: **Hepatocellular carcinoma** occurs almost exclusively in the setting of chronic liver disease and cirrhosis.

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Advanced Liver Disease

HCC 27

Symptoms characteristic of complications from advanced or decompensated liver disease are related to synthetic dysfunction and portal hypertension. These include mental status changes (hepatic encephalopathy), ankle edema and abdominal distention (ascites), and hematemesis or melena (variceal bleeding)

- **Portal hypertension** is nearly always present in chronic liver failure, resulting in esophageal varices, highly prone to severe hemorrhage. **Liver failure may also be complicated by chronic kidney disease (hepatorenal syndrome)**. Hepatocellular carcinoma occurs almost exclusively in the setting of chronic liver disease and cirrhosis. Acute on chronic liver failure represents a sudden hepatic decompensation in patients with pre-existing chronic liver disease.
- **Hepatic encephalopathy** (acute or chronic) is a syndrome observed in patients with cirrhosis or liver disease. Exposure to viruses or harmful chemicals or disease can harm the liver and when this happens, the organ cannot remove toxin from the blood. It is characterized by personality changes, intellectual impairment, and a depressed level of consciousness. Coma may or may not be present.

"Hepatic encephalopathy is not synonymous with hepatic coma"
AHA Coding Clinic, Second Quarter 2016, p. 35

- **Esophageal varices** are abnormal, enlarged veins in the tube that connects the throat and stomach (esophagus). Occurs most often in people with serious liver diseases. Develop when normal blood flow to the liver is blocked by a clot or scar tissue in the liver.



Type of Liver Failure	Category
Alcoholic	K70
Toxic	K71
Hepatic failure (unspecified)	K72
Chronic hepatitis (unspecified)	K73
Fibrosis and cirrhosis	K74

CDI TIPS for Liver Failure

- Many ICD-10 liver failure codes are **combination codes** that depend on the **acuity** and **cause** of liver failure, as well as the presence of cirrhosis, coma, and occasionally **ascites**.
- Documentation and coding should include as much specificity as possible, mentioning all related liver disorders and any complications.

FYI: According to the National Institutes of Health (NIH), **the most common cause of chronic liver failure is chronic alcohol abuse**. Another is nonalcoholic fatty liver disease, commonly occurring in obesity, type 2 diabetes, and hypertriglyceridemia, which may progress to the more serious nonalcoholic steatohepatitis.

<https://emedicine.medscape.com/article/177792-clinical>

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Medical Record Review

A/P: B18.2, Chronic Hep C
Story: Controlled, s/p Tx with Harvoni for 3 months, discussed with I&D provider states his viral load in not detectable.



A/P: I85.00, Esophageal varices without bleeding.
Story: EGD in 2018; negative, not on BB.
Impression: asymptomatic



A/P: K72.90, Hepatic encephalopathy
Story: On xifaxin
Impression: Continue to monitor ammonia levels will send for recent records.



Chronic Viral Hepatitis C, Liver Cirrhosis and Ascites

- For ascites due to liver cirrhosis and chronic viral hepatitis C assign **B18.2**, chronic viral hepatitis C, **K74.60**, unspecified cirrhosis of liver, and **R18.8**, other ascites
- Do not** assign K71.51, toxic liver disease with chronic active hepatitis with ascites **even though the Index directs coders there**
- This is another example of when coders are supposed to apply the rule that, "if the code indexed does not identify the condition correctly, then further research/review may be required"

AHA Coding Clinic – Q1 2018

Wherever appropriate, the provider should **link clinically relevant conditions** when documenting encephalopathy.

Examples of linking:

- ✓ Hepatic encephalopathy secondary to cirrhosis
- ✓ Alcoholic hepatic encephalopathy due to cirrhosis

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HCC 33: Intestinal Obstruction / Perforation

Diagnosis Code	Description	56 ICD-10 Codes
<input type="checkbox"/> HCC 33 0.219		
K25.1	Acute gastric ulcer with perforation	
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation	
K27.1	Acute peptic ulcer, site unspecified, with perforation	
K50.012	Crohn's disease of small intestine with intestinal obstruction	
K51.512	Left sided colitis with intestinal obstruction	
K56.41	Fecal impaction	
K56.51	Intestinal adhesions [bands], with partial obstruction	
K56.600	Partial intestinal obstruction, unspecified as to cause	

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HCC 34: Chronic Pancreatitis

Diagnosis Code	Description	2 ICD-10 Codes
<input type="checkbox"/> HCC 34 0.287		
K86.0	Alcohol-induced chronic pancreatitis	
K86.1	Other chronic pancreatitis	

CHRONIC PANCREATITIS

- Chronic pancreatitis is an irreversible and progressive disorder of the pancreas characterized by inflammation, fibrosis, and scarring. Exocrine and endocrine functions are lost, often leading to chronic pain.
- The etiology is multifactorial, although alcoholism is the most significant risk factor in adults. However, a subset of chronic pancreatitis is caused by autoimmune and genetic factors. Chronic pancreatitis is autoimmune in 5% to 6% of cases.

CLINICAL PRESENTATION

- Patients most commonly present with recurrent episodes of acute pancreatitis. This will often progress to chronic abdominal pain that is characteristically located in the epigastrium and radiates to the back.
- The average age at diagnosis is 35 to 55 years.

TABLE 6

Complications of Chronic Pancreatitis

Complication	Incidence (%)
Acute pancreatitis	Recurrent
Chronic pain	80 to 90
Osteoporosis or osteopenia	65
Diabetes mellitus	> 40
Weight loss	> 40
Pseudocyst	25 to 30
Pancreatic cancer	15 to 40
Malabsorption and steatorrhea	10 to 15
Bile duct, duodenal, or gastric obstruction	5 to 10
Pancreatic ascites or pleural effusion	< 10
Pseudoaneurysm, especially of splenic artery	< 1
Splenic or portal vein thrombosis	< 1
Vitamin deficiency (A, D,* E, K, and B ₁₂)	Rare

*—Vitamin D deficiency has recently been reported more often with pancreatic exocrine dysfunction.

Adapted with permission from Nair RJ, Lawler L, Miller MB. Chronic pancreatitis. *Am Fam Physician*. 2007;76(11):1668, with additional information from references 13, 55, and 60.

Additional content at
<http://www.aafp.org/afp/2018/0315/p385.html>.

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Medical Record Review

CC/HPI: Here for 6 month follow up. Doing well. Lost 3 pounds.

Meds: Simvastatin 10 mg,

PSH: Alcohol Consumption – never consumed

Exam: RRR. Lungs clear. No edema.

A/P:

- **E78.5 – Hyperlipidemia**
 - Labs today. Simvastatin refilled. Return in 6 months
- **Z71.41 – Alcohol abuse counseling and surveillance of alcoholic**
 - Continue AA meetings
- **K86.1 – Chronic pancreatitis**
 - Labs today

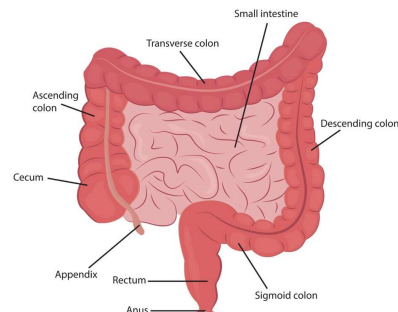


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HCC 35: Inflammatory Bowel Disease

Inflammatory bowel disease (IBD), which includes ulcerative colitis (UC), and Crohn's disease (CD), is a chronic, relapsing, and remittent intestinal inflammatory disorder affecting millions of people worldwide.

- IBS (irritable bowel syndrome) and IBD (inflammatory bowel disease) represent completely different conditions with different treatment, prognoses and expected costs.
- 25% of patients are diagnosed with IBD before 20 years of age.



Diagnosis Code	Description	77 ICD-10 Codes
----------------	-------------	-----------------

□ HCC 35 0.308

K50.90	Crohn's disease, unspecified, without complications
K50.911	Crohn's disease, unspecified, with rectal bleeding
K50.912	Crohn's disease, unspecified, with intestinal obstruction
K50.913	Crohn's disease, unspecified, with fistula
K50.914	Crohn's disease, unspecified, with abscess
K51.90	Ulcerative colitis, unspecified, without complications
K51.50	Left sided colitis without complications
K51.511	Left sided colitis with rectal bleeding
K51.20	Ulcerative (chronic) proctitis without complications

Inflammatory bowel disorders includes specific codes for:

- With and without **complications** as well as the **type** of complication (bleeding, obstruction, fistula, or abscess).
- Each is also stratified by **location**.
- **Crohn's** includes the small intestine, large intestine, both small and large intestine, and unspecified.
- **Ulcerative colitis** includes pancolitis, proctitis, and rectosigmoiditis.

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Inflammatory Bowel Disease in the Older Patient

- The incidence of IBD in older patients has been reported to be 10-15%.
- 10-30% of patients with IBD are over the age of 60
- Older-onset **ulcerative colitis** is more common than older-onset Crohn's disease, and **older men** have higher incidence rates of IBD than older women.
- Despite having milder disease and less progression, older patients with IBD are less likely to utilize IBD-specific outpatient care and **more likely to be hospitalized for IBD**.
- **Older age** is an independent risk factor for hospital **mortality in IBD-related** hospitalizations.
- Older patients who undergo surgery for IBD have **longer post-operative length of hospital stay** and may have **increased post-operative mortality**.

Patients with IBD are at a **two- to three-fold increased** risk of developing a venous thromboembolism (VTE). This risk increases significantly with age; there is a 20% increased risk of a venous thromboembolism for each increased decade in age.

Clinicians experience more difficulty diagnosing IBD in older patients, **leading to misdiagnosis and delayed diagnosis**.

- 60% of older patients with Crohn's disease are initially misdiagnosed, compared to 15% of younger patients.

Clinical Presentation of Crohn's Disease in Older Patients

- More likely to present with rectal bleeding without profound diarrhea, abdominal pain, fever, or weight loss.

Clinical Presentation of Ulcerative Colitis in Older Patients

- More likely to present with left-sided colitis rather than ulcerative proctitis or pancolitis, and often have milder symptoms of abdominal pain and rectal bleeding than younger patients.

<https://practicalgastro.com/wp-content/uploads/2019/07/Inflammatory-Bowel-Disease-in-the-Older-Patient.pdf>

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Crohn's Disease

Why does this diagnosis drop?

Most patients have active disease at the time Crohn's disease is diagnosed.

With medical and/or surgical treatment:

- About **50%** of patients will be in remission or have mild disease over the next 5 years
- **45%** of those in remission will remain relapse-free over the next year
- **35%** will have one or two relapses
- **11%** will have chronically active disease

For a Crohn's disease patient in **remission**, relapse rates at one, two, five, and ten years are estimated at 20%, 40%, 67%, and 76%, respectively.

Years in Remission	Relapse Rates
1 Year	20%
2 Year	40%
5 Years	67%
10 Years	76%

Crohn's:

- Bloody Stool: Variable
- ✓ Malnutrition: Common

Code also for openings

- ✓ **ileostomies and colostomies**

<http://www.crohnscolitisfoundation.org/assets/pdfs/updatedibdfactbook.pdf>

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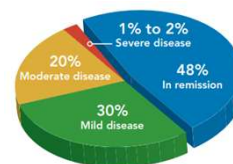
Ulcerative Colitis

Why does this diagnosis drop?

- **70%** of patients who have active disease in a given year will have another episode of active disease in the following year.
- Only **30%** of those in remission in a given year will have active disease in the following year.
- The **longer** a person with ulcerative colitis **remains in remission**, the **less likely** he or she is to experience a **flare-up** of the disease in the following year.

In a given year:

- **48%** of people with ulcerative colitis are in remission
- **30%** have mild disease activity
- **20%** have moderate disease activity
- **1% to 2%** have severe disease



<http://www.crohnscolitisfoundation.org/assets/pdfs/updatedibdfactbook.pdf>

Ulcerative Colitis:

- ✓ Bloody Stool: Common
- Malnutrition: Less Common

Code also for openings

- ✓ **ileostomies and colostomies**

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HCC 40: RA and Inflammatory Connective Tissue Disease

Diagnosis Code	Description	621 ICD-10 Codes
☐ HCC 40 0.421		
M05.9	Rheumatoid arthritis with rheumatoid factor , unspecified	
M06.00	Rheumatoid arthritis without rheumatoid factor , unspecified site	
M06.09	Rheumatoid arthritis without rheumatoid factor, multiple sites	
M06.9	Rheumatoid arthritis, unspecified	
M06.4	Inflammatory polyarthropathy	
M32.9	Systemic lupus erythematosus, unspecified	
M35.3	Polymyalgia rheumatica	
M46.1	Sacroiliitis, not elsewhere classified	

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Rheumatoid Arthritis

- ✓ The **indirect cost** of rheumatoid arthritis due to lost productivity has been estimated to be nearly **3 times greater** than the **costs associated with treating the disease**.
- ✓ A study from 2000 estimated that RA costs **\$5,720 per person** annually.
- ✓ Annual medication costs can reach **\$15,000 to \$20,000 per person** treated with a biologic agent.
- ✓ People with RA are **twice as likely to suffer from depression**, which may be due to decreased mobility and pain.
- ✓ RA **increases the risk of heart disease or stroke**, because it can attack the pericardium (lining of the heart), and cause inflammation through out the body.
 - Risk of heart attack is **60%** higher one year after being diagnosed with RA than it is without the disease.

<https://www.arthritis.org/Documents/Sections/About-Arthritis/arthritis-facts-stats-figures.pdf>

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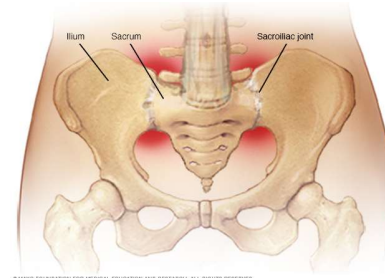
Sacroiliitis, Unspecified

Sacroiliitis is characterized by tenderness to palpation of the sacroiliac joint, pain that is reproduced with the **FABER** (Flexion, ABduction, External Rotation) test, and no pain with passive range of motion of the hips.

Symptoms

The pain associated with sacroiliitis most commonly occurs in the buttocks and lower back. It can also affect the legs, groin and even the feet. Sacroiliitis pain can be aggravated by:

- Prolonged standing
- Bearing more weight on one leg than the other
- Stair climbing
- Running
- Taking large strides



Diagnosis

Should be made by x-ray of pelvis.

Which must show

- Grade 2 Bilaterally or
- Grade 3 Unilaterally

Treatment (is evidence of diagnosis)

- Treatment for sacroiliitis is similar to that for other joint pain, including rest, anti-inflammatory medications, and possibly physical therapy.
- A number of additional treatments, including glucocorticoid injections, are used in patients who do not respond to conservative therapy.

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Bilateral Lower Sacroiliac DJD

Question:

A patient is diagnosed with bilateral lower sacroiliac degenerative joint disease (DJD). When referencing the Index to Diseases under Degenerative, joint disease, ICD-10-CM directs the coding professional to see "Osteoarthritis." However, the Index to Diseases does not specifically classify osteoarthritis (OA) of the sacroiliac joint. What is the appropriate code assignment for bilateral lower sacroiliac degenerative joint disease (DJD)?

Answer:

Assign code M46.1, Sacroiliitis, not elsewhere classified. DJD of the sacroiliac joint is caused by degeneration, leading to inflammation of the sacroiliac joint. Currently, the ICD-10-CM does not have a unique code for DJD of the sacroiliac joint; therefore, code M46.1 is the closest available alternative. The National Centers for Health Statistics has agreed to consider a future ICD-10 Coordination and Maintenance (C&M) proposal for creation of a new code for DJD/osteoarthritis of the sacroiliac joint.

AHA Coding Clinic 2nd Quarter 2020

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Hematological / Immunity Disorders

Diagnosis Code	Description	
☐ HCC 48 0.192	Coagulation Defects and Other Hematological Disorders	58 ICD-10 Codes
D57.3	Sickle-cell trait	
D68.59	Other Primary Thrombophilia	
D68.69	Other Thrombophilia	
D69.6	Thrombocytopenia, unspecified	
☐ HCC 47 0.665	Disorders of Immunity	60 ICD-10 Codes
D70.9	Neutropenia, unspecified	
☐ HCC 46 1.372	Severe Hematological Disorders	52 ICD-10 Codes
D46.9	Myelodysplastic syndrome, unspecified	

* HCC 46 trumps HCC 48 – HCC 47 is a stand-alone category

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Senile Purpura

- ➔ Senile purpura is common in patients over 65.
- ➔ These “spots” appear on sun-damaged forearms and dorsal hands, and are commonly referred to as solar, actinic, or Bateman purpura.
- ➔ They occur when minor trauma ruptures blood vessels and blood is extravasated into the dermis.
- ➔ These lesions are seen more frequently in patients taking anticoagulants, antiplatelet agents, or corticosteroids.
- ➔ The discoloration usually lasts 1-3 weeks and does not undergo color stages associated with a normal bruise. However, residual hyperpigmentation may persist.

- AAFP

- Purpura D69.2
 - nonthrombocytopenic D69.2
 - autoerythrocyte sensitization D69.2
 - Bateman's D69.2 (senile)
 - Devil's pinches D69.2
 - nonthrombopenic D69.2
 - red cell membrane sensitivity D69.2
 - senile D69.2
 - simplex D69.2



Exam:
SKIN: no suspicious lesions, warm and dry. Purple lesion on arms bl le.

Exam:
SKIN: no suspicious lesions, warm and dry, senile purpura noted UE b/l.

Assessment:
D69.2, Other nonthrombocytopenic purpura

Plan:
Sunscreen recommended

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Hypercoagulable State

- If chronic anticoagulation is used to prevent new clots, these likely treat a hypercoagulable state and should be documented.
- Hypercoagulable state is a Comorbidity/Complication (CC) and Hierarchical Condition Category (HCC)
- Helps reflect the severity of illness in patients.

- Hypercoagulable (state) D68.59
 - └ antithrombin D68.59 (III)
 - └ primary NEC D68.59
 - └ protein C deficiency D68.59
 - └ protein S deficiency D68.59
- Hypercoagulation D68.59 (state)
- Thrombophilia D68.59
 - └ primary NEC D68.59
- Hypercoagulable (state) D68.59
 - └ secondary D68.69
 - └ specified NEC D68.69
- Thrombophilia D68.59
 - └ secondary NEC D68.69
 - └ specified NEC D68.69

Primary Hypercoagulable States:

- ✓ Factor V Leiden
- ✓ Protein C deficiency
- ✓ Protein S deficiency
- ✓ AT3 deficiency

Secondary Hypercoagulable States:

- ✓ Active Cancer
- ✓ Chemotherapy
- ✓ Myeloproliferative disorders
- ✓ HIT
- ✓ Nephrotic syndrome
- ✓ Oral contraceptives
- ✓ Sickle cell disease / crisis
- ✓ Pregnancy / Postpartum
- ✓ Wegener granulomatosis
- ✓ DIC
- ✓ Estrogen receptor modulators (tamoxifen, raloxifene)
- ✓ Antiphospholipid antibodies
- ✓ Testosterone therapy

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HCC 51, 52, 75 and 79 Dementia, Neuropathy, Polyneuropathy and Seizures

*Based on 2020 Community, Non-Dual, Aged
 ** Based on 2020 Hillsborough County, FL Rate (3.5% Bonus)

Translating Clinical Documentation to Risk...

Clinical Documentation	ICD-10 Code	HCC Category	RAF	Value (3.5 % Bonus- Aged)
“neuropathy”	G62.9	n/a	n/a	n/a
“alcoholic polyneuropathy”	G62.1	HCC 75	0.472	\$4,882.88
“polyneuropathy due to vitamin B deficiency”	G63	HCC 75	0.472	\$4,882.88
“myasthenia gravis”	G70.00	HCC 75	0.472	\$4,882.88
“dementia without complication”	F03.90	HCC 52	0.346	\$4,060.03
“dementia with behavioral disturbance”	F03.91	HCC 51	0.346	\$4,060.03
“age related age-related cognitive decline”	R41.81	n/a	n/a	n/a

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HCC 51 and 52: Dementia

Diagnosis Code	Description	
<input type="checkbox"/> HCC 52 0.346	Dementia without Complications	44 ICD-10 Codes
F01.50	Vascular dementia without behavioral disturbance	
F03.90	Unspecified dementia without behavioral disturbance	
G30.0	Alzheimer's disease with early onset	
G30.9	Alzheimer's disease, unspecified	
G31.1	Senile degeneration of brain, not elsewhere classified	
G31.2	Degeneration of nervous system due to alcohol	
<input type="checkbox"/> HCC 51 0.346	Dementia with Complications	10 ICD-10 Codes
F01.51	Vascular dementia with behavioral disturbance	

Section F01-F09 — Mental disorders due to known physiological conditions

F03 Unspecified Dementia

Excludes1

- senility NOS (R41.81)

Excludes2:

- mild memory disturbance due to known physiological condition (F06.8)
- senile dementia with delirium or acute confusional state (F05)

Section G30-G32 — Other degenerative diseases of the nervous system

G30 Alzheimer's disease

Use Additional code to identify:

- delirium, if applicable (F05)
- dementia with behavioral disturbance (F02.81)
- dementia without behavioral disturbance (F02.80)

Excludes1:

- senile degeneration of brain NEC (G31.1)
- senile dementia NOS (F03)
- senility NOS (R41.81)

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HCC 51 and HCC 52: Dementia

Dementia is the loss of **cognitive functioning**—thinking, remembering, and reasoning—and **behavioral abilities** to such an extent that it interferes with a person's daily life and activities.

Alzheimer's disease is the **most common** cause of a progressive dementia in older adults, but there are a number of causes of dementia. Depending on the cause, some dementia symptoms may be reversible.

Vascular dementia. This **second most common** type of dementia is caused by damage to the vessels that supply blood to your brain. Blood vessel problems can cause strokes or damage the brain in other ways, such as by damaging the fibers in the white matter of the brain. The most common symptoms of vascular dementia include difficulties with problem-solving, slowed thinking, focus and organization. These tend to be more noticeable than memory loss.

According the AAFP: The cumulative incidence of Alzheimer's disease has been estimated to be as high as:

- 4.7% by age 70
- 18.2% by age 80
- 49.6% by age 90.1

Risk factors for dementia include:

- Family history of dementia, previous head injury, lower educational level and female sex

MMSE is commonly used to assess cognitive function

<https://www.nia.nih.gov/health/what-dementia-symptoms-types-and-diagnosis>

<https://www.mayoclinic.org/diseases-conditions/dementia/symptoms-causes/syc-20352013>

<https://www.aafp.org/afp/2001/0215/p703.html>

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Medical Record Review

— G31.84, Mild Cognitive Impairment – Continue Donepezil (Aricept)

Other common medication:

- Memantine (Namenda)
- Rivastigmine (Exelon)

Code to the highest degree of specificity...

Code for all conditions that affect the care, management and treatment of the patient....

- F03.90, Dementia without behavioral disturbance
- F33.0, MDD, recurrent, mild
- E44.1, Protein calorie malnutrition
- I69.334, Monoplegia L upper arm s/p CVA
- D96.2, Senile purpura
- F10.21, Alcoholism in remission
- I70.201, Atherosclerosis of the R LLE



HCC 52, HCC 59, HCC 23, HCC 104, HCC 48, HCC 55, HCC 108

7 Payment HCCs = 0.126

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HCC 55 Substance Use Disorder Moderate or Severe

Diagnosis Code	Description	309 ICD-10 Codes
<input type="checkbox"/> HCC 55 0.329		
F10.20	Alcohol dependence, uncomplicated	
F10.21	Alcohol dependence, in remission	
F10.94	Alcohol use , unspecified with alcohol-induced mood disorder	
F11.93	Opioid use , unspecified with withdrawal	
F13.930	Sedative, hypnotic or anxiolytic use , unspecified with withdrawal, uncomplicated	
F13.939	Sedative, hypnotic or anxiolytic use , unspecified with withdrawal, unspecified	
F14.21	Cocaine dependence , in remission	

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HCC 56

Substance Use Disorder, Mild, Except Alcohol and Cannabis

Diagnosis Code	Description	14 ICD-10 Codes
<input type="checkbox"/> HCC 56 0.329		
F11.10	Opioid abuse, uncomplicated	
F11.11	Opioid abuse, in remission	
F13.10	Sedative, hypnotic or anxiolytic abuse, uncomplicated	
F13.11	Sedative, hypnotic or anxiolytic abuse, in remission	
F14.10	Cocaine abuse, uncomplicated	
F14.11	Cocaine abuse, in remission	
F15.10	Other stimulant abuse, uncomplicated	
F15.11	Other stimulant abuse, in remission	

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DSM 5 - Substance Use Disorders

The DSM 5 recognizes substance-related disorders resulting from the use of 10 separate classes of drugs:

1. Alcohol
2. Caffeine*
3. Cannabis
4. Hallucinogens
5. Inhalants
6. Opioids
7. Sedatives, Hypnotics, or Anxiolytics
8. Stimulants (including amphetamine-type substances, cocaine, and other stimulants)
9. Tobacco
10. Other Or Unknown Substances.

*Substance use disorder does not apply to caffeine.

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Substance Use, Abuse and Dependence

Dependence:

- Opioid F11
- Cannabis F12
- Sedative F13
- Cocaine F14
- Other Stimulant F15
- Hallucinogen F16
- Inhalant F18
- Other psychoactive substance F19

Findings of **physical** withdrawal:

- Sweating
- Racing heart
- Palpitations
- Muscle tension
- Tightness in the chest
- Difficulty breathing
- Tremors
- Nausea, vomiting or diarrhea
- Grand mal seizures
- Heart attacks
- Strokes
- Hallucinations
- Delirium tremors (DT)

Findings of **emotional** withdrawal:

- Anxiety
- Restlessness
- Irritability
- Insomnia
- Headaches
- Poor concentration
- Depression
- Social isolation

Clinical documentation:

The provider must state:

- Pattern of harmful usage (dependence, abuse or use)
- Current clinical state (uncomplicated, intoxication, remission, ect.)
- Indicate the relationship to any identified mental, behavioral or physical disorder
- Relevance to the patient’s status or encounter including its clinical significance

Substance Use / Abuse

With

- Anxiety Disorder
- Mood Disorder
- Psychosis
- Sexual Dysfunction
- Sleep Disorder

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Opioid Use Disorder	MILD	Heroin, Hydrocodone (Narco, Vicodin), Oxycodone (OxyContin, Percocet), Morphine, Hydromorphone (Dilaudid), Codeine (cough syrup), Meperidine (Demerol), Fentanyl, etc.	F11.10
	MODERATE		F11.20
	SEVERE		F11.20
Alcohol Use Disorder	MILD	Beer, liquor, etc.	F10.10
	MODERATE		F10.20
	SEVERE		F10.20
Cannabis Use Disorder	MILD	Marijuana and marijuana-related products	F12.10
	MODERATE		F12.20
	SEVERE		F12.20
Stimulant Use Disorder- Amphetamine-Type Substance	MILD	Methamphetamine (crystal meth, crank, speed, tweek, glass, etc.)	F15.10
	MODERATE		F15.20
	SEVERE		F15.20
Stimulant Use Disorder- Cocaine	MILD	Cocaine (coke, blow, snow, etc.)	F14.10
	MODERATE		F14.20
	SEVERE		F14.20
Sedative, Hypnotic, or Anxiolytic Use Disorder	MILD	Benzodiazepines (Xanax [alprazolam], Ativan [lorazepam], Valium [diazepam], Klonopin [clonazepam]) Barbiturates (Pentobarbital, Secobarbital, etc.) Z-drugs (Ambien [zolpidem], Lunesta [eszopiclone], Sonata [zaleplon], Imrest [zopiclone], etc.)	F13.10
	MODERATE		F13.20
	SEVERE		F13.20
Other Hallucinogen Use Disorder	MILD	LSD (acid), Ecstasy (MDMA), Ketamine, magic mushrooms (Psilocybin), Peyote (Mescaline), etc.	F16.10
	MODERATE		F16.20
	SEVERE		F16.20
Stimulant Use Disorder- Other or Unspecified Stimulant	MILD	Ritalin (methylphenidate), Adderall (dextroamphetamine/ amphetamine), Vyvanse (lisdexamfetamine), etc.	F15.10
	MODERATE		F15.20
	SEVERE		F15.20

Substance Use Disorders to ICD-10 Crosswalk

Severity Levels:

1. Mild – 2 to 3 symptoms
2. Moderate – 4 to 5 symptoms
3. Severe – 6 or more symptoms

ICD-10 CM

Dependence

- caffeine – see Dependence, drug stimulant NEC (F15.2--)

Other Stimulant Dependence
F15.20, requires 4 or more symptoms

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Recreational Marijuana Use

Question:

Should recreational marijuana use be coded when documented by the patient's provider?

Answer:

No, a code for the marijuana use is not assigned unless the provider documents an associated physical, mental, or behavioral disorder in accordance with Guideline I.C.5.b.3.

This guideline states "As with all other diagnoses, the codes for psychoactive substance use (F10.9-, F11.9-, F12.9-, F13.9-, F14.9-, F15.9-, F16.9-) should only be assigned based on provider documentation and when they meet the definition of a reportable diagnosis (see Section III, Reporting Additional Diagnoses).

The codes are to be used only when the psychoactive substance use is associated with a physical, mental or behavioral disorder, and such a relationship is documented by the provider."

– AHA Coding Clinic 2018 2nd Quarter, page 11

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Prescription Pain Medicine

Question:

Medical record documentation indicates the patient is taking opioids prescribed by their physician for treatment of chronic pain. Does Guideline I.C.5.b.3. mean that codes cannot be assigned for the opioid use unless there is documentation of an associated physical, mental or behavioral disorder?

Answer:

A code for the use of prescription opiates would not be reported because there is no associated physical, mental or behavioral disorder.

– AHA Coding Clinic 2018 2nd Quarter, pages 11 and 12

- For patients with **properly managed, prescribed opioid use without OUD**, ICD-10-CM code **Z79.891** for therapeutic long-term (current) use of opioid analgesics may be assigned.

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Opioid Induced Constipation

CC/HPI:

Complains of chronic constipation due to pain medicine. Miralax not working.

ROS:

Gastrointestinal: Abdominal pain admits. Constipation admits. Diarrhea denies. Heartburn denies. Nausea denies.

Assessment:

- K59.03 - Drug induced constipation
- T40.2X5A - Adverse effect of other opioids, initial encounter
- F11.988 - Opioid use, unspecified with other opioid-induced disorder

K59 Other functional intestinal disorders

Excludes1

- change in bowel habit NOS (**R19.4**)
- intestinal malabsorption (**K90.-**)
- psychogenic intestinal disorders (**F45.8**)

Excludes2

- functional disorders of stomach (**K31.-**)

K59.0 Use additional code for adverse effect, if applicable, to identify drug (T36 – T50)

Section T36-T50 — Poisoning by, adverse effects of and underdosing of drugs, medicaments and biological substances

Code first for adverse effects, the nature of the adverse effect, such as:

- adverse effect NOS (**T88.7**)
- aspirin gastritis (**K29.-**)
- blood disorders (**D56-D76**)
- contact dermatitis (**L23-L25**)
- dermatitis due to substances taken internally (**L27.-**)
- nephropathy (**N14.0-N14.2**)

Includes:

- adverse effect of correct substance properly administered
- poisoning by overdose of substance

Excludes1

- toxic reaction to local anesthesia in pregnancy (**O29.3-**)

Excludes2

- abuse and dependence of psychoactive substances (F10-F19)**
- abuse of non-dependence-producing substances (**F55.-**)
- drug reaction and poisoning affecting newborn (**P00-P96**)
- pathological drug intoxication (inebriation) (**F10-F19**)

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FOR IMMEDIATE RELEASE

Wednesday, September 30, 2020

National Health Care Fraud and Opioid Takedown Results in Charges Against 345 Defendants Responsible for More than \$6 Billion in Alleged Fraud Losses

Largest Health Care Fraud and Opioid Enforcement Action in Department of Justice History



Cases Involving the Illegal Prescription and/or Distribution of Opioids And Cases Involving Traditional Health Care Fraud Schemes

- Also included are charges against medical professionals and others involved in the distribution of more than 30 million doses of opioids and other prescription narcotics.



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Diagnostic Criteria for Sedative, Hypnotic and Anxiolytic Use Disorder

- ✓ The diagnosis **requires at least 2** of the following criteria.
- ✓ **Severity** is determined by the number of criteria met.
- Continuing to use a substance, in this case a barbiturate, benzodiazepine or other sedative-hypnotic, despite negative personal consequences.
- Repeated inability to carry out major functions at work, school or home on account of use.
- Recurrent use in physically hazardous situations
- Continued use despite recurrent or persistent social or interpersonal problems caused or made worse by use.
- Tolerance, as manifested by needing a markedly increased dose to achieve intoxication or desired effect, or by markedly diminished effect with continued use of the same amount.
- Withdrawal with the characteristic symptoms or use of the drug to avoid withdrawal.
- Using more of the drug or using for a longer period than intended.
- Persistent desire to cut down use, or unsuccessful attempts to control use.
- Spending a lot of time obtaining or using the substance or recovering from use.
- Stopping or reducing important occupational, social or recreational activities due to use.
- Craving or strong desire to use.

Severity Levels:

1. Mild – 2 to 3 symptoms (F13.10, Sedative, hypnotic or anxiolytic abuse)
2. Moderate – 4 to 5 symptoms (F13.20, Sedative, hypnotic or anxiolytic dependence)
3. Severe – 6 or more symptoms (F13.20, Sedative, hypnotic or anxiolytic dependence)

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Alcohol Use Disorder

DSM-5 Diagnostic Criteria for AUD

A problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

1. Alcohol is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
3. A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.
4. Craving, or a strong desire or urge to use alcohol.
5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home.
6. Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
7. Important social, occupational, or recreational activities are given up or reduced because of alcohol use.
8. Recurrent alcohol use in situations in which it is physically hazardous.
9. Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
10. Tolerance, as defined by either of the following:
 - a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.
 - b. A markedly diminished effect with continued use of the same amount of alcohol.
11. Withdrawal, as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for alcohol.
 - b. Alcohol (or a closely related is taken to relieve or avoid withdrawal symptoms.

DSM-5 Criteria	Severity	ICD-10 Code	ICD-10 Description
Presence of 2-3 symptoms	Mild	F10.10	Alcohol abuse, uncomplicated
Presence of 4-5 symptoms	Moderate	F10.20	Alcohol dependence, uncomplicated
Presence of 6 or more symptoms	Severe	F10.20	Alcohol dependence, uncomplicated

Alcohol Dependence in Remission

ICD-10-CM classifies a “history of” alcohol abuse or dependence as in remission.

The DSM-5 defines remission as the absence of any AUD diagnostic criteria (other than craving/desire/urge for alcohol) for at least three months.

Alcohol is a necessary underlying cause for more than 30 conditions and a contributing factor to many more.

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Medical Record Review...

John is in today for a routine follow up.

BP is better today. Recent CBC done. Platelet count down to 98. Continues to drink daily despite known cirrhosis. Canceled last GI appointment and has not rescheduled. Complaining today of burning and tingling in his feet. Recently saw the neurologist who diagnosed him with alcoholic polyneuropathy. States gabapentin helps with pain. Requesting refills.

Assessment and Plan:

- Hypertension, refill Amlodipine
- Hyperlipidemia, refill Simvastatin
- Polyneuropathy, refill gabapentin

ICD-10 Code	HCC Category	RAF
K70.30	HCC 28	0.363
F10.20	HCC 55	0.329
G62.1	HCC 75	0.472
D69.6	HCC 48	0.192

- Cirrhosis – Will assist patient with scheduling follow up appointment w/ GI today
- Alcohol Dependence – Sobriety again urged. AA strongly encouraged.
- Alcoholic polyneuropathy – refill gabapentin. Keep follow up with neurologist.
- Thrombocytopenia – stable, last platelet count was 110

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HCC 59: Major Depressive Disorder

DSM-IV Criteria for Major Depressive Disorder (MDD)

- ☞ Depressed mood or a loss of interest or pleasure in daily activities for **more than two weeks**.
- ☞ Mood represents a **change** from the person's baseline.
- ☞ **Impaired functioning:** social, occupational, educational.
- ☞ Specific **symptoms, at least 5 of these 9, present nearly every day:**
 - 1. Depressed mood or irritable most of the day, nearly every day,
 - 2. Decreased interest or pleasure in most activities, most of each day
 - 3. Significant weight change (5%) or change in appetite
 - 4. Change in sleep: Insomnia or hypersomnia
 - 5. Change in activity: Psychomotor agitation or retardation
 - 6. Fatigue or loss of energy
 - 7. Guilt/worthlessness: Feelings of worthlessness or excessive or inappropriate guilt
 - 8. Concentration: diminished ability to think or concentrate, or more indecisiveness
 - 9. Suicidality: Thoughts of death or suicide, or has suicide plan

Clinician Documentation Checklist:

- Single or recurrent episode
- Current degree of depression
- Presence of symptoms
- Remission status
- Treatment plan

Treatment May Include:

- Psychotherapy
- Medications

Clinical Documentation

History and ROS may include:

- Interview of patient with no physical findings
- Fatigue
- Sleeping problems
- Loss of appetite or overeating
- Depressed mood that is frequent, persistent and sad
- Frequent or persistent intense feeling
- Suicidal thoughts

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Major Depressive Disorder – Single Episode

F32 – Major Depressive Disorder, **single** episode

- ◆ A **single episode** of a major depressive disorder lasts a **minimum of 2 weeks** with **persistent symptoms throughout the day**.
- ◆ An individual can only have **1** single depressive episode during his or her **lifetime**.

Single Episode, In Remission -

- ◆ One MDD episode in the past, but **has been free from depressive symptoms for several months**.
- ◆ Can still be used if the patient is receiving treatment to reduce the risk of further episodes.
- ◆ Coding is based on provider's documentation.

Major Depression (Single Episode)	ICD-10	HCC
Major depressive disorder, single episode, in full remission	F32.5	59
Major depressive disorder, single episode, in partial remission	F32.4	59
Major depressive disorder, single episode, mild	F32.0	59
Major depressive disorder, single episode, moderate	F32.1	59
Major depressive disorder, single episode, severe with psychotic features	F32.3	59
Major depressive disorder, single episode, severe without psychotic features	F32.2	59

HCC 59

0.309 RAF

- ▶ **Code** selection is based on **episode, severity** (mild, moderate, severe) and **status**.

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Major Depressive Disorder – Recurrent Episode

F33 – Major Depressive Disorder, **recurrent** episode

- ◆ A recurrent depressive disorder is characterized by **repeated** episodes of depression **without any history** of independent episodes of mood elevation and increased energy or mania. (At no time in the past has there been any hypomanic or manic episodes.)
- ◆ There has been **at least 1 previous episode** lasting a **minimum of 2 weeks** and **separated by the current episode by at least 2 months**

Recurrent Episode, In Remission -

- ◆ Two or more MDD episodes in the past, but **has been free from depressive symptoms for several months**.
- ◆ Can still be used if the patient is receiving treatment to reduce the risk of further episodes.
- ◆ Coding is based on provider's documentation.

HCC 59
0.309 RAF

Major Depression (Recurrent)	ICD-10	HCC
Major depressive disorder, recurrent, mild	F33.0	59
Major depressive disorder, recurrent, moderate	F33.1	59
Major depressive disorder, recurrent severe without psychotic features	F33.2	59
Major depressive disorder, recurrent, severe with psychotic symptoms	F33.3	59
Major depressive disorder, recurrent, in full remission	F33.42	59
Major depressive disorder, recurrent, in partial remission	F33.41	59
Major depressive disorder, recurrent, in remission, unspecified	F33.40	59
Major depressive disorder, recurrent, unspecified	F33.9	59

- ▶ **Code** selection is based on **episode, severity** (mild, moderate, severe) and **status**.

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Risk Adjustment Validation...

<https://oig.hhs.gov/oas/reports/region7/71001082.pdf>

The documentation that CIGNA submitted to us did not support the diagnoses associated with 53 HCCs.

For 4 of the 53 HCCs, our medical reviewer determined other diagnoses to be more appropriate. In these instances, the documentation supported HCCs that were different from those that CMS used in determining the beneficiaries' risk scores.

The following are examples of HCCs that were not supported by CIGNA's documentation.

For a second beneficiary, CIGNA submitted the diagnosis code for "major depressive disorder, recurrent episode, moderate." CMS used the HCC associated with this diagnosis in calculating the beneficiary's risk score. Although the documentation that CIGNA provided stated that the patient suffered from panic attacks and depression, the documentation did not distinguish between single or recurrent episodes; nor did it specify the onset, duration, or severity of the illness. The documentation supported a code for Depression, F32.9 which does not have an associated HCC.

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Risk Adjustment Data Validation

The documentation that PacifiCare (Texas) submitted to us for medical review did not support the diagnoses associated with 57 HCCs.

The following is an example of HCCs that were not supported by PacifiCare's documentation.

- For one beneficiary, PacifiCare (Texas) submitted the diagnosis code for "major depressive disorder, recurrent episode, moderate." CMS used the HCC associated with this diagnosis in calculating the beneficiary's risk score. However, the documentation that PacifiCare provided stated that the patient had complained of leg pain and difficulty walking. The documentation did not indicate that depression had affected the care, treatment, or management provided during the encounter.

<https://oig.hhs.gov/oas/reports/region6/60900012.pdf>

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HCC 75: Myasthenia Gravis, Guillain-Barre Syndrome and Inflammatory Neuropathy

Diagnosis Code	Description	52 ICD-10 Codes
HCC 75 0.472		
G61.81	Chronic inflammatory demyelinating polyneuritis	
G61.9	Inflammatory polyneuropathy, unspecified	
G62.0	Drug-induced polyneuropathy	
G62.82	Radiation-induced polyneuropathy	
G63	Polyneuropathy in diseases classified elsewhere	
G70.00	Myasthenia gravis without (acute) exacerbation	
G70.01	Myasthenia gravis with (acute) exacerbation	

Section G60-G65 —
 Polyneuropathies and Other Disorders of the Peripheral Nervous System

Excludes1 (G60 – G65)

- neuralgia NOS (M79.2)
- neuritis NOS (M79.2)
- peripheral neuritis in pregnancy (O26.82-)
- radiculitis NOS (M54.10)

G63 Polyneuropathy in diseases classified elsewhere

Code first underlying disease, such as:

- amyloidosis (E85.-)
- endocrine disease, except diabetes (E00-E07, E15-E16, E20-E34)
- metabolic diseases (E70-E88)
- neoplasm (C00-D49)
- nutritional deficiency (E40-E64)

Excludes1:

- polyneuropathy (in):
- diabetes mellitus (E08-E13 with .42)
- diphtheria (A36.83)
- infectious mononucleosis (B27.0-B27.9 with 1)
- Lyme disease (A69.22)
- mumps (B26.84)
- postherpetic (B02.23)
- rheumatoid arthritis (M05.5-)
- scleroderma (M34.83)
- systemic lupus erythematosus (M32.19)

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Medical Record Review

HPI:

34 year-old female with bilateral upper and lower extremity paresthesia, elevated TSH. Hypothyroid-associated peripheral neuropathy.

Assessment:

G63 – Polyneuropathy in diseases classified elsewhere
 E03.9 – Hypothyroidism, unspecified

Plan:

Will start work up.



HPI:

60 year-old male with bilateral lower extremity paresthesia due to sciatica (radiculopathy), improving.

Assessment:

G63 – Polyneuropathy in diseases classified elsewhere
 M54.30 – Sciatica, unspecified side
 M54.10 – Radiculopathy, site unspecified

Plan:

Will start work up.



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HCC 78 Parkinson's and Huntington's Disease

Diagnosis Code	Description	15 ICD-10 Codes
☐ HCC 78 0.606		
G10	Huntington's disease	
G20	Parkinson's disease	
G90.3	Multi-system degeneration of the autonomic nervous system	

Orthostatic Hypotension (OH)

- OH can be divided into 2 pathophysiological subtypes: neurogenic and non-neurogenic.
- Neurogenic OH (G90.3)** is due to impairment of baroreflex-mediated vasoconstriction of the skeletal muscle and splanchnic circulation and is caused by damage or dysfunction at central and/or peripheral sites in the baroreflex efferent pathway.
- Epidemiologic studies suggest that **OH in elderly patients increases the risk of** frequent falling, syncope, chronic kidney disease, stroke, HF, coronary events, and all-cause mortality.

ICD-10-CM Tabular Index

Hypotension (arterial) (constitutional) I95.9
 - orthostatic (chronic) I95.1
 • due to drugs I95.2
 • **neurogenic, orthostatic G90.3**

Primary neurogenic causes:

- Sympathetic noradrenergic denervation
 - PD
 - PAF
 - Lewy body dementia
 - Familial dysautonomia

Secondary neurogenic causes:

- Peripheral neuropathies
 - Diabetes mellitus
 - Alcoholic polyneuropathy
 - Amyloidosis
 - Guillain-Barré syndrome
 - HIV/AIDS
 - Paraneoplastic
 - Renal failure/post-hemodialysis
 - Vitamin B12 or folate deficiency

DOI: <https://doi.org/10.1016/j.jacc.2018.05.079>

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HCC 79: Seizure Disorders and Convulsions

270 ICD-10 Codes in 2019, -219 ICD-10 Codes 2020

Diagnosis Code	Description	51 ICD-10 Codes
☐ HCC 79 0.220		
G40.209	Partial complex seizures	
G40.309	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, without status epilepticus	
G40.802	Other epilepsy, not intractable, without status epilepticus	
G40.89	Other seizures	
G40.909	Epilepsy, unspecified, not intractable, without status epilepticus	
R56.1	Post traumatic seizures	
R56.9	Unspecified convulsions	

Intractable migraine, also referred to as status migraine or status migrainosus, is a severe migraine that has continued for greater than 72 hours and has been refractory to usual therapies for migraine.

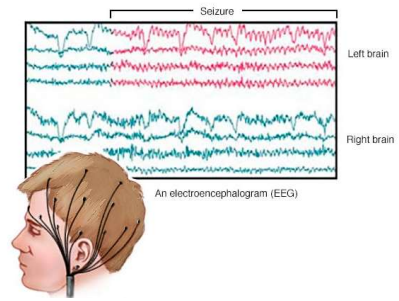
Status Epilepticus is defined as a seizure with 5 minutes or more of continuous clinical and/or electrographic seizure activity or recurrent seizure activity without recovery between seizures.

<https://www.ncbi.nlm.nih.gov/books/NBK482269/>

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Seizure Disorders and Convulsions

- **Seizures** are episodes of abnormal electrical brain activity that cause changes in attention or behavior.
- The term “convulsions” may be used interchangeably with seizures, but during a convulsion, the body rapidly and uncontrollably shakes.
- **Epilepsy** is a brain disorder in which a person has repeated seizures. **Epilepsy may be diagnosed when the patient has two or more unprovoked seizures.**



According to the American Epilepsy Society, **1 in 26 people** will develop epilepsy or recurring seizures in their lifetime.

The signs and symptoms of a seizure can vary greatly and may be mild to severe, depending on the type of seizure.

Seizures are usually classified as either focal (or partial) or generalized, depending on the part of the brain effected.

Typical symptoms of a seizure may include:

- Loss of awareness or consciousness
- Temporary confusion
- Staring
- Uncontrollable movements of the legs and arms

The **risk of seizure recurrence** is greatest within the first 2 years (21% to 45%) and this risk may be mitigated with the initiation of medications.

- Levetiracetam (Keppra)
- Carbamazepine (Carbatrol, Tegretol, others)
- Phenytoin (Dilantin, Phenytek)
- Valproic acid (Depakene)
- Oxcarbazepine (Oxtellar, Trileptal)
- Gabapentin (Gralise, Neurontin)
- Topiramate (Topamax)

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HCC 84 Cardio-Respiratory Failure and Shock

Diagnosis Code	Description	27 ICD-10 Codes
<input type="checkbox"/> HCC 84 0.282		
I46.9	Cardiac arrest, cause unspecified	
I49.01	Ventricular fibrillation	
I49.02	Ventricular flutter	
J96.00	Acute respiratory failure, unspecified whether with hypoxia or hypercapnia	
J96.01	Acute respiratory failure with hypoxia	
J96.02	Acute respiratory failure with hypercapnia	
J96.10	Chronic respiratory failure, unspecified whether with hypoxia or hypercapnia	
J96.11	Chronic respiratory failure with hypoxia	
J96.12	Chronic respiratory failure with hypercapnia	

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Respiratory Failure Definitions

- **Hypoxemic respiratory failure** is defined as either an arterial partial pressure (PaO₂) less than 60 mm Hg breathing room air, or a PaO₂/FiO₂ ratio less than 300 while on supplemental oxygen.
- **Acute hypercapnic respiratory failure** is defined as a significantly elevated arterial partial pressure (PaCO₂) to 50 mm Hg or more **and** a pH less than 7.35.
- **ARDS** is defined as the acute onset of hypoxemia (PaO₂/FiO₂ <300) within one week of a known clinical insult to the lungs or onset of respiratory symptoms, with bilateral infiltrates consistent with pulmonary edema on imaging, not fully explained by heart failure or fluid overload. To fulfill the definition, the PaO₂/FiO₂ must be determined while the patient is being treated with positive end-expiratory pressure or continuous positive airway pressure with at least 5 cm of H₂O either invasively (e.g. via an endotracheal tube) or noninvasively. Depending on the degree of hypoxemia, ARDS is classified as mild, moderate, or severe.

Degrees of Oxygenation (On Room Air)

Clinical State	Arterial partial pressure	Oxygen saturation	Pao ₂ /Fio ₂ ratio
Normal	≥80 mm Hg	≥96%	≥400
Hypoxemia	60-79 mm Hg	91%-95%	300-399
Respiratory Failure	<60 mm Hg	<91%	<300

The P/F ratio equals the arterial pO₂ ("P") from the ABG divided by the FiO₂ ("F")—the fraction (percent) of inspired oxygen that the patient receives expressed as a decimal (40% oxygen = FiO₂ of 0.40)

<https://acphospitalist.org/archives/2017/07/coding-postprocedural-respiratory-failure.htm>

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Chronic Respiratory Failure

Chronic respiratory failure is very common in patients with **severe COPD** and other chronic lung diseases such as **cystic fibrosis and pulmonary fibrosis**.

- It is characterized by a combination of hypoxemia, elevated pCO₂, elevated bicarbonate level, and normal pH (7.35–7.45). **The most important tip-off to chronic respiratory failure is chronic dependence on supplemental oxygen ("home O₂").**
- Patients who qualify for home O₂ almost always have chronic respiratory failure. Another clue is an **elevated bicarbonate level** on the basic metabolic panel (BMP) **in a COPD patient**, especially helpful when no ABG was obtained.
- **For example, consider a patient admitted with CHF exacerbation and a history of severe COPD.** ABG on room air shows pH 7.40, pCO₂ 52 mmHg, and pO₂ 70 mmHg; bicarbonate level on BMP is elevated at 42.
- **This is classic chronic respiratory failure:** normal pH, elevated pCO₂ and bicarbonate, with hypoxemia—but no acute criteria.

✓ Z99.81 - Dependence on supplemental oxygen

Acute-on-chronic respiratory failure

When a patient experiences an acute exacerbation or decompensation of chronic respiratory failure, he has "acute-on-chronic" respiratory failure. It is recognized by any of the following:

- Worsening symptoms
- Greater hypoxemia (hypoxemic)
- Elevated pCO₂ with pH < 7.35 (hypercapnic)

*Use hypoxemic criteria (pO₂, SpO₂, and P/F ratio) in patients with chronic respiratory failure with caution. Many of these patients always have a pO₂ < 60 mmHg on room air, which is the reason they use supplemental oxygen.

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HCC 85, 86 and 88: Heart Failure, Acute MI and Angina

*Based on 2020 Community, Non-Dual, Aged
 ** Based on 2020 Hillsborough County, FL Rate (3.5% Bonus - \$977.85 / \$11,734.20)

Translating Clinical Documentation to Risk...

Clinical Documentation	ICD-10 Code	HCC Category	RAF	Value (3.5 % Bonus– Aged)
“CAD”	I25.10	n/a	n/a	n/a
“CAD w/ angina”	I25.119	88	0.135	\$1,585.33
“chronic ischemic heart disease”	I25.9	n/a	n/a	n/a
“heart failure”	I50.9	85	0.331	\$3,884.02
“NSTEMI”	I21.4	86	0.195	\$2,288.17
“old MI”	I25.2	n/a	n/a	n/a
“ischemic cardiomyopathy”	I25.5	n/a	n/a	n/a
“cardiomyopathy”	I42.9	85	0.331	\$3,884.02

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HCC 85: Congestive Heart Failure

HCC 85 - #5 per MedPAC
 11% – 11.8%

Diagnosis Code	Description	61 ICD-10 Codes
□ HCC 85 0.331		
I11.0	Hypertensive heart disease with heart failure	
I13.0	Hypertensive heart and CKD with HF and stage 1 through stage 4 CKD ▪ Code also type of HF (I50.-) and Stage of CKD (N18.1-N18.4, N18.9)	
I13.2	Hypertensive heart and CKD with HF and stage 5 CKD, or ESRD ▪ Code also type of HF (I50.-) and Stage of CKD (N18.5 – N18.6)	
I27.20	Pulmonary hypertension, unspecified	
I42.9	Cardiomyopathy, unspecified	
I50.20	Unspecified systolic (congestive) heart failure	
I50.22	Chronic systolic (congestive) heart failure	
I50.30	Unspecified diastolic (congestive) heart failure	
I50.32	Chronic diastolic (congestive) heart failure	
I50.9	Heart failure, unspecified	

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Heart Failure

In systolic heart failure, the EF is less than 55%; an EF of 55% and above is diastolic failure.

Heart failure with reduced ejection fraction (HFrEF)
Heart failure with preserved ejection fraction (HFpEF)

- The diagnosis of heart failure is, first and foremost, a clinical one, based on history and physical examination traditionally defined by the 1948 Framingham diagnostic criteria.
- The **Framingham** diagnostic standards identify major and minor criteria. For a diagnosis of heart failure, a patient should meet either **two major criteria** or **one major criterion plus two minor criteria**.
- Major criteria** include paroxysmal nocturnal dyspnea, orthopnea, elevated jugular venous pressure, S-3 gallop, pulmonary rales, and cardiomegaly or pulmonary edema on chest X-ray.
- Minor criteria** include bilateral lower-extremity edema, nocturnal cough, dyspnea on ordinary exertion, hepatomegaly, pleural effusion, and tachycardia (≥ 120 beats/min).

Acute or Chronic

- Always document clearly and consistently in the medical record if there has been an acute exacerbation or decompensation of chronic heart failure—even if mild.

Nature of Heart Failure

- Systolic
- Diastolic
- Combined systolic/diastolic in nature.

Common Diagnostic Tests

- EKG
- Echo
- B-type natriuretic peptide (BNP)
- Stress Test

Other acceptable descriptions include heart failure “with low EF” or “with reduced systolic function” for systolic heart failure and “preserved systolic” or “preserved ventricular” function for diastolic heart failure. Similar descriptive terms are also acceptable for either systolic or diastolic function.

Physical Findings in Heart Failure

- Tachycardia
- S-3 gallop
- Pulmonary congestion (with or without rales)
- Elevated jugular venous pressure
- Hepato-jugular reflux
- Peripheral edema
- Other signs of volume overload
 - Hepatomegaly
 - Splenomegaly
 - Ascites

<https://www.acphospitalist.org/archives/2019/02/coding-corner-heart-failure-documentation-challenges.htm>

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Heart Failure Classification

New York Heart Association Functional Class

The severity of heart failure may be determined by the New York Heart Association functional classification, stages I through IV

Class	Descriptions
I.	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).
II.	Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea (shortness of breath).
III.	Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea.
IV.	Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.

http://www.heart.org/HEARTORG/Conditions/HeartFailure/AboutHeartFailure/Classes-of-Heart-Failure_UCM_306328_Article.jsp#.WMmGMofruUm

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Pulmonary Hypertension

Pulmonary hypertension, defined as a mean pulmonary arterial pressure greater than **25 mm Hg at rest or greater than 30 mm Hg** during exercise, is often characterized by a progressive and sustained increase in pulmonary vascular resistance that eventually may lead to right ventricular failure.

Types of Pulmonary Hypertension

- **Pulmonary arterial hypertension (PAH):** This type of PH is caused by the changes in the walls of the small arteries of the lungs.
- **Pulmonary venous hypertension (PVH):** This type of PH is caused by problems related to the left side of the heart such as heart valve disease, congestive heart failure and cardiomyopathy.

The **cause** of pulmonary hypertension is classified by the World Health Organization into *five* groups.

1. Pulmonary Arterial Hypertension
2. Left-sided Heart Disease
3. Lung disease
4. Chronic blood clots
5. Other conditions that have unclear reasons why the pulmonary

htn occurs: Blood disorders such as polycythemia vera and essential thrombocythemia. Metabolic disorders such as thyroid and glycogen storage diseases. Systemic disorders such as sarcoidosis and vasculitis. Tumors pressing against pulmonary arteries.

Conditions that contribute to the development of Pulmonary HTN:

- Aortic valve disease
- Congenital heart disease
- Mitral valve disease
- Sickle cell disease
- Liver cirrhosis
- Autoimmune diseases (e.g. lupus, rheumatoid arthritis and scleroderma)
- Cardiomyopathy
- CHF
- Chronic obstructive pulmonary disease "COPD"
- Interstitial lung disease
- Pulmonary fibrosis
- Obstructive sleep apnea

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Risk Adjustment Data Validation

The documentation that CIGNA submitted to us did not support the diagnoses associated with 53 HCCs.

For 4 of the 53 HCCs, our medical reviewer determined other diagnoses to be more appropriate. In these instances, the documentation supported HCCs that were different from those that CMS used in determining the beneficiaries' risk scores.

The following is an example of HCCs that were not supported by CIGNA's documentation.

- For one beneficiary, CIGNA submitted the diagnosis code for "**congestive heart failure, unspecified.**" CMS used the HCC associated with this diagnosis in calculating the beneficiary's risk score. However, the documentation that CIGNA provided **indicated that the beneficiary visited the physician because of knee pain. The documentation did not support the diagnosis of congestive heart failure.**

<https://oig.hhs.gov/oas/reports/region7/71001082.pdf>

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HCC 88 Angina

HCC 88 - #12 per MedPAC data 3% - 4%

Diagnosis Code	Description	HCC 88 includes 88 ICD-10 Codes
<input type="checkbox"/> HCC 88 0.135		
I20.1	Angina pectoris with documented spasm	
I20.8	Other forms of angina pectoris	
I20.9	Angina pectoris, unspecified	
I25.111	CAD of native coronary artery with angina pectoris with documented spasm	
I25.118	CAD of native coronary artery with other forms of angina pectoris	
I25.119	CAD of native coronary artery with unspecified angina pectoris	

I20 Angina Pectoris

Use Additional code to identify:

- exposure to environmental tobacco smoke (Z77.22)
- history of tobacco dependence (Z87.891)
- occupational exposure to environmental tobacco smoke (Z57.31)
- tobacco dependence (F17.-)
- tobacco use (Z72.0)

Excludes1:

- angina pectoris with atherosclerotic heart disease of native coronary arteries (I25.1-)
- atherosclerosis of coronary artery bypass graft(s) and coronary artery of transplanted heart with angina pectoris (I25.7-)
- postinfarction angina (I23.7)

Angina Pectoris

Joseph E. Pizzorno MD, and Herb Joiner-Bey MD
 The Clinician's Handbook of Natural Medicine
 (3rd Edition), 2016

General Considerations:


- Angina pectoris results when oxygen supply and occasionally other nutrients are inadequate for metabolic needs of heart muscle.
- Primary cause is atherosclerosis; also platelet aggregation, coronary artery spasm, nonvascular mechanisms (e.g., hypoglycemia), and increased metabolic need (e.g., hyperthyroidism). coronary artery spasm.

Unstable Angina and Other Acute Ischemic Heart Disease (HCC 87 – RAF 0.195)

- I23.7, Postinfarction Angina
- I23.8, Other Current Complications Following Acute MI

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Medical Record Review

CC: Physical 

HPI: Telephone encounter.

Pt. with history of CAD s/p stent, COPD, chronic low back pain, GERD. Has no new issues.

Medical History: Sleep apnea, CAD, hypertension, pituitary tumor, COPD, neuropathy with chronic pain, DDD, osteoarthritis, GERD, anxiety, kidney stones, NIDDM.

Assessment:

1. Encounter for general medical exam with abnormal findings – Z00.01
2. COPD – J44.9
3. Chronic pain syndrome – G89.4
4. **CAD with angina pectoris with documented spasm – I25.111**
5. Intervertebral disc degeneration, lumbar region – M51.36

Plan:


1. Hypertension - Continue Lisinopril Tablet, 10 MG, 1 tablet, Oral, once a day, 90 days, 90, Refills 1
2. CAD with angina pectoris with documented spasm - Continue Plavix tablet, 75 mg, 1 tab(s), orally, once a day; Continue pravastatin tablet, 40 mg, 1 tab(s), orally, once a day.

History of Present Illness: 

Pt. follows with cardiology for CAD with angina; scheduled for cath next month per patient. He has 4 coronary stents and gets off/on chest pain. Wears nitro patch. Advised if develops chest pain that does not relieve to please go to ER.

Assessment:

1. **CAD with unspecified angina – I25.119**
 Story: h/o cad with 4 stents. Intolerant to statin. On coreg, asa, and nitro patch. Follows with cardiology.

Do NOT code for all on the same encounter! 

1. CAD without angina – I25.10
2. CAD with angina – I25.119
3. Angina – I20.8
4. Angina pectoris – I20.9

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Risk Adjustment Data Validation

The documentation that Excellus submitted to us for medical review did not support the diagnoses associated with 59 HCCs. The following are examples of HCCs that were not supported by Excellus' documentation.

- For one beneficiary, Excellus submitted the diagnosis code for "intermediate coronary syndrome." CMS used the HCC associated with this diagnosis in calculating the beneficiary's risk score. However, the documentation that Excellus provided noted the diagnosis as coronary artery disease, which does not have an associated HCC.

<https://oig.hhs.gov/oas/reports/region2/20901014.pdf>

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HCC 96: Specified Heart Arrhythmias

11% – 11.4%
#7 per MedPAC

Diagnosis Code	Description	14 ICD-10 Codes
<input type="checkbox"/> HCC 96 0.268		
I44.2	Atrioventricular block, complete	
I47.1	Supraventricular tachycardia	
I47.9	Paroxysmal tachycardia, unspecified	
I48.0	Paroxysmal atrial fibrillation	
I48.1	Persistent atrial fibrillation	
I48.2	Chronic atrial fibrillation	
I48.91	Unspecified atrial fibrillation	
I48.92	Unspecified atrial flutter	
I49.5	Sick Sinus Syndrome	

A. Fib and Secondary Hypercoagulable State

D68.69 Other thrombophilia (HCC 48, RAF 0.192)

Secondary hypercoagulable states are acquired disorders that predispose patients to thrombosis. These involve blood flow abnormalities or defects in blood composition and of vessel walls.

- Examples of conditions that can cause secondary hypercoagulable states are atrial fibrillation, malignancy, pregnancy, trauma, myeloproliferative disorders, and antiphospholipid antibody syndrome.

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A. Fib Clinical Documentation



Chief Complaint:

1. Bp high, legs swelling.

HPI:

General examination:

Patient has elevated blood pressure because of leg swelling amlodipine was stopped months ago but he has no significant change in leg swelling his systolic blood pressure runs around 180s he has seen cardiologist and pulmonologist. He will have a sleep study done he was advised to take extra dose of clonidine for high blood pressure, at this time he denies having any epistaxis.

Medical History: Polyarthritis, uncontrolled htn, colon polyp--last colonoscopy 03-2016, GERD, atrial fibrillation.

Exam: Normal

Assessment and Plan:

1. Hypertensive heart disease w/out HF - I11.9
2. Paroxysmal atrial fibrillation - I48.0
Continue Eliquis tablet, 5 mg, 1 tab(s), orally, BID;
Continue Metoprolol Tartrate tablet, 25 mg, 3 tab(s), orally, QD. Follow Up: prn

Reason for Appointment

Follow up lab results



History of Present Illness

Atrial Fibrillation:

Patient presents for follow-up of atrial fibrillation for which pharmacologic rhythm control was prescribed, is considered paroxysmal, which has required blood thinners.

Exam:

GENERAL APPEARANCE: obese female in nad. HEART: no murmurs, regular rate and rhythm, S1, S2 normal. LUNGS: clear to auscultation bilaterally. EXTREMITIES: no clubbing, cyanosis, or edema.

Assessment and Plan:

1. Paroxysmal atrial fibrillation - I48.0
Continue Eliquis Tablet, 5 MG, as directed, Orally
Continue Propafenone HCl Tablet, 225 MG, 1 tablet, Orally, every 8 hrs

D68.69 - Secondary hypercoagulable state?

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HCC 103 and 104: Hemiplegia / Monoplegia

Diagnosis Code	Description	
<input type="checkbox"/> HCC 103 0.437	Hemiplegia / Hemiparesis	45 ICD-10 Codes
G81.91	Hemiplegia, unspecified affecting right dominant side	
I69.351	Hemiplegia / Hemiparesis post CVA , affecting right dominant side	
G81.94	Hemiplegia, unspecified affecting left non-dominant side	
I69.354	Hemiplegia / Hemiparesis post CVA , affecting left non-dominant side	
<input type="checkbox"/> HCC 104 0.331	Monoplegia and Other Paralytic Syndromes	119 ICD-10 Codes
I69.341	Monoplegia of lower limb, following cerebral infarction affecting right dominant side	
G83.14	Monoplegia of lower limb affecting left non-dominant side	
I69.331	Monoplegia of upper limb, following cerebral infarction affecting right dominant side	
G83.22	Monoplegia of upper limb affecting left dominant side	

* HCC 103 trumps HCC 104

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*Based on 2020 Community, Non-Dual, Aged

** Based on 2020 Hillsborough County, FL Rate (3.5% Bonus - \$977.85 / \$11,734.20)

HCC 100, 103 and HCC 104 Acute CVA, Hemiplegia and Monoplegia

Translating Clinical Documentation to Risk...

Clinical Documentation	ICD-10 Code	HCC Category	RAF	Value (3.5 % Bonus- Aged)
"history of CVA"	Z86.73	n/a	n/a	n/a
"R sided hemiplegia s/p CVA 2014"	I69.351	HCC 103	0.437	\$5,127.85
"L hand weakness s/p CVA 2019"	I69.334	HCC 104	0.331	\$3,884.02
"acute CVA"	I69.3	HCC 100	0.230	\$2,698.87

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Common Coding Errors for CVA

- Coding for acute stroke in the outpatient setting



CC / HPI: In for hospital follow up. Discharged on 5/1/2018. Meds reconciled.

Exam: Doing well. No weakness. Minimal speech problems.

A/P: I63.9 - Acute CVA, unspecified

- Coding for history of stroke without residual deficit – when there is one documented.



CC / HPI: In for routine follow up. BP is okay today.

Vitals: 120/80 Unable to obtain height / weight – pt. in w/c.

Exam: Right sided hemiplegia secondary to CVA in 2016.

A/P: Z86.73 – History of CVA w/out residual deficit.

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Department of Health and Human Services
**OFFICE OF
 INSPECTOR GENERAL**

**INCORRECT ACUTE STROKE
 DIAGNOSIS CODES SUBMITTED BY
 TRADITIONAL MEDICARE PROVIDERS
 RESULTED IN MILLIONS OF DOLLARS
 IN INCREASED PAYMENTS
 TO MEDICARE ADVANTAGE
 ORGANIZATIONS**

Key Point:
580 out 582 were not validated

The OIG reviewed 582 of 8,437 transferred enrollees (that were selected with a stratified random sample) who received one instance of a high-risk acute stroke diagnosis code during 2014 or 2015.

Almost all of the selected acute stroke diagnosis codes that physicians submitted to CMS under traditional Medicare and that CMS later used to make payments to MA organizations for 2015 or 2016 on behalf of the 582 transferred enrollees **did not comply with Federal requirements.**

For 580 of the transferred enrollees, the medical records did not support the acute stroke diagnosis codes. Thus, the Ischemic or Unspecified Stroke HCCs were not validated.

09-16-2020 | A-07-17-01176 | [Complete Report](#)

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Documentation and Coding for Residual Deficits of CVA

Office visits are directed at follow up and to address any **residual deficits**

▶ Personal **history** of TIA or stroke **without** residual deficits **Z86.73**

OR

▶ **Late effects** which include:

- ◆ Cognitive deficits
- ◆ Monoplegia of lower limb (Lt or Rt)
- ◆ Monoplegia of upper limb (Lt or Rt)
- ◆ Hemiplegia/paresis (Lt or Rt)
- ◆ Other paralytic syndrome
- ◆ Speech and language deficits

ICD-10	Description
I69.320	Aphasia following cerebral infarction
I69.321	Dysphasia following cerebral infarction
I69.391	Dysphagia following cerebral infarction <ul style="list-style-type: none"> ▪ Use additional code to identify type of dysphagia (R13.1-)

Documentation Examples:

- R arm weakness secondary to CVA
- Left hemiplegia due to stroke
- CVA sequelae: aphasia, monoplegia right arm, difficulty swallowing, weakness

ICD-10	Description	Notes
I69.33	Monoplegia of upper limb following cerebral infarction	(+) Add 6 th Character 1 – R dominant 2 – L dominant 3 – R non-dominant 4 – L non-dominant 9 – Unspecified
I69.34	Monoplegia of lower limb following cerebral infarction	
I69.35	Hemiplegia and Hemiparesis following cerebral infarction	

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Coding for Residual Weakness

If “right-sided weakness” or “left-sided weakness” is linked in documentation to a cerebral infarct or cerebral hemorrhage, it should be reported as **hemiplegia**.

For example, an acute infarct:

- I63.9 Cerebral infarction, unspecified.
- G81.94 Hemiplegia, unspecified affecting left nondominant side

– **The linkage cannot be assumed**

If the weakness is described, as “residual right arm weakness s/p CVA” or “residual lower limb weakness s/p CVA”, choose the appropriate **monoplegia** code from I69.34-

- Coding Clinic for ICD-10-CM, Q1 2015; Q1 2017

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HCC 108: Vascular Disease

#3 per MedPAC

18% – 18.9% per MedPac

Diagnosis Code	Description	300 ICD-10 Codes
<input type="checkbox"/> HCC 108 0.288		
I70.0	Atherosclerosis of aorta	
I70.201	Atherosclerosis of native arteries of extremities, right leg	
I70.202	Atherosclerosis of native arteries of extremities, left leg	
I71.2	Thoracic aortic aneurysm, without rupture	
I71.4	Abdominal aortic aneurysm, without rupture	
I73.9	Peripheral vascular disease, unspecified	
I77.1	Stricture of artery	
I82.501	Chronic embolism and thrombosis of unspecified deep veins of right lower extremity	
I82.502	Chronic embolism and thrombosis of unspecified deep veins of left lower extremity	

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Atherosclerosis

- Most common type of arteriosclerosis (thickening and stiffening of the arterial wall)
- Leading cause of vascular disease worldwide
- **60% prevalence in patients over the age of 65.**

Major Risk Factors:

- › High Blood Pressure
- › High Cholesterol
- › Obesity
- › Diabetes
- › Inactivity
- › Poor Nutrition
- › Smoking
- › Increased Alcohol Consumption

Common Sites of Atherosclerosis:

- › Abdominal aorta
- › Coronary arteries
- › Popliteal arteries
- › Carotid arteries

Depending on the location, atherosclerosis may lead to a variety of conditions, such as:

- › Arterial aneurysms and dissection
- › Coronary heart disease (CHD)
- › Peripheral artery disease (PAD)
- › Intestinal ischemia
- › Subcortical vascular dementia (Binswanger's disease)
- › Thrombosis (e.g., acute coronary syndrome and stroke)
- › Renovascular hypertension.

"Aortic atherosclerosis is a marker for diffuse atherosclerosis and may pre-dispose to systemic embolism by association with carotid disease, CAD, AF, ect..."

Aortic Atherosclerosis, Hypercoagulability, and Stroke

The APRIS (Aortic Plaque and Risk of Ischemic Stroke) Study

Marco R. Di Tullio, MD,* Shunichi Homma, MD, FACC,* Zhezheng Jin, PhD,† Ralph L. Sacco, MD‡
New York, New York; and Miami, Florida

<http://spo.escardio.org/eslides/view.aspx?eevid=40&fp=327>

<https://www.amboss.com/us/knowledge/Atherosclerosis>

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Document and Code for Test Results

FINDINGS: No significant pulmonary parenchymal abnormalities.
 LUNGS: Unremarkable pulmonary vasculature.
 VASCULATURE: No cardiac silhouette abnormality or cardiomegaly.
 CARDIAC: No abnormal widening. Mild atherosclerotic calcification of the transverse aorta.
 MEDIASTINUM: No effusion, pleural thickening, or pneumothorax.
 PLEURA: No fracture or acute bony abnormality.
 BONES: Negative.
 OTHER:

"Mild atherosclerotic calcification of the transverse aorta..."

ICD: I70.0 / HCC 108

HISTORY: Cough

TECHNIQUE: PA and lateral chest radiographs were obtained.

COMPARISON: Chest radiographs 1/28/14 and 5/31/12.

FINDINGS: The lungs are well expanded with no focal consolidation. There is a stable tiny calcified granuloma within the left lower lung. Perihilar vascularity is within normal limits. No pneumothorax or pleural effusion is seen. There is mild enlargement of the cardiac silhouette. The descending aorta is tortuous. Normal hilar regions and trachea. Regional osteopenia is found. The patient has had prior rotator cuff repair on the right. A small calcific density in the region of the left rotator cuff insertion may relate to calcific tendinitis. No acute fracture. Mild to moderate degenerative changes are seen along the thoracic spine.

Overall, there has been no significant change compared to prior exam of 1/28/14.

IMPRESSION:

1. No acute cardiopulmonary disease.
2. No significant change compared to prior exam of 1/28/14.
3. Stable mild enlargement of the cardiac silhouette.

"The descending aorta is tortuous..."

ICD: I77.1 / HCC 108

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HCC 108: Vascular Disease Examples

Chief Complaint:

- 3 month follow up

HPI:

Peripheral artery disease:

Current symptoms include coldness in leg, bilaterally. Severity of the symptoms is mild. Aggravating factors include walking. Alleviating factors include rest.

General Exam:

EXTREMITIES: Bilateral Lower Extremity hair loss and hyperpigmentation, no clubbing, cyanosis, or edema.

Assessment:

- I73.9, PAD

Treatment:

PAD: Start ASA 81 mg QD. Elevate legs at home for at least 30 minutes twice a day, avoid long periods of time on sitting or standing position, avoid any tobacco products and second-hand smoking. Patient verbalized understanding.

Chief Complaint:

- Annual preventative exam

HPI:

Cardiology: 71 yr old female. Here for annual preventive care examination. She has Hypertensive CKD II and she is stable with antihypertensive medication. She has Hyperlipidemia, advised to follow low fat diet. She has Atherosclerosis of Aorta, her 05/2018 C-X-ray, stable.

Assessment:

- I70.0, Atherosclerosis of the aorta

Treatment:

Atherosclerosis of aorta: – ASA and statin.

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History Recurrent DVT and Anticoagulant Treatment

Question:

- A 79-year-old patient presents for a follow-up visit for multiple conditions, including personal history of recurrent deep vein thrombosis (DVT) of the lower extremity. The patient was initially anticoagulated with Coumadin but was switched to Xarelto®. Some coding professionals at our facility feel that a diagnosis of history of recurrent DVT in a patient on anticoagulation therapy should be coded as a chronic DVT. However, other coding professionals believe that history of recurrent DVT without any further specification should be reported with the default code assignment of acute DVT. What is the appropriate code assignment for personal history of recurrent deep vein thrombosis of the lower extremity?

Answer:

- Based on the health record documentation, assign codes Z86.718, Personal history of other venous thrombosis and embolism, and Z79.01, Long term (current) use of anticoagulants, for history of recurrent deep vein thrombosis of the lower extremity on long term use of anticoagulant medication. In this case, the patient presented for a follow-up visit and had no evidence of an acute, current or recurrent DVT nor complications from the thrombus.
 - **Chronic DVT** is a thrombus that is one month to several months old and usually involves symptoms, such as chronic swelling, ulceration, cellulitis, or other complication.
 - **Recurrent DVT** indicates the condition has occurred more than once. The provider would need to document recurrent or chronic DVT, to code it as such.

AHA Coding Clinic 2nd Quarter 2020

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Risk Adjustment Data Validation

The documentation that PacifiCare (Texas) submitted to us for medical review **did not support the diagnoses** associated with 57 HCCs.

The following is an example of HCCs that were **not supported** by PacifiCare's documentation.

- For a second beneficiary, PacifiCare (Texas) submitted the diagnosis code for **“peripheral vascular disease”(PVD)**. CMS used the HCC associated with PVD in calculating the beneficiary's risk score. However, the documentation that PacifiCare provided indicated that the patient's chief complaint on the date of service was pain in her right foot, which was caused by a heavy can that fell on her foot. **The documentation did not mention PVD or indicate that PVD had affected the care, treatment, or management provided during the encounter.**

<https://oig.hhs.gov/oas/reports/region6/60900012.pdf>

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Risk Adjustment Data Validation

The documentation that CIGNA submitted to us **did not support the diagnoses associated with 53 HCCs**.

For 4 of the 53 HCCs, our medical reviewer determined other diagnoses to be more appropriate. In these instances, the documentation supported HCCs that were different from those that CMS used in determining the beneficiaries' risk scores.

The following are examples of HCCs that were not supported by CIGNA's documentation.

- For a third beneficiary, CIGNA submitted the diagnosis code for **“venous embolism and thrombosis of the deep vessels of distal lower extremity.”** CMS used the HCC associated with this diagnosis in calculating the beneficiary's risk score. However, the documentation that CIGNA provided indicated that the **patient's chief complaint was lower extremity pain and circulatory concerns. According to the documentation, the venous doppler ultrasound showed no evidence of venous embolism.**

<https://oig.hhs.gov/oas/reports/region7/71001082.pdf>

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HCC 111 and 112: COPD, Fibrosis and Other Chronic Lung Disease

HCC 111 - #4 per MedPAC data 14% - 14.2%

Diagnosis Code	Description	14 ICD-10 Codes
<input type="checkbox"/> HCC 111 0.335		
J41.0	Simple chronic bronchitis (smokers cough)	
J42	Chronic bronchitis, unspecified	
J43.9	Emphysema, unspecified	
J44.1	COPD, with (acute) exacerbation	
J44.9	COPD, unspecified	

Diagnosis Code	Description	80 ICD-10 Codes
<input type="checkbox"/> HCC 112 0.219		
J47.9	Bronchiectasis, uncomplicated	
J70.4	Drug-induced interstitial lung disorders	
J84.10	Pulmonary fibrosis	
J84.9	Interstitial pulmonary disease, unspecified	
D86.0	Sarcoidosis of lung	



HPI:

Chronic Obstructive Pulmonary Disease:

The patient presents for follow-up of COPD which was diagnosed a year ago, by the patient's pulmonologist, considered mild at diagnosis. Medication(s) include albuterol Spiriva. Response to medication(s) has been good.

Interstitial lung disease (ILD) is an umbrella term used for a large group of diseases that cause scarring (fibrosis) of the lungs. The scarring causes stiffness in the lungs which makes it difficult to breathe and get oxygen to the bloodstream. Lung damage from ILDs is often irreversible and gets worse over time.

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COPD and Chronic Bronchitis

COPD Clinical Criteria:

- **COPD** should be considered in any patient who has dyspnea, chronic cough or sputum production, a history of lower respiratory tract infections and/or a history of exposure.

GOLD 2020 Guidelines

- **Spirometry is required to make the diagnosis**; the presence of a post-bronchodilator $FEV_1/FVC < 0.70$ confirms the presence of persistent airflow limitation.

Chronic Bronchitis Clinical Criteria

- The occurrence of Chronic bronchitis in the general population has been documented to vary between 3% to 7% of healthy adults.
- **Chronic bronchitis** can be defined as a chronic productive cough lasting more than 3 months occurring within a span of 2 years. The most common symptom of patients with chronic bronchitis is a cough.
- There is a strong causal association with smoking and is very often secondary to chronic obstructive pulmonary disease (COPD).

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Medical Record Review

CC: Follow up up and test results

HPI: Suspected ILD? Treated as pneumonia, no improvement. No smoking history. Negative sputum.

Exam: General: Normal. CV: Normal. Extremities: Normal.

A/P:

- R05, Chronic Cough – Suspected ILD? Referral to pulmonology for evaluation and management.
- J84.9, Interstitial Lung Disease – Has chronic interstitial changes on CT chest. Suspicious for ILD, negative AFB and cocci tests, referral to pulmonology.
- E11.42, Diabetes with Diabetic Polyneuropathy – Well controlled. Continue current meds. Return in 2 to 3 months for follow up.

Does the encounter documentation validate the diagnoses?

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HCC 134, 135, 136, 137, and 138 Acute and Chronic Kidney Disease

Translating Clinical Documentation to Risk...

*Based on 2020 Community, Non-Dual, Aged

** Based on 2020 Hillsborough County, FL Rate (3.5% Bonus - \$977.85 / \$11,734.20)

Clinical Documentation	ICD-10 Code	HCC Category	RAF	Value (Per Month) (3.5 % Bonus– Aged)
“renal insufficiency”	N28.9	n/a	n/a	n/a
“CKD”	N18.9	n/a	n/a	n/a
“CKD stage 3”	N18.3	HCC 138	0.069	\$67.47
“CKD stage 4”	N18.4	HCC 137	0.289	\$3,391.18
“CKD stage 5” or “ESRD”	N18.5 or N18.6	HCC 136	0.289	\$3,391.18
“AKI”	N17.9	HCC 135	0.435	\$5,104.38
“dialysis status”	Z99.2	HCC 134	0.435	\$5,104.38

N25.81 - Secondary hyperparathyroidism of renal origin (HCC 23 – RAF 0.194)

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HCC 134: Dialysis Status

Diagnosis Code	Description	49 ICD-10 Codes
<input type="checkbox"/> HCC 134 0.474		
Z49.31	Encounter for adequacy testing for hemodialysis	
Z49.32	Encounter for adequacy testing for peritoneal dialysis	
Z91.15	Patient's noncompliance with renal dialysis	
Z99.2	Dependence on renal dialysis	

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HCC 135: Acute Kidney Injury

Diagnosis Code	Description	5 ICD-10 Codes
<input type="checkbox"/> HCC 135 0.435		
N17.0	Acute kidney failure with tubular necrosis	
N17.1	Acute kidney failure with acute cortical necrosis	
N17.2	Acute kidney failure with medullary necrosis	
N17.8	Other acute kidney failure	
N17.9	Acute kidney failure, unspecified	

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Acute Kidney Injury (AKI)

Did you know:

Up to **one-third** of elderly patients hospitalized with AKI are re-hospitalized with recurrent AKI within 12 months

What is an AKI?

- Non-traumatic acute kidney injury or impairment (AKI) is defined as the rapid loss of kidney function within 48 hours in either pre-existing normal renal function or with pre-existing renal disease (acute on chronic).
- AKI is characterized by the accumulation of creatinine, urea, and other unmeasured waste products after an abrupt decrease in kidney function.
- More recently, injury has replaced “failure” to emphasize the disease continuum because even modest reductions in kidney function are associated with worse outcomes.

Journal of the American Society of Nephrology
<https://jasn.asnjournals.org/content/27/4/1190>

AKIs are Most Common...

- Acute kidney injury (AKI) is commonly seen amongst critically ill and hospitalized patients. Approximately **5% to 10% of hospitalized patients** and up to **60% of patients admitted to the intensive care unit (ICU)** meet the criteria for AKI.
- Individuals with certain co-morbid diseases have an increased risk of developing AKI.** Thus, recognizing the co-morbidities that predispose patients to AKI is important in AKI prevention and treatment.
- Some of the most common co-morbid disease processes that increase the risk of AKI are **diabetes, cancer, cardiovascular disease and human immunodeficiency virus (HIV) acquired immune deficiency syndrome (AIDS).**
- Comorbid conditions that were **associated with recurrent AKI** included **CHF, dementia, diabetes,** and coronary artery disease.
- Amongst these co-morbid diseases, inflammation, the use of nephrotoxic agents, and hypoperfusion to the kidneys have been shown to be major pathological processes that predisposes individuals to AKI.

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Criteria for the Diagnosis of AKI in Adults

RIFLE Classification—Risk, Injury, Failure, Loss and End-stage kidney disease. Established and published in 2004. Created with primary goal to develop a consensus and have evidence-based guidelines for the treatment and prevention of AKI.

AKIN Classification—Acute Kidney Injury Network. Established and published in 2007. This is a modified version of the RIFLE criteria. This was established in order to increase the sensitivity and specificity of the diagnosis of AKI. AKIN advised that acute renal failure be changed to acute kidney injury to represent the full spectrum of renal injury (mild to severe).

KDIGO Classification—Kidney Disease Improving Global Outcomes. Released in 2012 for use and is a build off of the RIFLE and AKIN criteria already being used. This criteria reserved the baseline creatinine that was established in RIFLE and a small increase in creatinine from AKIN. **This is thought to give KDIGO greater sensitivity than RIFLE or AKIN.**

Comparison of Recent Consensus AKI Definitions

AKI Stage	Urine Output ^a	KDIGO	AKIN	RIFLE
1	<0.5 mL/kg/h for 6-12 h	Scr to 1.5-1.9 × baseline over 7 d or ≥0.3 mg/dL absolute increase over 48 h	Scr to 1.5-2 × baseline or ≥0.3 mg/dL absolute Scr increase within 48 h	<i>Risk:</i> Scr to ≥1.5 × increase within 7 d, sustained for ≥24 h
2	<0.5 mL/kg/h for ≥12 h	Scr to 2.0-2.9 × baseline	Scr to >2-3 × baseline	<i>Injury:</i> Scr to ≥2 × increase
3	<0.3 mL/kg/h for ≥24 h or anuria for ≥12 h	Scr to ≥3.0 × baseline, or Scr increase to ≥4.0 mg/dL or initiation of RRT	Scr to >3.0 × baseline, or Scr increase to ≥4.0 mg/dL (with increase of 0.5 mg/dL) or initiation of RRT	<i>Failure:</i> Scr to ≥3.0 × increase or Scr increase to ≥4.0 mg/dL (with increase of 0.5 mg/dL) or initiation of RRT <i>Loss:</i> Complete loss of kidney function for >4 wk <i>ESKD:</i> ESKD for >3 mo

[https://www.ajkd.org/article/S0272-6386\(17\)31141-1/fulltext](https://www.ajkd.org/article/S0272-6386(17)31141-1/fulltext)

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HCC 136 – 138: Chronic Kidney Disease

Diagnosis Code	Description	7 ICD-10 Codes
<input type="checkbox"/> HCC 136 0.289		
I12.0	Hypertensive CKD with stage 5 CKD or ESRD	
I13.11	Hypertensive heart and CKD without heart failure, with stage 5 CKD, or ESRD	
I13.2	Hypertensive heart and CKD with heart failure and with stage 5 CKD, or ESRD	
N18.5	CKD, stage 5	
N18.6	End stage renal disease (ESRD)	
<input type="checkbox"/> HCC 137 0.289		
N18.4	CKD, stage 4	
<input type="checkbox"/> HCC 138 0.069		
N18.3	CKD stage 3	

US Renal Data System estimated that about **20%** of the money spent on all patients 65 years or older was spent on CKD.
 *In reality, the real cost of CKD is much higher since Medicare only covers about 80% of the people with End-Stage Renal Disease (ESRD)

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Chronic Kidney Disease

Instructional Notes Advise:

Code first any associated:

- Diabetic chronic kidney disease (E08.22, E09.22, E10.22, E11.22, E13.22)
- Hypertensive chronic kidney disease (I12.-, I13.-)

CKD Detection

To prevent the progression of kidney disease, early detection and treatment are key.

eGFR is the best test for staging CKD

Stage	Loss of Kidney Function	GFR	ICD-10 Code
1	Normal	90 +	N18.1
2	Mild	60-89	N18.2
3a	Mild to Moderate	44-59	N18.3
3b	Moderate to Severe	30-44	N18.3
4	Severe	15-29	N18.4
5	Failure	< 15	N18.5

*Stage 1 and 2 also require other evidence of renal disease (proteinuria, evidence of structural damage on imaging, etc.)

Code also for dialysis status w/ ESRD (N18.6)

- ← HCC 138
- ← HCC 137
- ← HCC 136

* When the medical record **does not document** the stage of CKD, code **N18.9** (*chronic kidney disease, unspecified*) is assigned.

Use a Combination Code When a Patient has CKD and...

- Hypertension
- Diabetes
- Heart Disease
- Heart Failure

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Chronic Kidney Disease

Risk Factors for Developing CKD

Adults with diabetes, high blood pressure, or both have a higher risk of developing CKD than those without these diseases.



Approximately **1 in 5** adults with high blood pressure may have CKD



Approximately **1 in 3** adults with diabetes may have CKD

CKD Fast Facts

- It affects 30 million people in the U.S. – 15% of the adult population.
- Approximately 90% of those with kidney disease don't even know they have it.
- More than \$114 billion in annual Medicare costs for all people with CKD.
- CKD shortens life expectancy by 5–11 years.
- CKD causes more deaths than breast cancer or prostate cancer.
- It is the 9th leading cause of death in the U.S. and is growing in prevalence.

<https://www.niddk.nih.gov/health-information/health-statistics/kidney-disease>

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Causes, Complications and Comorbidities of CKD

Diabetes and **high blood pressure** are the number one and two conditions leading to chronic kidney disease (CKD) in the United States.

Other common conditions and diseases that may lead to kidney disease:

- CHF (HCC 85)
- Pulmonary diseases such as asthma, emphysema and chronic bronchitis (HCC 111)
- PVD (HCC 108)

As eGFR declines, complications and comorbidities occur more commonly and are more severe. These include:

- Cardiovascular Disease (CVD) and dyslipidemia
 - Most patients with CKD die of CVD-related complications than progress to ESRD.
- Anemia due to impaired erythropoiesis and low iron stores
- Malnutrition
- Mineral and bone disorders
 - Secondary hyperparathyroidism is associated with high bone turnover. Vascular calcification is associated with secondary hyperparathyroidism in CKD.
- Depression and decreased functional status

<https://www.niddk.nih.gov/health-information/professionals/clinical-tools-patient-management/kidney-disease/identify-manage-patients/manage-ckd/treat-complications-comorbidities>

<https://ceufast.com/course/chronic-kidney-disease-and-its-main-comorbidities>

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HCC 159: Pressure Ulcer of Skin with Partial Skin Loss

Diagnosis Code	Description	25 ICD-10 Codes
□ HCC 159	0.656	
L89.312	Pressure ulcer of right buttock, stage 2	
L89.322	Pressure ulcer of left buttock, stage 2	
L89.152	Pressure ulcer of sacral region, stage 2	
L89.132	Pressure ulcer of right lower back, stage 2	
L89.142	Pressure ulcer of left lower back, stage 2	
L89.612	Pressure ulcer of right heel, stage 2	
L89.622	Pressure ulcer of left heel, stage 2	



“May also present as an intact or open / ruptured blister...”

– CMS MLN

Documentation Tips for Ulcers:

- Use the term **ulcer** only in A/P.
- Document in the **exam**.
- Include all the following:
 - Type
 - Stage
 - Laterality
 - Location
 - Treatment

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HCC 176: Complications of Specified Implanted Device or Graft



▶ T84.84XA

- **Pain due to** internal orthopedic prosthetic devices, implants and grafts, initial encounter
- ✓ Use additional code to identify device, implant or graft

Z96.651 – Presence of **right** artificial **knee** joint

Z96.652 – Presence of **left** artificial **knee** joint

Z96.653 – Presence of artificial **knee** joint, **bilateral**

Z96.641 – Presence of **right** artificial **knee** joint

Z96.642 – Presence of **left** artificial **hip** joint

Pain “due to”

- Chronic pain following
- Chronic pain due to
- Pain due to

□ T82848A

- ✓ Pain due to **vascular** prosthetic devices, implants and grafts, initial encounter

□ T8384XA

- ✓ Pain due to **genitourinary** prosthetic devices, implants and grafts, initial encounter

□ T8484XA

- ✓ Pain due to **internal orthopedic** prosthetic devices, implants and grafts, initial encounter

□ T85840A

- ✓ Pain due to **nervous system** prosthetic devices, implants and grafts, initial encounter

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HCC 189: Amputation Status

Diagnosis Code	Description	291 ICD-10 Codes
<input type="checkbox"/> HCC 189 0.519		
G54.6	Phantom limb syndrome with pain	
G54.7	Phantom limb syndrome without pain	
Z89.411	Acquired absence of right great toe	
Z89.412	Acquired absence of left great toe	
Z89.421	Acquired absence of other right toe(s)	
Z89.422	Acquired absence of other left toe(s)	
Z89.431	Acquired absence of right foot	
Z89.432	Acquired absence of left foot	
Z89.511	Acquired absence of right leg below knee	
Z89.512	Acquired absence of left leg below knee	

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Advanced Risk Management and HCC Coding for Value-Based Payments

Tips and Tricks for Success

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Work SMARTER, Not Harder...

1. Capture a complete and accurate health status on each patient q 6 months.
2. Review diagnostic test results, inpatient and specialist reports.
3. Update the problem list regularly.
4. Think in INK... Document medical decision making.
5. Code to the highest degree of specificity. (Search by ICD-10 code to reduce search results.)
6. Implement Pre-Visit Chart Checks
7. Risk adjustment is a TEAM sport. Uptrain medical assistants and coders / billers to assist providers.

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Look at the Data...

Assessment:

Assessment:

1. H/O endarterectomy - Z98.890 (Primary)
2. Coronary artery disease involving native coronary artery of native heart without angina pectoris - I25.10
3. Presence of stent in artery - Z95.828
4. Mesenteric artery stenosis - K55.1
5. Primary insomnia - F51.01
6. Mixed hyperlipidemia - E78.2
7. Body mass index (BMI) 20.0-20.9, adult - Z68.20
8. Essential (primary) hypertension - I10
9. GERD (gastroesophageal reflux disease) - K21.9
10. Acute pain - R52
11. Bilateral carotid artery stenosis - I65.23, carotid duplex 07/10/2019
12. Angiodysplasia of stomach and duodenum without bleeding - K31.819, from GI consult note 11/04/2019
13. Claudication in peripheral vascular disease - I73.9 ←
14. Claudication of both lower extremities - I73.9 ←

Each ICD-10 code should only be assigned one time per encounter...

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Assessment:**Assessment:**

1. Annual physical exam - Z00.00 (Primary)
2. Type 2 diabetes mellitus with diabetic chronic kidney disease - E11.22 ←
3. Diabetes mellitus - E11.9 ←
4. Hyperlipemia, mixed - E78.2
5. HTN (hypertension) - I10
6. Chronic maxillary sinusitis - J32.0
7. Osteoarthritis of both hips, unspecified osteoarthritis type - M16.0
8. Chronic obstructive pulmonary disease, unspecified COPD type - J44.9
9. Hypertension with congestive heart failure and renal failure - I13.0
10. History of arthroscopy of left knee - Z98.890
11. Chronic kidney disease, stage 3 (moderate) - N18.3
12. Chronic heart failure, unspecified heart failure type - I50.9
13. Body mass index (BMI) 30.0-30.9, adult - Z68.30
14. Dysphagia, oropharyngeal phase - R13.12, from ENT note, 12/16/2019
15. Postnasal drip - R09.82, from ENT note, 12/16/2019
16. Benign mass of nasopharynx - J39.2, from ENT note, 12/16/2019
17. Hypermetropia of both eyes - H52.03, from eye exam, dr note 09/2019
18. Drusen of left macula - H35.362, from eye exam, dr note 09/2019
19. GERD (gastroesophageal reflux disease) - K21.9

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Assessments

1. Annual physical exam - Z00.00 (Primary)
2. Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease - I12.9
3. Chronic kidney disease, stage 3 (moderate) - N18.3
4. Proteinuria, unspecified type - R80.9
5. Other hemochromatosis - E83.118
6. Type 2 diabetes mellitus without complication, without long-term current use of insulin - E11.9 ←
7. Mixed hyperlipidemia - E78.2
8. Type 2 diabetes mellitus with diabetic chronic kidney disease - E11.22 ←
9. Hyponatremia - E87.1
10. Hyperkalemia - E87.5
11. Hypoalbuminemia - E88.09
12. Hyperphosphatemia - E83.39
13. SIADH (syndrome of inappropriate ADH production) - E22.2
14. PVD (peripheral vascular disease) - I73.9
15. Asymptomatic varicose veins of both lower extremities - I83.93
16. Intermittent claudication of lower extremity due to atherosclerosis - I70.219
17. Aspirin long-term use - Z79.82
18. BMI 21.0-21.9, adult - Z68.21
19. Breast cancer screening by mammogram - Z12.31
20. Encounter for fecal immunochemical test screening - Z12.11
21. Type 2 diabetes mellitus with other specified complication, without long-term current use of insulin - E11.69 ←

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Assessment:**Assessment:**

1. Diabetes mellitus due to underlying condition with diabetic polyneuropathy - E08.42 (Primary) ←
2. Low back pain - M54.5
3. Personal history of nicotine dependence - Z87.891
4. Obesity, unspecified - E66.9
5. DM 2 with diabetic nephropathy - E11.21 ←
6. Personal history of pulmonary embolism - Z86.711
7. GERD without esophagitis - K21.9
8. Fatty liver, not elsewhere classified - K76.0
9. Atherosclerotic heart disease of native coronary artery without angina pectoris - I25.10
10. Major depressive disorder, recurrent, mild - F33.0
11. Other abnormal and inconclusive findings on diagnostic imaging of breast - R92.8
12. Chronic kidney disease, stage 3 (moderate) - N18.3
13. Person injured in unspecified motor-vehicle accident, traffic, initial encounter - V89.2XXA
14. Hypertensive CKD with stage 1 - 4 CKD, or unspecified CKD - I12.9
15. Atherosclerosis of aorta - I70.0

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Advanced Risk Management and HCC Coding for Value-Based Payments

Risk Adjustment Data Validation

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Risk Adjustment Data Validation

Proper chart documentation helps ensure risk adjustment payment integrity and accuracy.



- **42 CFR §422.310(e)** requires MA organizations and their providers and practitioners to submit a sample of medical records for the validation of risk adjustment data, as required by CMS.
- The Centers for Medicare & Medicaid Services (CMS) conducts medical record reviews to **validate the accuracy and integrity** of the **risk adjustment data** submitted by the Medicare Advantage (MA) for payments. CMS selects MA organizations to participate in the medical record review based on a number of criteria.
- *For example, some organizations are **randomly selected** while others are **targeted**; thus, every MA organization has a chance of being selected for validation.*

For FY2018, \$64.93 million in self reported overpayments

"insufficient documentation to determine..."

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Risk Adjustment Data Validation

- | Yes | No | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Is the record for the correct enrollee? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the record from the correct calendar year for the payment year being audited (i.e., for audits of 2011 payments, validating records should be from calendar year 2010) |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the date of service present for the face to face visit? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the record legible? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the record from a valid provider type? (Hospital inpatient, hospital outpatient/ physician) |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there valid credentials and/or is there a valid physician specialty documented on the record? |
| <input type="checkbox"/> | <input type="checkbox"/> | Does the record contain a signature from an acceptable type of physician specialist? |
| <input type="checkbox"/> | <input type="checkbox"/> | If the outpatient/physician record does not contain a valid credential and/or signature, is there a completed CMS-Generated Attestation for this date of service? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is there a diagnosis on the record? ← ??? |
| <input type="checkbox"/> | <input type="checkbox"/> | Does the diagnosis support an HCC? ← ??? |
| <input type="checkbox"/> | <input type="checkbox"/> | Does the diagnosis support the requested HCC? ← ??? |

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RADV Guidance




Contract-Level Risk Adjustment Data Validation Medical Record Reviewer Guidance In effect as of 03/20/2019

* This guidance will be used for audits commencing after 09/27/2017.

https://www.hhs.gov/guidance/sites/default/files/hhs-guidance-documents/RADVMedicalRecordReviewerGuidance_effective092717_CR_03202019.F.pdf

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U.S. Department of Health and Human Services
Office of Inspector General

Billions in Estimated Medicare Advantage Payments From Diagnoses Reported Only on Health Risk Assessments Raise Concerns

OEI-03-17-00471
September 2020
oig.hhs.gov

Christi A. Grimm
Principal Deputy
Inspector General



Key Takeaways:

- Billions in estimated risk-adjusted payments supported solely through HRA's raise concerns about the completeness of payment data, validity of diagnoses on HRA's and quality of care coordination for beneficiaries.
- OIG findings highlight concerns about the extent to which MAOs are using HRAs to improve care and health outcomes, as intended, and about the sufficiency of the oversight by the Centers for Medicare & Medicaid Services (CMS).

From an analysis of 2016 MA encounter data, the OIG found that:

- **Diagnoses that MAOs reported only on HRAs**, and on no other encounter records, resulted in an estimated **\$2.6 billion in risk-adjusted payments** for 2017.
- **In-home HRAs generated 80 percent of these estimated payments.** Most in-home HRAs were conducted by companies that partner with or are hired by MAOs to conduct these assessments—and therefore are not likely conducted by the beneficiary's own primary care provider.
- **Twenty MAOs generated millions in payments from in-home HRAs for beneficiaries for whom there was not a single record of any other service being provided in 2016.**

<https://oig.hhs.gov/oei/reports/OEI-03-17-00471.pdf>

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Exhibit 5: Almost three-quarters of the estimated MA risk-adjusted payments from in-home HRAs corresponded to 10 HCCs

HCC	HCC Description	Number of Beneficiaries With HCC	Estimated Payments From In-Home HRAs	Percentage of In-Home HRA Payments
HCC58	Major Depressive, Bipolar, and Paranoid Disorders	117,620	\$353,868,747	17%
HCC108	Vascular Disease	116,238	\$307,397,936	15%
HCC18	Diabetes With Chronic Complications	59,856	\$173,205,866	8%
HCC22	Morbid Obesity	58,760	\$142,061,471	7%
HCC111	Chronic Obstructive Pulmonary Disease	49,800	\$141,810,708	7%
HCC85	Congestive Heart Failure	39,422	\$114,760,158	6%
HCC75	Myasthenia Gravis/Myoneural Disorders and Guillain-Barré Syndrome/Inflammatory and Toxic Neuropathy	26,521	\$102,878,201	5%
HCC88	Angina Pectoris	55,500	\$67,379,225	3%
HCC21	Protein-Calorie Malnutrition	11,697	\$61,723,441	3%
HCC55	Drug/Alcohol Dependence	18,817	\$59,412,704	3%
	Total	554,231	\$1,524,498,457	74%

Source: OIG estimation of 2017 payment amounts by using 2016 MA encounter data from CMS's IDR

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Exhibit C-1: For HCCs that CMS previously identified as at high risk for improper payments, estimated risk-adjusted payments from HRAs totaled \$152 million for 2017

HCC Identified by CMS as High-Risk	HCC Description	Risk-Adjusted Payments From In-Home HRAs	Risk-Adjusted Payments From Facility-Based HRAs	Risk-Adjusted Payments From All HRAs
HCC75	Myasthenia Gravis/Myoneural Disorders and Guillain-Barré Syndrome/Inflammatory and Toxic Neuropathy	\$102,878,201	\$8,805,499	\$111,683,700
HCC106	Atherosclerosis of the Extremities With Ulceration or Gangrene	\$13,944,640	\$1,930,652	\$15,875,292
HCC9	Lung and Other Severe Cancers	\$6,145,930	\$3,479,056	\$9,624,986
HCC100	Ischemic or Unspecified Stroke	\$316,551	\$5,477,506	\$5,794,057
HCC27	End-Stage Liver Disease	\$1,984,807	\$1,286,525	\$3,271,332
HCC87	Unstable Angina and Other Acute Ischemic Heart Disease	\$1,661,437	\$1,005,786	\$2,667,223
HCC136	Chronic Kidney Disease, Stage 5	\$1,071,463	\$596,758	\$1,668,221
HCC99	Cerebral Hemorrhage	\$40,799	\$769,949	\$810,748
HCC54	Drug/Alcohol Psychosis	\$456,813	\$180,761	\$637,574
HCC114	Aspiration and Specified Bacterial Pneumonias	\$107,586	\$198,491	\$306,077
	TOTAL	\$128,608,227	\$23,730,983	\$152,339,210

Source: OIG estimation of 2017 payment amounts using 2016 encounter data from CMS's IDR and CMS's list of HCCs at a high-risk for payment errors for 2014

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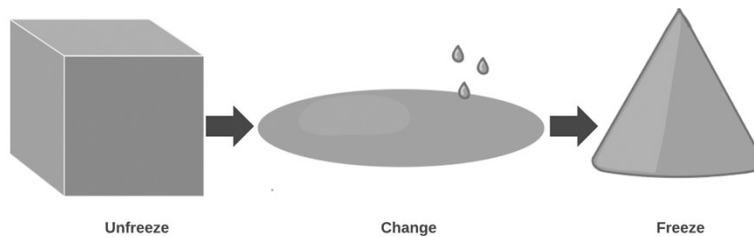
Leveraging the Frontline For Success

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Change is a Process... Not an Event

Kurt Lewin's Change Theory



THERE IS NO "I" IN TEAM

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Important KPIs

- **Membership**
 - Monthly Total
 - Additions
 - Transfers
 - Termed
- **Office Visits**
 - Quarterly
- **Admits / Discharges**
 - 72 Hour Follow Ups
 - Re-Admit Rate
- **ER Visits**
 - Day and Time
 - Diagnosis
 - Outcome – Admit ?
- **PMPM Expenses**
 - PCP
 - Specialist
 - Hospitals
 - ASC
 - Pharmacy
- **Disease Management**
 - Eligible vs. Enrolled
- **Quality Care**
 - No PCP visit in 12 months
 - No AWV visit in 13 months
 - Average visits PMPY
 - Rx Refills w/out OV
 - HEDIS / QPP
- **Practice Management**
 - Patient Satisfaction
 - Employee Retention
 - No Shows / Reschedules
 - Generic Dispensing Rate
 - Referral Patterns

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Key Takeaways

- ▶ All VBPM Rely on HCCs to Drive Accurate Quality and Risk Scores
- ▶ Comprehensive Annual Coding – Yes, Limbs Grow Back
- ▶ Follow CMS, ICD-10 and Clinical Documentation Guidelines
- ▶ Think in Ink – Treatment is Evidence of Diagnosis
- ▶ Stay Informed of Model Updates and Changes
- ▶ Perform Internal Audits – Every Year

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QUESTIONS & SURVEYS



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Thank You!

This Workshop has been approved by the following organizations for CEU / CME:

- AAPC for 7 hours of CEU
- AAFP for 5 hours of CME (prescribed)

This Live activity, Advanced Risk Management and CDI for Primary Care, has been reviewed and is **acceptable** for up to **6.5 Prescribed credit(s) by the American Academy of Family Physicians**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AMA/AAFP Equivalency:

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Advanced Risk Management and HCC Coding for Value-Based Payments

Resource Links

CMS

Resource	Resource Link
The CMS Customer Service and Support Center (CSSC):	http://www.csscooperations.com/
CMS’ Technical Assistance Registration Service Center:	http://tarsc.info/
Jennifer Harlow Director, Division of Payment Validation	Email Address: jennifer.harlow@cms.hhs.gov
Lateefah Hughes RADV Project Team Lead Project Officer – LAC	Email Address: lateefah.hughes@cms.hhs.gov
Additional Questions	Risk Adjustment - riskadjustment@cms.hhs.gov Encounter Data - encounterdata@cms.hhs.gov
2019 Coding Guidelines	https://www.cms.gov/Medicare/Coding/ICD10/Downloads/2019-ICD10-Coding-Guidelines-.pdf