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Introduction to HCC Coding (Cardiology)



# Types of Coding

## ❖ Evaluation and management (E&M) coding \*

- E/M services represent a category of Current Procedural Terminology (CPT) codes used for billing purposes.
- Most patient visits require an E/M code, and these are used to determine provider reimbursement.
- There are different levels of E/M codes (99213, 99204, etc.) which are determined by the complexity (or length of time) of a patient visit and documentation requirements.
- CPT codes are also used to bill for procedures.

## ❖ HCC “complexity” coding



\*Adapted from AAFP / Family Physician / Practice and Career / Getting Paid / Coding / Coding for E/M Services

# What is HCC coding?



- Hierarchical condition category (HCC) coding is a **risk-adjustment model** originally designed to estimate future health care costs for patients.



# Hierarchical condition category (HCC) coding

- HCC coding is based on patient complexity.
- Along with demographic factors (such as age and gender), insurance companies use HCC coding to assign patients a risk adjustment factor (RAF) score.
- HCC codes represent costly chronic health conditions, as well as some severe acute conditions.
- Of the approximately 70,000 ICD-10 codes, about 9,500 map to HCC categories.\*

\*Adapted from <https://www.asahq.org/quality-and-practice-management/managing-your-practice/timely-topics-in-payment-and-practice-management/an-introduction-to-hierarchical-condition-categories-hcc>

# Why is HCC coding important?



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- In recent years, there has been a shift away from a “fee-for-service” model (where providers are paid for each service that they perform) to a “value-based” model (where healthcare teams are paid based on patient health outcomes).
- Therefore, it is crucial that the providers’ documentation accurately reflects the true illness burden of their patients (as this directly impacts reimbursement).





# How do HCCs impact reimbursement?





- \* HCCs directly impact the amount of money received by healthcare organizations participating in “value-based” contracts.
- \* Patients with high HCCs are expected to require intensive medical treatment, and clinicians that enroll these high-risk patients are reimbursed at higher rates than those with enrollees who have low HCCs.
- \* Organizations who do not document HCC codes properly or to the highest specificity will not receive the additional reimbursement amount for applicable patients.
- \* The ability to document with greater precision can dramatically impact payment amounts.



# Economic Formula

$$\text{Surplus/Deficit} = (\text{Budget} - \text{Expenses}) + \text{Quality}$$



Total Members  
Demographics  
ICD-10 Codes

ER Visits  
Readmissions  
SNF LOS  
Network Integrity  
Unnecessary testing/care

BP Control  
DM Control  
Cancer screening  
Immunizations  
Patient Satisfaction

# When should I include these HCC diagnoses?



Remember to include the appropriate HCC diagnosis codes whenever you are:

- A. Managing the specific problem during the visit
  - evaluating, ordering tests, prescribing medications, sending a referral, etc.
- B. Assessing the stability of the problem at the visit (even if it is being managed by an outside specialist)

-OR-

- C. The problem directly impacts your medical decision making
  - You want to prescribe steroids, but the patient is diabetic.
  - You want a contrast imaging study, but the patient has CKD.

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# Risk Adjustment and HCC Coding for Cardiology



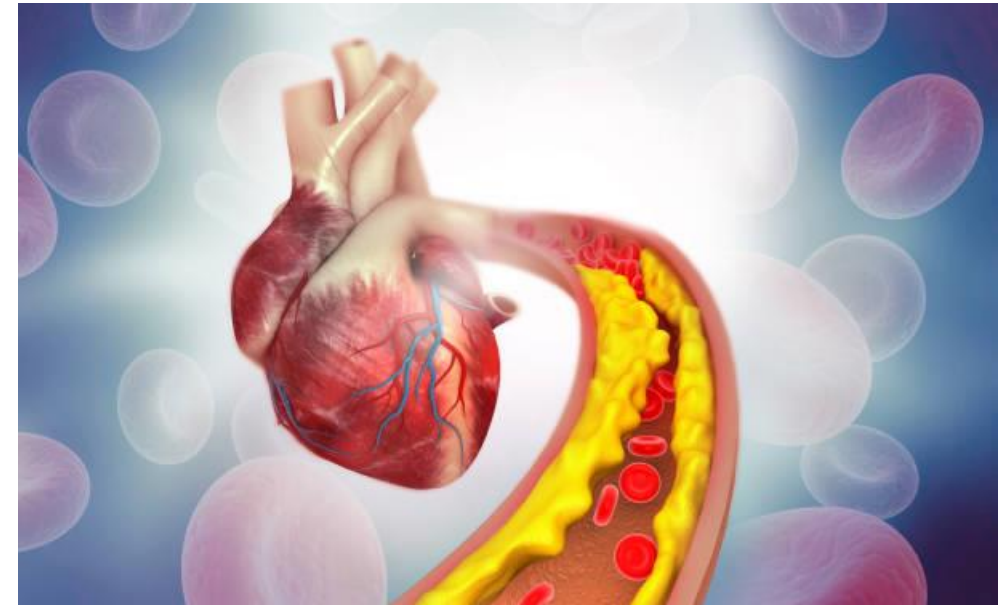
# Common Cardiology Diagnoses

- Angina
- Arrhythmia
- Cardiomyopathy
- Congenital Heart Conditions
- Congestive Heart Failure
- Coronary Artery Disease
- Myocardial Infarction
- Pericardial Disease
- Peripheral Vascular Disease
- Rheumatic Heart Disease
- Valvular Heart Disease

These diagnoses may have additional risk adjustment value.

# HCC Coding for Heart Disease

- There is no risk adjustment for asymptomatic Coronary Artery Disease [I25.10].
- However, there is risk adjustment for Aortic Atherosclerosis [I70.0] which is commonly noted on imaging studies.



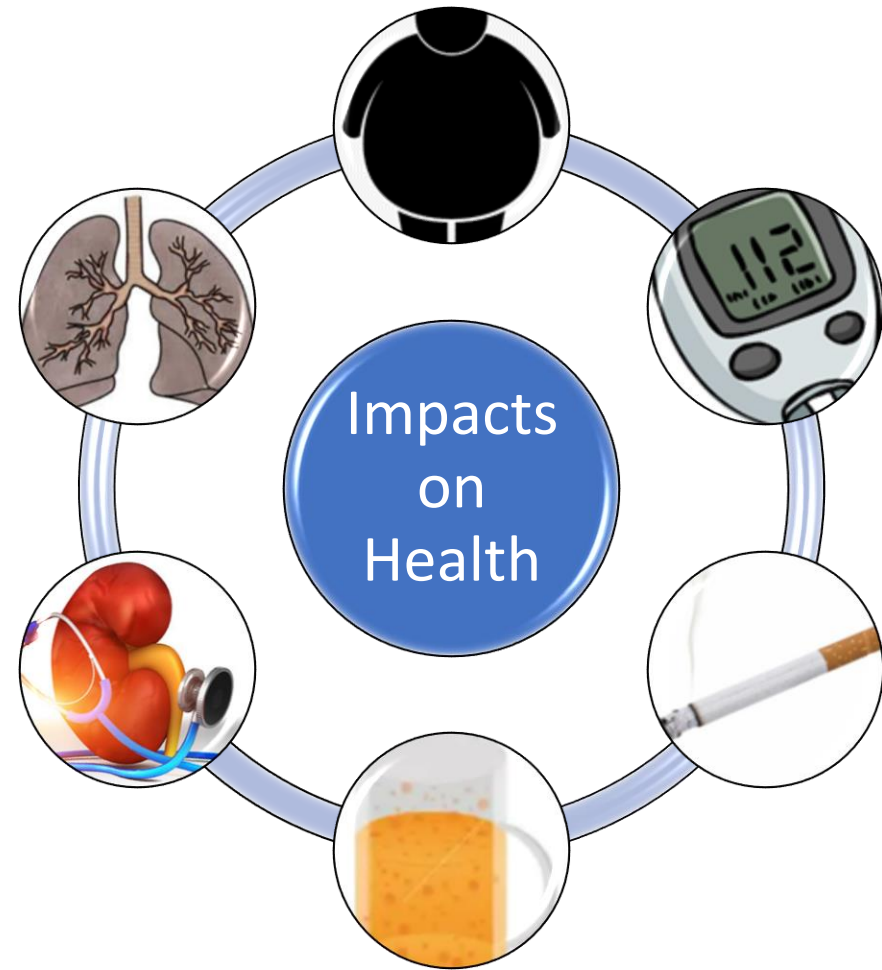


# HCC Coding for Heart Disease

Consider using the following diagnoses:

- Coronary Artery Disease with Unspecified Angina [I25.119]
- Congestive Heart Failure [I50.9]
- Cardiomyopathy [I42.9]
- PSVT [I47.1]
- Atrial Fibrillation [I48.91]
- Sick Sinus Syndrome [I49.5]

While it's true that many of the common diagnoses do not have additional risk adjustment value, consider the impact that the following HCC associated comorbidities have on the presenting problem or your medical decision making.

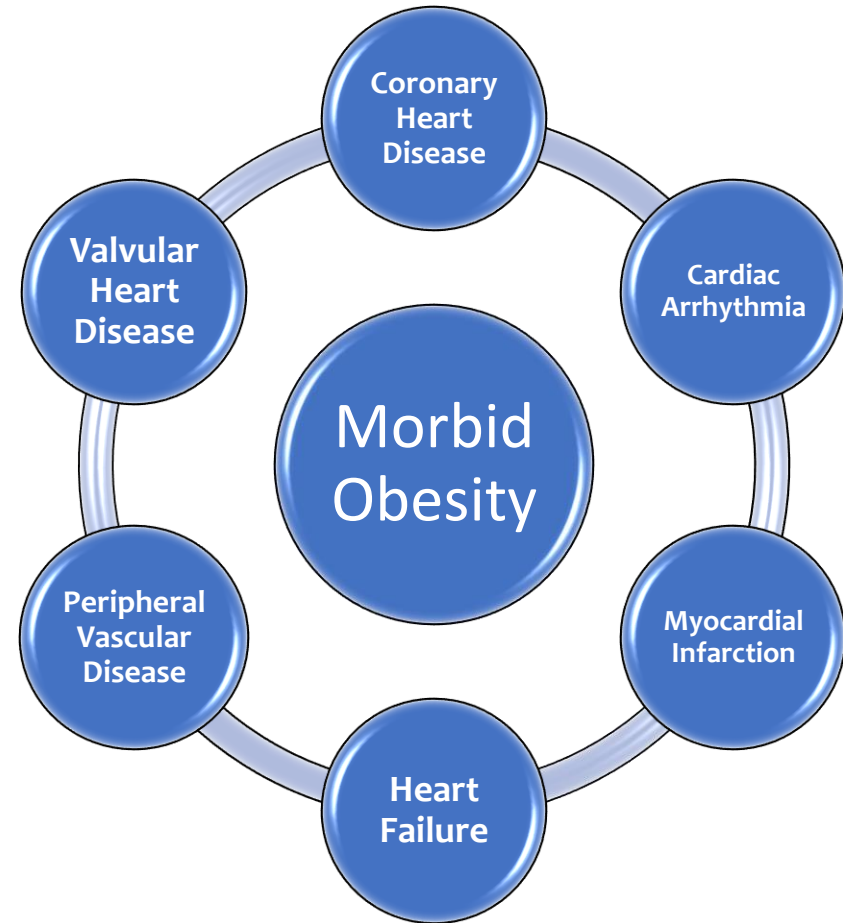


# Morbid Obesity [E66.01]

- The US obesity prevalence was 41.9% in 2017.\*
- Morbid obesity is defined as a BMI of 40+, or a BMI of 35-40 with any comorbid condition impacted by weight (HTN, DM, hyperlipidemia, OSA, etc.)
- Morbid obesity has been associated with an increased risk for coronary heart disease, cardiac arrhythmias, myocardial infarction, heart failure, peripheral vascular disease, and aortic stenosis.^

\*<https://www.cdc.gov/obesity/data/adult.html>

^Sources: [hopkinsmedicine.org](http://hopkinsmedicine.org); [heart.org](http://heart.org); [NIH.gov](http://NIH.gov)

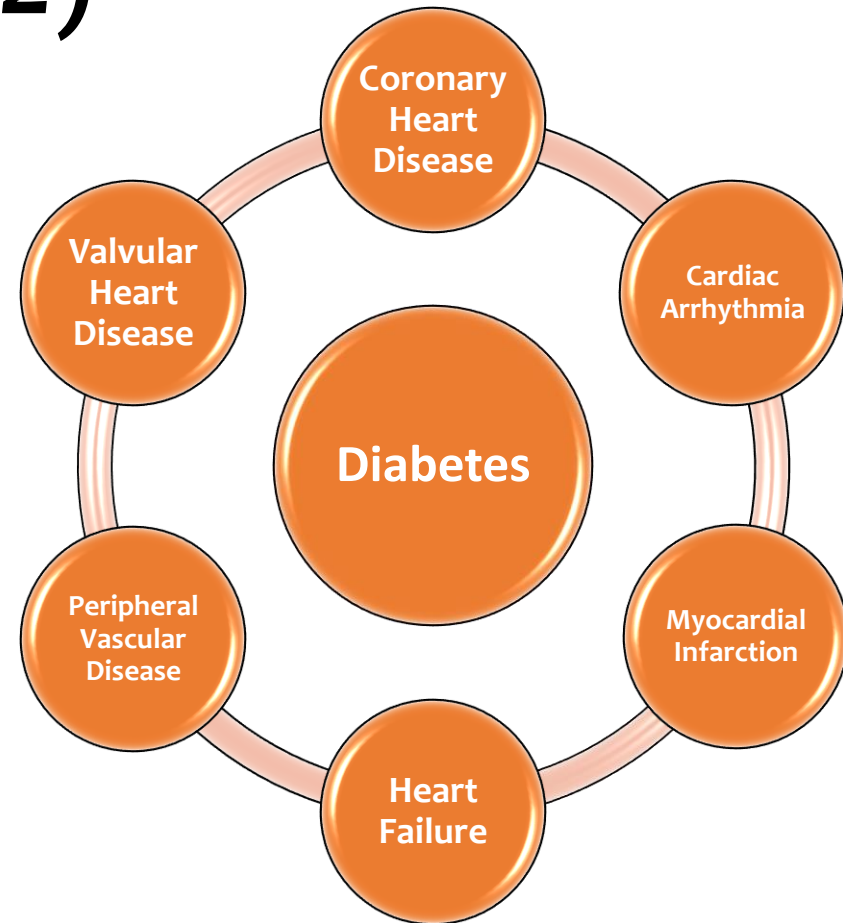


# Diabetes (Type 1 & Type 2)

- In the U.S., 37.3 million people have diabetes (11.3% of the population).\*
- Diabetes has been associated with an increased risk for coronary heart disease, cardiac arrhythmias, myocardial infarction, heart failure, peripheral vascular disease, and valvular heart disease.^
- The presence of diabetes may also have an impact on your medical decision making when it comes to prescribing medications.

\*<https://www.cdc.gov/diabetes/data/statistics-report/index.html>

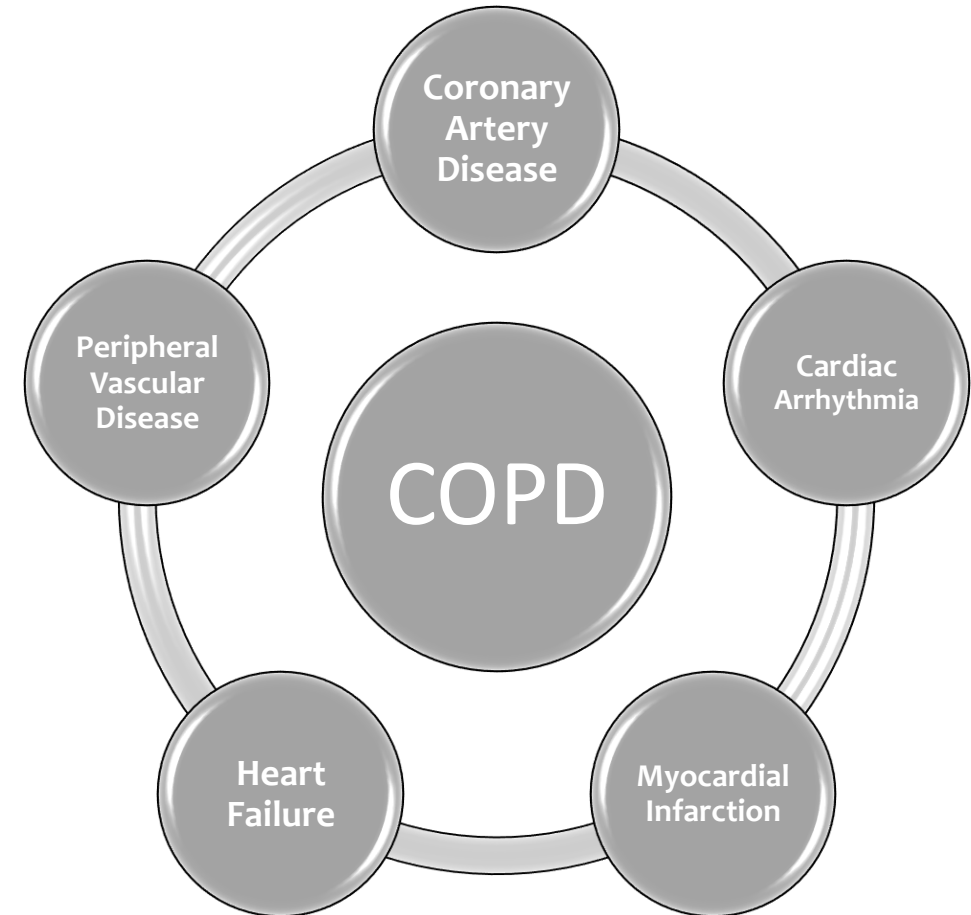
^Sources: CDC.gov; diabetes.org; heart.org; NIH.gov; AHAjournals.org



# COPD [J44.9]

- Almost 15.7 million Americans (6.4%) reported that they have been diagnosed with COPD.\*
- COPD has been associated with an increased risk for coronary artery disease, cardiac arrhythmias, myocardial infarction, heart failure, and peripheral vascular disease.^

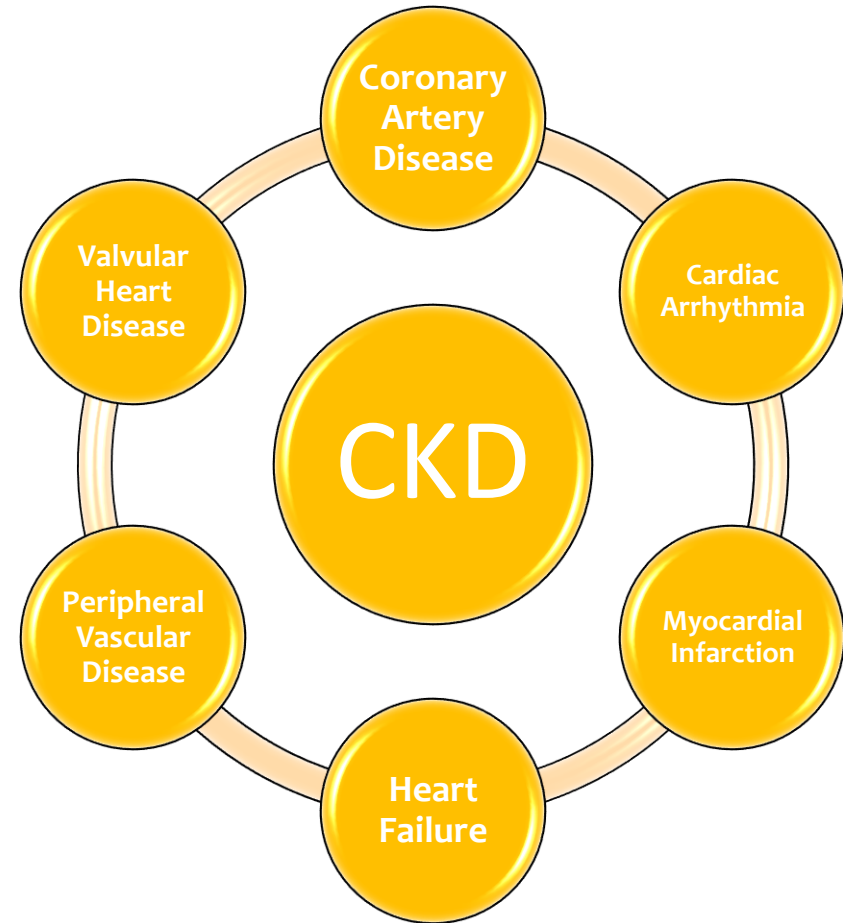
\*<https://www.cdc.gov/copd/basics-about.html>



^<https://pubmed.ncbi.nlm.nih.gov/23727296/#:~:text=Epidemiologic%20and%20mechanistic%20studies%20indicate,independent%20of%20shared%20risk%20factors.>

# Chronic Kidney Disease [N18.9]

- Almost 37 million US adults (15%) are estimated to have CKD.\*
  - CKD 3 => GFR <60
  - CKD 4 => GFR <30
  - CKD 5 => GFR <15
- CKD has been associated with an increased risk for coronary heart disease, cardiac arrhythmias, myocardial infarction, heart failure, peripheral vascular disease, and valvular heart disease.^
- The presence of CKD may also have an impact on your medical decision making when it comes to prescribing medications.



\*<https://www.cdc.gov/kidneydisease/ckd-national-facts>

^Source: [ahajournals.org](http://ahajournals.org); [NIH.gov](http://NIH.gov); [kidney-international.org](http://kidney-international.org)

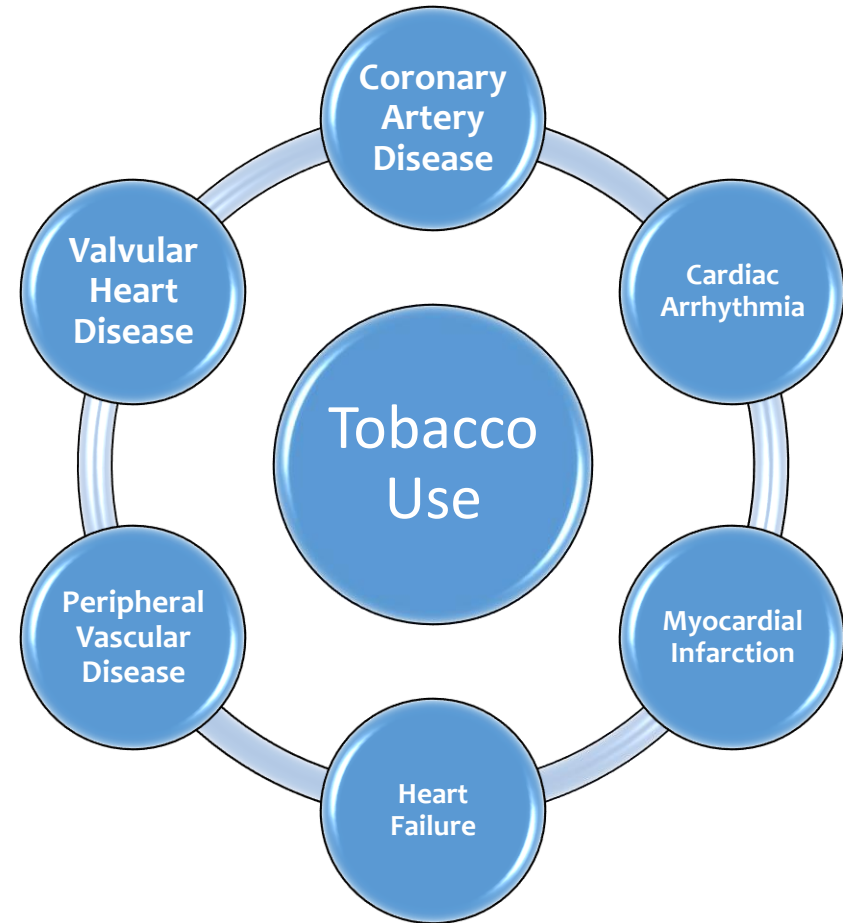
# Tobacco Use [Z72.0]+

- In 2020, an estimated 30.8 million U.S. adults currently smoked cigarettes.\*
- Nearly 5.7 million adults reported current use of smokeless tobacco products.\*
- Tobacco use has been associated with an increased risk for coronary heart disease, cardiac arrhythmias, myocardial infarction, heart failure, peripheral vascular disease, and aortic stenosis.^

\*<https://www.cdc.gov>

^ Sources: JAMA; reuters; publichealth.jhu.edu; NIH.gov; ahajournals.org

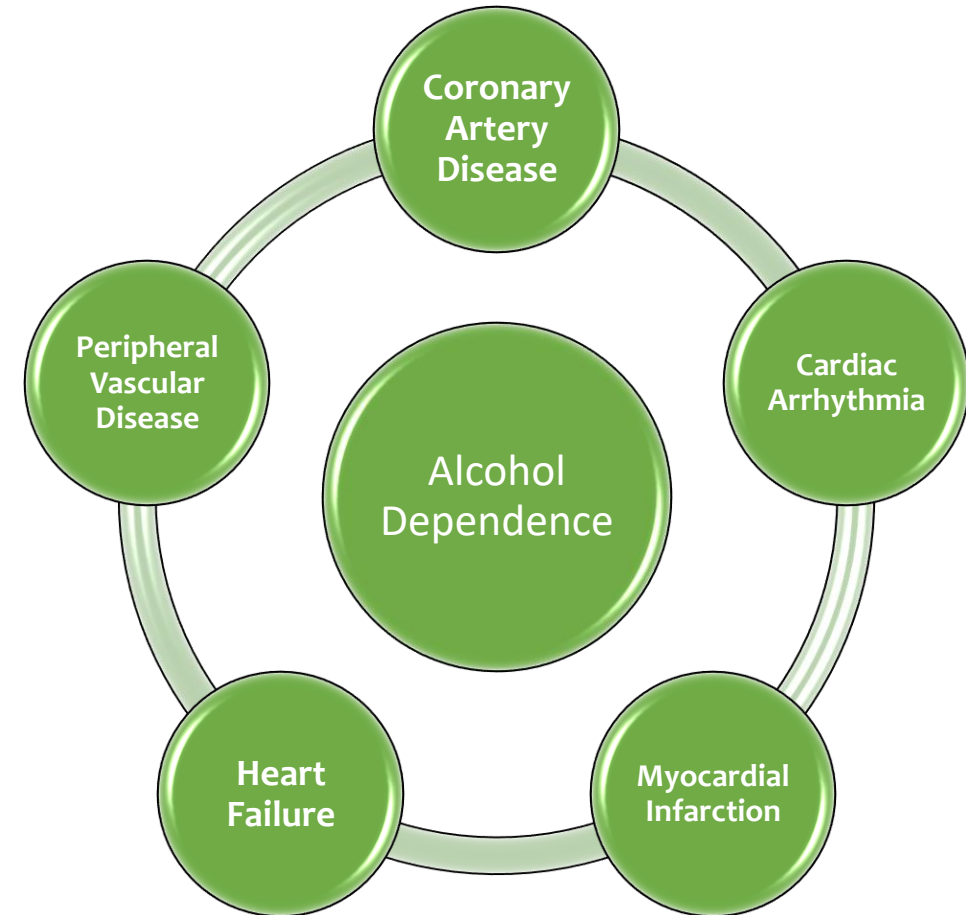
+ This diagnosis has no additional RAF value





# Alcohol Dependence [F10.20]

- In 2019, 25.8 percent of people ages 18 and older reported that they engaged in binge drinking in the past month, and 6.3 percent reported that they engaged in heavy alcohol use in the past month.\*
- Excessive alcohol use has been associated with an increased risk for coronary heart disease, cardiac arrhythmias, myocardial infarction, heart failure, and peripheral vascular disease.^
- The presence of alcohol dependence may also have an impact on your medical decision making when it comes to prescribing medications.



\*<https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/alcohol-facts-and-statistics>

^ Sources: NIH.gov; hopkinsmedicine.org; alcoholthinkagain.com; heart.org

# A note on Hypercoagulable States

Some patients with **primary** (generally inherited) and **secondary** (generally acquired) thrombophilias may also be treated with anticoagulants.



## Primary hypercoagulable states include:

- antithrombin III deficiency
- protein C and S deficiencies
- abnormalities of the fibrinolytic system
- dysfibrinogenemias

## Secondary hypercoagulable states include:

- Malignancy
- Pregnancy
- Oral contraceptives
- Atrial Fibrillation
- Prolonged immobilization
- Myeloproliferative disorder
- Trauma
- Vascular anomaly
- Vascular device (stents, catheters, prosthetic valves)

The ICD-10-CM Code for Other thrombophilia **D68.69** has HCC value and may be used to specify conditions or terms like acquired thrombophilia, thrombophilia associated with pregnancy, thrombophilia due to acquired protein c deficiency, thrombophilia due to antineoplastic agent therapy, **thrombophilia due to drug therapy**, thrombophilia due to hormone therapy, etc.

<https://icdlist.com/icd-10/D68.69>

## Hierarchical Condition Categories



Make sure to code for both the diagnosis  
AND the Other Thrombophilia code.

For example:

- Atrial Fibrillation [I48.91]
- Other thrombophilia [D68.69]



Additionally, in your documentation, you should explain the rationale for the secondary hypercoagulable state:

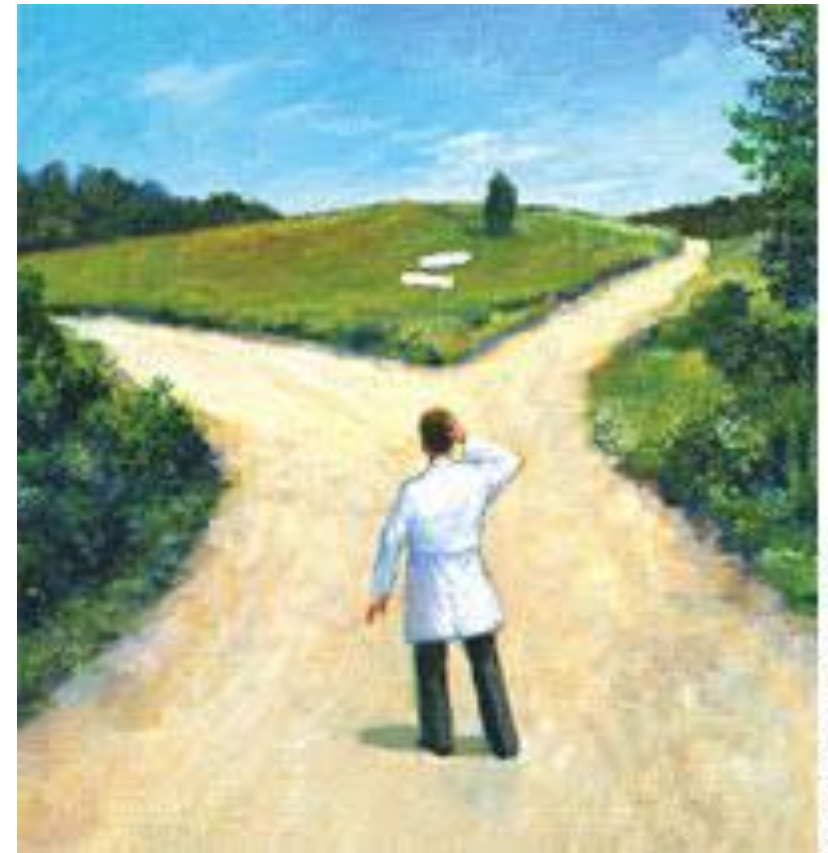
“Secondary hypercoag- CHADS<sub>2</sub>vasc > 1. Patient requiring coumadin for secondary hypercoagulable state. Continue to monitor coumadin levels to ensure patient in therapeutic range. Stable.”





# Influence on Medical Decision Making

In addition to the impact that these comorbid medical conditions have on the underlying diagnosis, they may also influence your medical decision making when it comes to the available treatment options.





# Example

- A 65-year-old poorly controlled diabetic male is seeing you in the office for follow-up of coronary artery disease. The patient had an MI two years ago. His BMI is 38. After evaluation, you feel that his diabetes and morbid obesity are playing a role in his coronary artery disease.

Scenario 1	Scenario 2
Coronary Artery Disease (I25.10)	Coronary Artery Disease (I25.10)
Old Myocardial Infarction (I25.2)	Old Myocardial Infarction (I25.2)
	Type 2 Diabetes with unspecified complications (E11.8)
Obesity, unspecified (E66.0)	Morbid obesity (E66.01)
Approx Budget = \$3,000/year	Approx Budget = \$8,300/year

# Example

- A 72-year-old female with stage 4 CKD presents for evaluation of new onset atrial fibrillation. She was recently seen in the ER and started on a calcium channel blocker and Coumadin. She lives alone and finds it difficult to come in for her INR testing. You decide to switch her to a DOAC but need to adjust the dose due to her chronic kidney disease.

Scenario 1	Scenario 2
Atrial Fibrillation (I48.91)	Atrial Fibrillation (I48.91)
	CKD, stage 4 (N18.4)
Approx Budget = \$6,300/year	Approx Budget = \$9,000/year

# Example

- A 68-year-old female smoker, with COPD, presents for follow-up of chronic atrial fibrillation. She is stable on her oral anticoagulant medication. Her BMI is 42. After evaluation, you feel that her COPD and morbid obesity are contributing to her atrial fibrillation. You continue her current meds.

Scenario 1	Scenario 2
Atrial Fibrillation (I48.20)	Atrial Fibrillation (I48.20)
	COPD (J44.9)
Obesity, unspecified (E66.0)	Morbid obesity (E66.01)
	Other Thrombophilia (D68.69)
Approx Budget = \$5,700/year	Approx Budget = \$13,200/year

# Rules of Thumb

- Code more specifically when possible
- Code for everything addressed and documented
  - **Include diseases that impacted decision making**
    - CKD impacting medication choices
    - DM impacting whether to prescribe steroids
- Code chronic conditions yearly\*

\*Although chronic conditions are ongoing, providers must document a patient's chronic condition and recapture the ICD-10 code annually to maintain the patient's HCC risk score. This includes amputations and ostomies.

