

Medicare Risk Adjustment Coding Focus

Atherosclerosis

Atherosclerosis is a specific type of arteriosclerosis that occurs when fats, cholesterol, and other substances build up and create plaque in and on the artery walls.¹ Over time, the arteries can narrow or become blocked which prevents adequate blood flow to tissues and organs. The plaque that builds up can also break apart, causing a blood clot. When atherosclerosis narrows the arteries that carry blood to the heart muscle it is called coronary artery disease (CAD), which is the primary cause for about 1 in 7 deaths in the U.S. annually.²

Signs and symptoms

Atherosclerosis develops gradually and most people with mild atherosclerosis will have no symptoms at all. More often, symptoms do not occur until the artery becomes too narrow or clogged to supply adequate blood flow.²

When symptoms do occur, they will vary depending on the affected artery and may include chest pain, high blood pressure, kidney failure, and leg pain when walking, known as claudication.

Risk factors

The exact cause of atherosclerosis is not known but there are several factors that are associated with higher risk of developing the disease:³

- High blood cholesterol levels
- Smoking
- High blood pressure
- Being obese or overweight
- Diabetes and insulin resistance
- Stress
- Alcohol consumption

Genetic factors may play a role as well, as people with a family history of heart disease may be at an increased risk.

Treatment

There are various treatment options for atherosclerosis that include lifestyle changes, such as maintaining a healthy weight, eating a heart-healthy diet and quitting smoking, as well as adding medications such as statins which help to lower blood cholesterol levels.³ In severe cases, surgery such as an angioplasty may be recommended to widen the artery, or bypass grafting may be used to redirect blood flow from a blocked artery through a healthy one.

Coding guidance

Atherosclerosis codes are located in chapter 9 of the ICD-10-CM codebook. These codes include a great amount of detail regarding the specific type of artery affected (such as native or nonbiological bypass graft), anatomical site, and laterality, as well as details regarding any complications such as the presence of an ulcer or gangrene. If an ulcer is present, an additional diagnosis code should be used to identify the severity of the ulcer (L97.-) when applicable. In version 23 of the CMS-HCC Risk Adjustment model, atherosclerosis with ulceration or gangrene maps to HCC 106.

Atherosclerosis with Ulceration or Gangrene (HCC 106)	
I70.2.*	of native arteries
I70.3.*	of unspecified type of bypass graft(s)
I70.4.*	of autologous vein bypass graft(s)
I70.5.*	of nonautologous biological bypass graft(s)
I70.6.*	of nonbiological bypass graft(s)
I70.7.*	of other type of bypass graft(s)
* Fifth and sixth characters (if required) will add detail regarding laterality, anatomical site, and the presence of ulceration or gangrene	
Use additional code to identify the severity of ulcer (L97.-)	

Resources

- 1 Mayo Clinic (2017). *Arteriosclerosis / Atherosclerosis*. Accessed April 20, 2018 from <https://www.mayoclinic.org>
- 2 WebMD (n.d.). *Atherosclerosis and Coronary Artery Disease*. Accessed April 20, 2018 from <https://www.webmd.com>
- 3 National Heart, Lung, and Blood Institute (n.d.). *Atherosclerosis*. Accessed April 23, 2018 from <https://www.nhlbi.nih.gov>

Reference the ICD-10-CM Codebook, CMS-HCC Risk Adjustment Model(s) and AHA Coding Clinic for complete code sets and official coding guidance.