

Department of Vermont Health Access (DVHA)

Agency of Human Services

Clinical Practice Guidelines: Cardiovascular Disease

Last Modified: April 11, 2024

PURPOSE

Cardiovascular Diseases (CVDs) are the leading cause of death globally and amounted to an estimated 695,000 deaths in the United States in 2021 (CDC, 2023). The Centers for Disease Control and Prevention (CDC) estimates cardiovascular disease resulted in about \$239.9 billion in healthcare costs to the United States each year from 2018 to 2019. This includes the cost of health care services, medication therapies, and lost productivity due to death.

The purpose of these guidelines is to provide clinicians, patients, payers, and others with the components of cardiovascular disease care, general treatment goals, and tools to evaluate the quality of care. This guidance is intended to help facilitate and assure quality, effective treatment, and interventions related to cardiovascular disease for Vermont Medicaid members.

These guidelines provide an overview of suggestions and flexible protocols for cardiovascular disease management. Clinical practice guidelines should not be considered as the only resource for providing health care and are not intended to replace the professional judgment of providers. Guidelines may not apply to every member or clinical situation and some divergence from guidelines is expected. Further, guidelines do not determine insurance coverage of health care services or products. Coverage decisions are based on member eligibility, contractual benefits, and determination of medical necessity.

DEFINITION

The World Health Organization defines cardiovascular diseases (CVD) as a group of disorders of the heart and blood vessels (WHO, 2021). They include, but are not limited to, coronary heart disease, cerebrovascular disease, peripheral arterial disease, rheumatic heart disease, congenital heart disease, deep vein thrombosis, and pulmonary embolism. Most cardiovascular diseases can be prevented by addressing behavioral risk factors, such as tobacco use, unhealthy diet, obesity, physical inactivity, and harmful use of alcohol. It is important to detect CVD early so that medical management can be started as soon as possible.

GUIDELINES & RECOMMENDATIONS

Clinical practice guidelines and further information on standards of care for CVD can be found at the following links:

- **American College of Cardiology (ACC) and the American Heart Association (AHA)** [Guideline for the Management of Patients with Chronic Coronary Disease \(2023\)](#)
- **American College of Cardiology (ACC), American Heart Association (AHA), Heart Failure Society of America (HFSA)** [Guideline for the Management of Heart Failure \(2022\)](#)
- **World Health Organization (WHO)**

[Guideline for the Pharmacological Treatment of Hypertension in Adults \(2021\)](#)

- **American College of Cardiology (ACC) and the American Heart Association (AHA)** [Guideline on the Primary Prevention of Cardiovascular Disease \(2019\)](#)
- **American Heart Association (AHA), American College of Cardiology (ACC), and American Society of Hypertension** [Treatment of Hypertension in Patients With Coronary Artery Disease \(2015\)](#)
- **Eighth Joint National Committee (JNC 8), The Journal of the American Medical Association (JAMA)** [2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults \(2014\)](#)
- **American College of Cardiology (ACC), American Heart Association (AHA), and US Department of Health and Human Services (HHS)** [Strategies to Enhance Application of Clinical Practice Guidelines in Patients with Cardiovascular Disease and Comorbid Condition \(2014\)](#)
- **American Heart Association (AHA)** [Secondary Prevention of Atherosclerotic Cardiovascular Disease in Older Adults \(2013\)](#)
- **National Heart, Lung, and Blood Institute (NIH)** [Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents \(2012\)](#)
- **American Heart Association (AHA) and American College of Cardiology Foundation (ACCF)** [Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and Other Atherosclerotic Vascular Disease: 2011 Update \(2011\)](#)

REGULATORY BACKGROUND, MEDICAID RULE & MEDICAID POLICY, and VERMONT STATE RESOURCES:

Providers are expected, as part of their contract with Vermont Medicaid, to understand and abide by Vermont Medicaid rules, the aspects of the Provider Manuals that are applicable to their discipline, and any criteria and guidelines that are applicable to their discipline. Providers are encouraged to review section 5 of the DVHA Provider Manual, and the other State of Vermont resources documented below.

[Vermont Medicaid General Provider Manual \(vtmedicaid.com\)](#)

[Vermont Medicaid General Billing and Forms Manual \(vtmedicaid.com\)](#)

Please refer to section 5.3.2.1 of the [Vermont Medicaid General Billing and Forms Manual \(vtmedicaid.com\)](#) and section §1908 of [Vermont statutes](#) regarding Vermont Medicaid as the payer of last resort.

Please refer to the following link regarding the definition of medical necessity, as defined by Vermont's Agency of Human Services: [Medical Necessity HCAR 4.101.pdf \(vermont.gov\)](#)

REFERENCES

Centers for Disease Control and Prevention (2023). *Heart Disease*. Retrieved from <https://www.cdc.gov/heartdisease/facts.htm>

World Health Organization (2021). *Cardiovascular Diseases (CVDs)*. Retrieved from [https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds))

American College of Cardiology and the American Heart Association (2023). *Guideline for the Management of Patients with Chronic Coronary Disease*. Retrieved from <https://www.ahajournals.org/doi/10.1161/CIR.0000000000001168>

American College of Cardiology, American Heart Association, Heart Failure Society of America (2022). *Guideline for the Management of Heart Failure*. Retrieved from https://www.jacc.org/doi/pdf/10.1016/j.jacc.2021.12.012?_ga=2.108929153.2042976034.1713804185-1755146388.1713804182

World Health Organization (2021). *Guideline for the Pharmacological Treatment of Hypertension in Adults*. Retrieved from <https://www.who.int/publications/i/item/9789240033986>

American College of Cardiology and the American Heart Association (2019). *Guideline on the Primary Prevention of Cardiovascular Disease*. Retrieved from <https://www.ahajournals.org/doi/10.1161/CIR.0000000000000678>

American Heart Association, American College of Cardiology, and American Society of Hypertension (2015). *Treatment of Hypertension in Patients with Coronary Artery Disease*. Retrieved from <https://www.ahajournals.org/doi/full/10.1161/cir.0000000000000207>

James PA, Oparil S, Carter BL, et al. 2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults: Report From the Panel Members Appointed to the Eighth Joint National Committee (JNC 8). *JAMA*. 2014;311(5):507–520. Retrieved from <https://jamanetwork.com/journals/jama/fullarticle/1791497>

American Heart Association, American College of Cardiology, and US Department of Health and Human Services (2014). *Strategies to Enhance Application of Clinical Practice Guidelines in Patients with Cardiovascular Disease and Comorbid Conditions*. Retrieved from <https://www.ahajournals.org/doi/10.1161/CIR.0000000000000128>

American Heart Association (2013). *Secondary Prevention of Atherosclerotic Cardiovascular Disease in Older Adults*. Retrieved from <https://ahajournals.org/doi/full/10.1161/01.cir.0000436752.99896.22>

National Heart, Lung, and Blood Institute (2012). *Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents*. Retrieved from <https://www.nhlbi.nih.gov/health-topics/integrated-guidelines-for-cardiovascular-health-and-risk-reduction-in-children-and-adolescents>

American Heart Association and American College of Cardiology Foundation (2011). *Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and Other Atherosclerotic Vascular Disease: 2011 Update*. Retrieved from <https://www.ahajournals.org/doi/10.1161/cir.0b013e318235eb4d>