2015 Clinical Integration Clinical Practice Guide for Established Coronary Artery Disease

Measure/Parameter	Monitoring Frequency	Recommendations
Weight and BMI[1]	At routine visits	• Review healthy weight maintenance and goals, and for those who require weight loss consider behavioral, medical, or surgical treatment options
Diet	Discuss at routine visits	• Should include fruits and vegetables, fibers, foods with low glycemic index, use of mono-unsaturated fats, and intake of fish and plant sources of omega-3 fatty acids.
Physical Activity[4]	Discuss at routine visit	• Moderate intensity exercise for 150 minutes per week or vigorous exercise for 75 minutes a week is recommended, even walking for 20 minutes a day brings benefits in CAD.
Blood Pressure Screening and Control[1,6,8]	At least annually and at routine visits	• < 140/90 for all patients • < 130/80 may be appropriate for those who are younger, on fewer agents, or at low risk for hypotension and side effects of therapy.
Smoking[1]	Initially and then periodically	• Assess smoking status and provide smoking cessation counseling and interventions if the patient is receptive.
Complete Lipid Profile & Control[1,2,3,9]	Once Guidelines are met, lipid profile and liver function tests can be re-checked every 12 months unless there is a change in status.	Several approaches to consider for secondary prevention: 1) High intensity statin for adults <75 years of age with CAD who are not yet receiving statin therapy and/or the intensity should be increased in those receiving a low or moderate intensity statin. Consider placing patients on the highest tolerated statin dose. 2) a. Statin therapy with a goal of LDL < 100 mg/dl in individuals 40 to 75 years old with CAD.* Alternatively b. Statin therapy with goal of LDL < 70 mg/dl in higher risk individuals ≤ 75 years old with CAD.* 3) Moderate dose statin and consider titrating to high dose as tolerated 4) Patients who are intolerant of statins should be considered for alternative strategies. †Moderate intensity: atorvastatin 10-20 mg, rosuvastatin 5-10 mg, pravastatin 40-80, lovastatin 40, fluvastatin 40 bid, or XL 80 mg/d, pitavastatin 2-4 mg, simvastatin 20-40 mg. High intensity: atorvastatin 40-80 mg, rosuvastatin 20-40 mg. *Current ADA/AACE guidelines differ slightly from ACC/AHA guidelines so the general recommendations of both have been incorporated here. These recommendations, specific goals, and age considerations (<40 and >75) should be individualized.
Anti-Platelet Use[1,5]	Review at each office visit	• Aspirin at a dose of 81 mg should be prescribed to all patients with angina, PCI, or other atherosclerotic disease. Consider clopidogrel 75 mg daily for patients with aspirin allergy. • Dual anti platelet therapy should be considered for all patients who have had PCI or acute coronary syndromes for at least a year after the event

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Beta Blocking Medications[8]	Review at each office visit	• First line agents to reduce angina episodes and increase exercise tolerance, prevent re-infarction, and improve survival after myocardial infarction. They should not be used in vasospastic angina.
Calcium Channel Blocking Medications[8]	Review symptoms at each office visit	• Can be prescribed for relief of symptoms when initial treatment with beta blockers is unsuccessful, when beta blockers are contraindicated, or can be used in combination with beta blockers to increase effectiveness or to improve symptom relief.
Nitrates[8]	Review at each office visit	• First line medications to reduce acute angina and can be used as prophylaxis to prevent predictable angina. • Long acting nitrates can be added to beta blockers and/or calcium channel blockers to increase anti-anginal effectiveness.
ACE/ARB Medications[8]	Review at each office visit	• Consider if LV ejection fraction <40% and in patients who also have diabetes, hypertension or CKD. *routine electrolytes and renal function should be checked levels at least every 6 months and more frequently if medications are adjusted.
Psychosocial Issues[1]	Routinely	• Screen for depression, anxiety (including heart disease related stress), eating disorders, cognitive issues and patient's social situation. Consider treatment, referral and social services consultation when appropriate.
Vaccinations[1]	Based on Individual Schedules	• Per ACIP guidelines
Patient Education[1]	Initially at diagnosis and reassess needs periodically	• Provide education regarding risk factors for further progression of atherosclerotic disease, exercise, nutrition and weight. Consider referral to dietician if necessary.
Cardiac Rehabilitation[7]	Consider when there is an intervention or change in clinical status	• Consider referral to a cardiac rehabilitation program in patients who have coronary disease with recent acute coronary syndrome, PCI, or open heart surgery.
Cardiovascular Specialist/PCP Integration	Consider when there is an intervention or change in clinical status	• Patients with suspected or newly diagnosed CAD or symptoms consistent with CAD that cannot be managed or diagnosed with standard measures should be considered for referral to a cardiovascular specialist. • Patients with known CAD with worsening symptoms should be considered for referral to a cardiovascular specialist. Patients who report worsening symptoms should be scheduled for an evaluation visit on a timely basis appropriate to the level of symptoms. • Patients with stable CAD should be seen and evaluated for appropriate preventive care and symptom control at least on a yearly basis. Evaluation and optimization of preventive care can be assessed by a primary care physician or cardiovascular specialist.
Functional Testing[8]	Not done routinely in stable patients.	• Functional testing such as stress testing and ejection fraction determination is not done routinely in the first 5 years after an intervention unless there is a change in status such as new symptoms or a change in the EKG.

[1]American Diabetes Association, "Standards of Medical Care in Diabetes," Diabetes Care. January 2014, Vol 37, Supplement 1:S14-S80

[2]2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. Circulation. November 2013, 1-84

[3]American Association of Clinical Endocrinologists' Guidelines for the Management of Dyslipidemia and Prevention of Atherosclerosis. Endocrine Practice March/April 2012 18(S1):1-78

[4] Wannamethee SG, Shaper AG, Alberti KG. Arch Int Med 2000; 160:2108

[5] Antithrombotic Trialists' Collaboration. Collaborative meta-analysis of randomized trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. BMJ 2002; 324:71.
[6]Chobanian AV, Bakris GL, Black HR, et al. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: the JNC 7 report. JAMA 2003; 289:2560.
[7] Clark AM, Hartling L, Vandermeer B, McAlister FA. Meta-analysis: secondary prevention programs for patients with coronary artery disease. Ann Intern Med 2005; 143:659.
[8] 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS guideline for the diagnosis and management of patients with stable ischemic heart disease: a report of the American College of Cardiology Foundation/American Heart Association task force on practice guidelines, et al, Circulation. 2012;126(25):e354.
[9]Management of Dyslipidemia for Cardiovascular disease Risk Reduction: Synopsis of the 2014 U.S. Department of Veterans Affairs and U.S Department of Defense Clinical Practice Guideline. Downs JR, O'Malley PG. Ann Intern Med Published online 23 June 2015 doi:10.7326/M15-0840