

1.4. Scope of the Guideline

The scope of the “2021 ACC/AHA/SCAI Guideline for Coronary Artery Revascularization” is to provide an update to and to consolidate the 2011 coronary artery bypass graft (CABG) surgery (1) and the 2011 and 2015 percutaneous coronary intervention (PCI) guidelines (2,3), with the added consideration of using a patient-centric disease approach. The applicable sections on revascularization from the 2012 stable ischemic heart disease (SIHD) guideline (4), as well as the 2013 ST-segment-elevation myocardial infarction (STEMI) (5) and 2014 non-ST-segment-elevation myocardial infarction (NSTEMI) guidelines (6), will also be updated. This present guideline will affect the following documents:

1. Replace/retire the 2011 PCI guideline (2).
2. Replace/retire the 2011 CABG guideline (1).
3. Replace/retire the 2015 update in PCI in STEMI guideline (3).
4. Replace/retire the 2013 STEMI guideline, Sections 4.1, 4.2, 4.3, 4.4, 5.3 (deals with transfer after lytic with intent to do PCI), 6.2, 6.4, 7.1, and 7.2 (5).
5. Replace/retire 2014 non-ST-segment-elevation acute coronary syndrome (NSTEMI) guideline, Sections 4.4.4, 5.1.1, 5.1.2.1, 5.1.2.2, 5.1.2.3, and 5.2 (6).
6. Replace/retire the 2012 SIHD guideline, Section 5 (4).

The intended primary target audience consists of cardiovascular clinicians who are involved in the care of patients for whom revascularization is considered or indicated. Coronary artery disease (CAD) is to be approached with the most current treatment options and treated as a “condition.” Recommendations are stated in reference to the patients and their condition. The focus is to provide the most up-to-date evidence to inform the clinician during shared decision-making with the patient. Although the document is not intended to be a procedural-based manual of recommendations that outlines the best practice for coronary revascularization, there are certain techniques that surgeons or interventional cardiologists might use that are associated with improved clinical outcomes.

In developing the 2021 coronary artery revascularization guideline, the writing committee reviewed previously published guidelines and related statements. Table 1 contains a list of these publications and statements deemed pertinent to this writing effort and is intended for use as a resource, thus obviating the need to repeat existing guideline recommendations.

1.5. Class of Recommendation and Level of Evidence

The Class of Recommendation (COR) indicates the strength of recommendation, encompassing the

estimated magnitude and certainty of benefit in proportion to risk. The Level of Evidence (LOE) rates the quality of scientific evidence supporting the intervention on the basis of the type, quantity, and consistency of data from clinical trials and other sources (Table 2) (1).

1.6. Abbreviations

Abbreviation	Meaning/Phrase
ACS	acute coronary syndrome
AKI	acute kidney injury
AMI	acute myocardial infarction
AVR	aortic valve replacement
BIMA	bilateral internal mammary artery
BMS	bare-metal stent
CABG	coronary artery bypass graft
CAD	coronary artery disease
CKD	chronic kidney disease
COR	Class of Recommendation
CTO	chronic total occlusion
CVD	cardiovascular disease
DAPT	dual antiplatelet therapy
DES	drug-eluting stent
ECG	electrocardiogram
FFR	fractional flow reserve
GDMT	guideline-directed medical therapy
iFR	instantaneous wave-free ratio
IMA	internal mammary artery
ISR	in-stent restenosis
IVUS	intravascular ultrasound
LAD	left anterior descending
LIMA	left internal mammary artery
LOE	Level of Evidence
MACE	major adverse cardiovascular events
MI	myocardial infarction
NSTEMI	non-ST-segment-elevation acute coronary syndrome
NSTEMI	non-ST-segment-elevation myocardial infarction
OCT	optical coherence tomography
PCI	percutaneous coronary intervention
RCT	randomized controlled trial
SCAD	spontaneous coronary artery dissection
SIHD	stable ischemic heart disease
STEMI	ST-segment-elevation myocardial infarction
SVG	saphenous vein graft
SYNTAX	Synergy Between PCI With TAXUS and Cardiac Surgery
TAVR	transcatheter aortic valve replacement
UFH	unfractionated heparin
VT	ventricular tachycardia