



\*See Sections 2.2, 2.4, and 2.5 in the full-text CPG for recommendations for patients with symptomatic HF, VHD, or arrhythmias.  
 †See UA/NSTEMI and STEMI CPGs (Table 2).

**Figure 1.** Stepwise approach to perioperative cardiac assessment for CAD. Colors correspond to the Classes of Recommendations in Table 1. **Step 1:** In patients scheduled for surgery with risk factors for or known CAD, determine the urgency of surgery. If an emergency, then determine the clinical risk factors that may influence perioperative management and proceed to surgery with appropriate monitoring and management strategies based on the clinical assessment (see Section 2.1 for more information on CAD). (For patients with symptomatic HF, VHD, or arrhythmias, see Sections 2.2, 2.4, and 2.5 for information on evaluation and management.) **Step 2:** If the surgery is urgent or elective, determine if the patient has an ACS. If yes, then refer patient for cardiology evaluation and management according to GDMT according to the UA/NSTEMI and STEMI CPGs.<sup>18,20</sup> **Step 3:** If the patient has risk factors for stable CAD, then estimate the perioperative risk of MACE on the basis of the combined clinical/surgical risk. This estimate can use the American College of Surgeons NSQIP risk calculator (<http://www.riskcalculator.facs.org>) or incorporate the RCRI<sup>131</sup> with an estimation of surgical risk. For example, a patient undergoing very low-risk surgery (eg, ophthalmologic surgery), even with multiple risk factors, would have a low risk of MACE (<1%), whereas a patient undergoing major vascular surgery with few risk factors would have an elevated risk of MACE (Section 3). **Step 4:** If the patient has a low risk of MACE (<1%), then no further testing is needed, and the patient may proceed to surgery (Section 3). **Step 5:** If the patient is at elevated risk of MACE, then determine functional capacity with an objective measure or scale such as the DASI.<sup>133</sup> If the patient has moderate, good, or excellent functional capacity (≥4 METs), then proceed to surgery without further evaluation (Section 4.1). **Step 6:** If the patient has poor (<4 METs) or unknown functional capacity, then the clinician should consult with the patient and perioperative team to determine whether further testing will impact patient decision making (eg, decision to perform original surgery or willingness to undergo CABG or PCI, depending on the results of the test) or perioperative care. If yes, then pharmacological stress testing is appropriate. In those patients with unknown functional capacity, exercise stress testing may be reasonable to perform. If the stress test is abnormal, consider coronary angiography and revascularization depending on the extent of the abnormal test. The patient can then proceed to surgery with GDMT or consider alternative strategies, such as noninvasive treatment of the indication for surgery (eg, radiation therapy for cancer) or palliation. If the test is normal, proceed to surgery according to GDMT (Section 5.3). **Step 7:** If testing will not impact decision making or care, then proceed to surgery according to GDMT or consider alternative strategies, such as noninvasive treatment of the indication for surgery (eg, radiation therapy for cancer) or palliation. ACS indicates acute coronary syndrome; CABG, coronary artery bypass graft; CAD, coronary artery disease; CPG, clinical practice guideline; DASI, Duke Activity Status Index; GDMT, guideline-directed medical therapy; HF, heart failure; MACE, major adverse cardiac event; MET, metabolic equivalent; NB, No Benefit; NSQIP, National Surgical Quality Improvement Program; PCI, percutaneous coronary intervention; RCRI, Revised Cardiac Risk Index; STEMI, ST-elevation myocardial infarction; UA/NSTEMI, unstable angina/non-ST-elevation myocardial infarction; and VHD, valvular heart disease.