

Cardio Policy:

Perioperative Cardiovascular Evaluation and Care Before Non-Cardiac Surgery

POLICY NUMBER UM CARDIO_1175	SUBJECT Perioperative Cardiovascular Evaluation and Care Before Non-Cardiac Surgery		DEPT/PROGRAM UM Dept	PAGE 1 OF 5
DATES COMMITTEE REVIEWED 09/09/11, 01/09/13, 08/28/13, 06/30/14, 10/14/15, 12/21/16, 10/11/17, 11/14/18, 11/13/19, 12/11/19, 10/14/20, 10/14/21, 11/09/21, 10/12/22	APPROVAL DATE October 12, 2022	EFFECTIVE DATE October 28, 2022	COMMITTEE APPROVAL DATES 09/09/11, 01/09/13, 08/28/13, 06/30/14, 10/14/15, 12/21/16, 10/11/17, 11/14/18, 11/13/19, 12/11/19, 10/14/20, 10/14/21, 11/09/21, 10/12/22	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
URAC STANDARDS HUM v8: UM 1-2; UM 2-1	NCQA STANDARDS UM 2		ADDITIONAL AREAS OF IMPACT	
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Commercial, Exchange, Medicaid	

I. PURPOSE

Indications for determining medical necessity for perioperative cardiovascular evaluation and care before non-cardiac surgery.

II. DEFINITIONS

Perioperative cardiovascular evaluation and care before non-cardiac surgery is defined as the performance of an evaluation of the patient's current medical status; make recommendations to perform an evaluation of the patient's current medical status; make recommendations concerning the evaluation, management, and risk of cardiac problems over the entire perioperative period; and provide a clinical risk profile that the patient, primary physician and non-physician caregivers, anesthesiologist, and surgeon can use in making treatment decisions that may influence short and long-term cardiac outcomes. No test should be performed unless it is likely to influence patient treatment. The goal of the consultation is the optimal care of the patient.

An appropriate diagnostic or therapeutic procedure is one in which the expected clinical benefit exceeds the risks or negative consequences of the procedure by a sufficiently wide margin such that the procedure is generally considered acceptable or reasonable care. The ultimate objective of AUC

is to improve patient care and health outcomes in a cost–effective manner but is not intended to ignore ambiguity and nuance intrinsic to clinical decision making.

Appropriate Care- Median Score 7-9

May be Appropriate Care- Median Score 4-6

Rarely Appropriate Care- Median Score 1-3

Active Cardiac Conditions for which the patient should undergo evaluation and treatment before non-cardiac surgery:

Condition	Examples	
Unstable coronary syndromes	Unstable or severe angina* (CCS class III or IV)†	
	Recent MI‡	
Decompensated HF (NYHA functional class IV; worsening or new-onset HF)	High-grade atrioventricular block	
Significant arrhythmias	Mobitz II atrioventricular block	

Cardiac risk-stratification for non-cardiac surgical procedures:

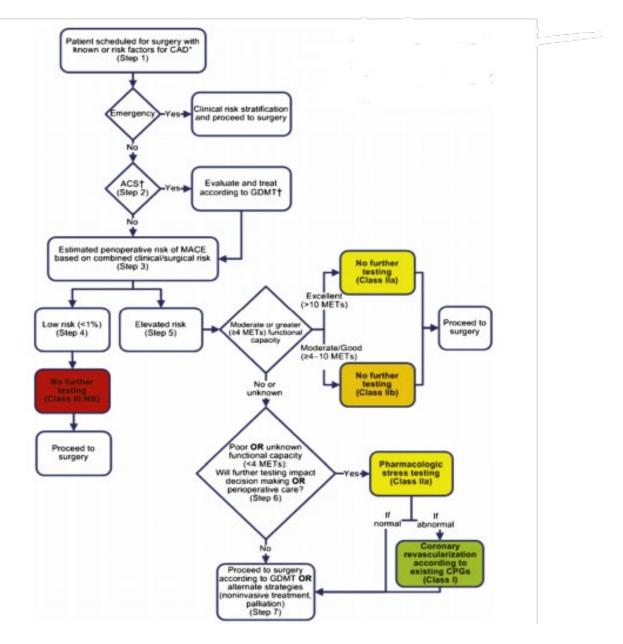
Risk Stratification	Procedure Examples	
Vascular (reported cardiac risk often more than 5%)	Aortic and other major vascular surgery Peripheral vascular surgery	
Intermediate (reported cardiac risk generally 1% to 5%)	Intraperitoneal and intrathoracic surgery Carotid endarterectomy Head and neck surgery Orthopedic Surgery Prostate surgery	
Low [†] (reported cardiac risk generally less than 1%)	Endoscopic procedures Superficial Procedure Cataract Surgery Breast Surgery Ambulatory surgery	

^{*} Combined incidence of cardiac death and nonfatal myocardial infarction.

Step wise approach to Peri Operative Cardiac assessment



[†]These procedures do not generally require further preoperative cardiac testing.



III. POLICY

Indications for approving a request for medical necessity are:

A. EKG- Preoperative resting 12-lead ECG is reasonable for patients with known coronary heart disease or other significant structural heart disease, except for low-risk surgery. (AUC Score 6)

B. Assessment of LV function

- 1. It is reasonable for patients with dyspnea of unknown origin to undergo preoperative evaluation of LV function, if no Echo has been performed since onset of new symptoms. (AUC Score 6)
- It is reasonable for patients with HF with worsening dyspnea or other change in clinical status to undergo preoperative evaluation of LV function, if no Echo has been performed since onset of new symptoms. (AUC Score 6)



C. Exercise/Pharmacological stress testing for myocardial ischemia and functional capacity

For patients with intermediate-high CAD risk and unknown or poor (<4 METs) functional
capacity it may be reasonable to perform exercise testing to assess for functional capacity if it
will change management and to assess for myocardial ischemia. (AUC Score 6)

D. Coronary Revascularization Before Noncardiac Surgery

Revascularization before noncardiac surgery is recommended when indicated. (AUC Score 8)

Limitations:

- A. Routine preoperative resting 12-lead ECG is not recommended for asymptomatic patients undergoing low-risk surgical procedures.
- B. Routine preoperative evaluation of LV function with Echocardiogram is not recommended.
- C. For patients with intermediate-high CAD risk and excellent functional capacity (>10 METs), it is reasonable to forgo further exercise/pharmacological testing and proceed to surgery.
- D. For patients with elevated risk and moderate to good functional capacity (≥4 METs to 10 METs), it may be reasonable to forgo further exercise/pharmacological testing and proceed to surgery.
- E. Routine screening with noninvasive stress exercise/pharmacological testing is not useful for low risk noncardiac surgery.
- F. Routine preoperative coronary angiography is not recommended.
- G. Requests for services that are part of a surveillance protocol for patients who are involved in a clinical trial are considered out of scope (OOS) for New Century Health and cannot be reviewed.

IV. PROCEDURE

The review of the documentation for compliance of the algorithm for cardiac evaluation and care for non-cardiac surgery requires appropriate documents.

- A. In order to review a request for medical necessity, the following items must be submitted for review
 - 1. Latest notes from Requesting /Servicing Provider that would support the medical necessity for the service(s) requested.
 - 2. Latest test/procedure report

V. APPROVAL AUTHORITY

- A. Review Utilization Management Department
- B. Final Approval Utilization Management Committee

VI. ATTACHMENTS

A. None

VII. REFERENCES

1. Perioperative Cardiovascular Risk Assessment and Management for Noncardiac Surgery: A Review. JAMA 2020; 324:279-290.



- 2. 2014 ACC/AHA Guideline on Perioperative Cardiovascular Evaluation and Management of Patients Undergoing Noncardiac Surgery. Fleisher et al. JACC VOL. 64, NO. 22, 2014
- 3. Appropriate use of cardiovascular technology: 2013 ACCF appropriate use criteria methodology update: a report of the American College of Cardiology Foundation appropriate use criteria task force. Robert C. Hendel MD, FACC, FAHA, FASNC et al. Journal of the American College of Cardiology. March 2013, Volume 61, Issue 12, Pages 1305-1317.
- 4. NCQA UM 2022 Standards and Elements.

