Common Indications & Appropriateness Criteria for Echocardiography

Initial echocardiogram	▪ Evaluation of cardiac symptoms eg. chest pain, dyspnea, edema, palpitations, presyncope or syncope ▪ Evaluation of murmur, suspected valvular stenosis/regurgitation, myocardial, pericardial or aortic disease ▪ Hypertension ▪ Post MI/ ACS/ revascularization/ cardiac surgery/ new prosthetic valve ▪ Arrhythmia, frequent ectopy, LBBB, high grade AV block, WPW ▪ Pre-pacemaker or ICD insertion (if prior echo > 3 months) ▪ Neurologic or other embolic event ▪ Other indications eg pulmonary hypertension, screening of relatives for inherited cardiac conditions, use of cardiotoxic drugs, Marfans/ connective tissue disease, suspected endocarditis
Reevaluation at any time	▪ Reevaluation of known valvular stenosis/regurgitation, myocardial, pericardial, aortic or congenital heart disease of any severity with change in clinical status or examination ▪ Reassessment of known LV dysfunction/ cardiomyopathy to guide therapy
Reassessment ≥ 6 months	▪ Severe valvular stenosis or regurgitation ▪ Severe LV dysfunction/ cardiomyopathy
Reassessment ≥ 1 year	▪ Moderate valvular stenosis or regurgitation ▪ Prosthetic valve ▪ LV dysfunction/ cardiomyopathy ▪ Prior surgery of aorta ▪ Moderate or greater sized pericardial effusion
Reassessment ≥ 2 years	▪ Mild valvular stenosis ▪ MVP with significant leaflet thickening/ redundancy ▪ Congenital heart disease

Common Indications for Stress Testing, Stress Echocardiogram & Myocardial Perfusion Imaging

Indications for exercise stress testing	▪ Evaluation of chest pain or ischemic equivalent syndrome, dyspnea, palpitations, presyncope or syncope ▪ Post MI/ ACS/ revascularization/ cardiac surgery ▪ Congestive heart failure ▪ Arrhythmia ▪ Physiologic assessment of patients with moderate/ severe valvular disease, cardiomyopathy, pulmonary hypertension ▪ Intermediate/ high global CAD risk ▪ Significant cerebrovascular or peripheral vascular disease ▪ Periodic reevaluation (≥ 1 year) of stable CAD ▪ Periodic reevaluation (≥ 1 year) of patients with cerebrovascular or peripheral vascular disease ▪ Periodic reevaluation (≥ 2 year) of patients with intermediate/ high global CAD risk

Indications for addition of imaging
 	
▪ myocardial perfusion imaging (Cardiolite) or
 	
▪ stress echocardiogram
	▪ Baseline ECG abnormalities eg.
	  ▪ ST depression > 1 mm
	  ▪ LVH
	  ▪ Digoxin therapy
	  ▪ LBBB, intraventricular conduction delay (recommend Persantine Cardiolite)
	  ▪ Paced rhythm
	  ▪ WPW
	
	▪ High pretest probability of CAD eg.
	  ▪ Typical angina
	  ▪ LV dysfunction
	
	▪ Known CAD to assess extent and localize ischemia
	
	▪ Inability to exercise (recommend pharmacogic stress with imaging - Persantine Cardiolite or dobutamine stress echocardiogram)

Adapted from Cardiac Care Network guidelines 2012.