

Cardiology Levels of Care

Procedure/Skill	Level of care	Supervision	Milestones	Milestone Level	Competency
Coronary Angiography	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive Cardiology	2	PC, MK, ICS
Coronary Bypass Angiography	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive Cardiology	2	PC, MK, ICS
Ventriculogram	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive Cardiology	2	PC, MK, ICS
Right Heart Catheterization	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive Cardiology & hemodynamics	2	PC, MK, ICS
Femoral Arterial Access	1, 2,3	Direct*	Access and hemostasis	2	PC, MK, ICS
Radial Arterial Access	1, 2,3	Direct*	Access and hemostasis	2	PC, MK, ICS
Central Venous Access	1, 2,3	Indirect	Access and hemostasis	2	PC, MK, ICS
Aortogram	1, 2,3	Direct	Cognitive and Technical knowledge of Vascular Medicine	2	PC, MK, ICS
Peripheral Angiogram	1, 2,3	Direct	Cognitive and Technical knowledge of Vascular Medicine	2	PC, MK, ICS
Coronary Stenting	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive/Interventional Cardiology	3	PC, MK, ICS
Coronary Balloon Angioplasty	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive/Interventional Cardiology	3	PC, MK, ICS
Intra-Aortic Balloon Placement	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive/Interventional Cardiology	3	PC, MK, ICS
Mechanical Circulatory Support	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive/Interventional Cardiology	3	PC, MK, ICS
Endomyocardial Biopsy	1, 2,3	Direct	Cognitive and Technical knowledge of Invasive/Interventional Cardiology	3	PC, MK, ICS
Echocardiogram	1, 2,3	Oversight	Noninvasive evaluation of cardiac anatomy and function	2	PC, MK, ICS,SBP
Stress Echo	1, 2,3	Indirect	Noninvasive evaluation of myocardial ischemia	2	PC, MK, ICS,SBP
Dobutamine Stress Echo	1, 2,3	Indirect	Noninvasive evaluation of myocardial ischemia	2	PC, MK, ICS,SBP

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Cardioversion	1, 2,3	Direct*	Cardiac Emergency management	2	PC, MK, ICS,SBP
Intracardiac Echo	1, 2,3	Direct	Invasive evaluation of cardiac anatomy and function	2	PC, MK, ICS,SBP
Transesophageal Echocardiogram	1, 2,3	Direct	Invasive evaluation of cardiac anatomy and function	2	PC, MK, ICS,SBP
Contrast Echocardiogram	1, 2,3	Indirect	Noninvasive evaluation of cardiac anatomy and function	2	PC, MK, ICS,SBP
Saline Bubble Study	1, 2,3	Indirect	Stroke and Cardiac Shunt risk stratification	2	PC, MK, ICS,SBP
Treadmill Stress Test	1, 2,3	Indirect	Noninvasive evaluation of myocardial ischemia	2	PC, MK, ICS,SBP
Lexiscan Cardiolute	1, 2,3	Indirect	Noninvasive evaluation of myocardial ischemia	2	PC, MK, ICS,SBP
Temporary Pacemaker	1, 2,3	Direct	Cardiac Emergency management	2	PC, MK
Pericardiocentesis	1, 2,3	Direct	Cardiac Emergency management	2	PC, MK
Permanent Pacemaker placement	1, 2,3	Direct	Cardiac rhythm disturbance management	2	PC, MK, ICS
Intracardiac Defibrillator placement	1, 2,3	Direct	Invasive evaluation and management of Systolic Heart Failure	2	PC, MK, ICS
Electrophysiological Studies	1, 2,3	Direct	Cardiac rhythm disturbance management	2	PC, MK, ICS
Intracardiac Ablations	1, 2,3	Direct	Cardiac rhythm disturbance management	2	PC, MK, ICS
Head Up Tilt Table Test	1, 2,3	Indirect	Syncope management	2	PC, MK, ICS
Link Cardiac Monitor Insertion	1, 2,3	Direct	Cardiac rhythm disturbance and syncope management	2	PC, MK, ICS
Pacemaker Interrogation	1, 2,3	Indirect	Cardiac rhythm disturbance management	2	PC, MK, ICS,
Defibrillator Interrogation	1, 2,3	Indirect	Cardiac rhythm disturbance management	2	PC, MK, ICS,
Procainamide Drug Challenge	1, 2,3	Indirect	Cardiac rhythm disturbance management	2	PC, MK, ICS,

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* Supervision
Direct -the supervising physician is physically present with the resident and patient.
*A faculty physician, other than another resident, is physically present during the key portions of the procedure or is immediately available.
Indirect -the supervising physician is physically within the hospital or other site of patient care and is immediately available to provide direct supervision.
Oversight - the supervising physician is available to provide review of procedures/encounters with feedback after care is provided.
**Core Competencies
1. Patient Care (PC)
2. Medical Knowledge (MK)
3. Practice-Based Learning & Improvement (PBL)
4. Systems-Based Practice (SBP)
5. Interpersonal & Communication Skills (IC)
6. Professionalism (P)