



## *Cardiovascular Technologist Exam Outline*

This Exam Outline was developed to help you prepare for the knowledge exam.

This Exam Outline is not meant to cover all aspects of the knowledge exam, but to guide your preparation for questions that may occur in the knowledge exam.

### Review:

- Systemic arterial and venous anatomy
- Coronary arterial and venous anatomy
- Cardiac anatomy and physiology to include pressures and oxygenation
- Valvular stenosis/regurgitation recognition, indications and contraindications, and interventions
- Uses for echocardiograms prior to valvuloplasty
- Hemodynamic wave form interpretation and management
- Hemodynamic lines, pressures, cardiac output
- What symptoms are seen due to injections into cardiac vessels
- Sheath removal with and without closure device
- 12-lead EKG interpretation
- Common radiographic projections
- Define
  - Isovolumetric contractions
  - Contrast-induced nephropathy
  - Rotational atherectomy
  - Over-the-wire and stent catheters
  - Dyskinetic wall motion
  - Low osmolar contrast media
  - Fractional flow reserve studies
  - LV-AO pullback
- Common medications indications, side effects, vasoactive properties
- National Patient Safety Goals
- Sterile technique
- Common laboratory results
- Common conditions effecting hemodynamic pressures
- HIPAA
- Cardioverter Defibrillator use, indications, insertion, management
- Pressure calculations e.g. systemic vascular resistance
- Myocardial infarction recognition, management, complications
- Intra-aortic balloon pump, insertion, indications, contraindications, complications, management
- Interventional cath laboratory treatments