## TECHNICAL STANDARDS CARDIOVASCULAR SONOGRAPHY

## **Cardiovascular Sonographers/Technologists**

Cardiovascular sonographers or technologists perform non-invasive tests using ultrasound instrumentation to examine the heart chambers, valves, myocardium, pericardium and great vessels. Cardiovascular sonographers also use ultrasound instrumentation to record vascular information such as arterial and venous blood flow, blood pressures, change in limb volume oxygen saturation, cerebral circulation, peripheral circulation and abdominal circulation. Cardiovascular sonographers may also perform electrocardiograms (EKG's) to trace electrical impulses of the heart. Some of theses tests may be done during or immediately after surgery. Cardiovascular sonographers will also perform medical history on patients to determine appropriateness of ordered examination, evaluate pulses and assess blood flow in arteries and veins by listening to flow sounds for abnormalities.

Hours are generally daytime hours with some evening or weekends, holidays and on-call times to be expected for emergency procedures. Cardiovascular sonographers may work within a hospital, in a clinical setting or on a mobile unit. They must be able to explain procedures to the patient prior to testing, as well as explain preliminary test results to physicians following examinations. Hospitals and clinics will require being on the registry from the American Registry of Diagnostic Medical Sonography (ARDMS) in Adult Echocardiography and Vascular Technology.

## Cardiovascular Sonographers and Technologists are expected to have the ability to complete the following:

- Regularly communicate effectively via speech, reading, writing and listening
- · Regularly sit
- Regularly reach with extremities and handle instrumentation
- Regularly manipulate equipment probes with fine finger dexterity
- Regularly use high degree of hand-eye coordination to manipulate equipment while simultaneously inputting data into a machine or working with a patient
- Frequently stand, walk, kneel, bend, stoop and squat
- · Frequently visualize images on monitors, distinguishing multiple shades of gray and color
- · Routinely discern small numbers and gauges on medical equipment in dimly lit environments
- Provide extreme attention to detail
- Frequently distinguish audible (Doppler) sounds
- Occasionally lift and/or move or use pushing/pulling force for up to 75 pounds
- Occasionally reach above shoulder level