

### Class Concept

This is skilled technical work in the performance and initial interpretation of exercise stress testing, electrocardiograms and vectorcardiograms. The electrocardiogram is a measurement of voltage and time reflecting the electrical activity of the heart, whereas the vectorcardiogram is used in relation to the EKG to expand electrocardiographic interpretation. The cardiograms preclude any detailed diagnostic screening for each patient. Technicians connect leads from electrocardiograph to electrodes, apply and observe electrical output, manipulate selector switch to secure tracing of electromotive variations and action of specific areas of the heart muscle. Work requires the employees to schedule patients for their particular tests; provide basic instruction to patients and clinicians; perform holter monitor tracings or stress tests; and provide initial test interpretations to clinicians. Employees balance and calibrate the vectorcardiographic machine, record results on laser, mount and label vector loops and photographs of heart size, vector direction, and duration of the heart beat in milliseconds for submission to a cardiologist and supervisor. Employees may be involved in short/long term planning; budget recommendations; training; establishing quality control standards; and participating in personnel functions. Technicians must recognize basic abnormalities of electrocardiograms while recording tracing to be submitted to the supervisor and cardiologist. Work may include other related assignments as determined by management. Work is supervised by a laboratory supervisor or Medical Director.

### Recruitment Standards

#### Knowledge, Skills, and Abilities

- Considerable knowledge of procedures, techniques, and equipment in electrocardiographic tests.
- General knowledge of the maintenance and operation of EKG testing equipment.
- General knowledge of cardiac anatomy, physiology, and disease, and electrocardiographic interpretation. Skill in the operation of electrocardiographic scanning and/or exercise stress testing equipment and vectorcardiograms.
- Ability to process EKG tracings and operate specialized diagnostic equipment.
- Ability to gain the confidence and cooperation of patients.
- Ability to instruct patients and residents in the diagnostic tests performed as well as their interpretation.

#### Minimum Education and Experience

High school or General Educational Development (GED) diploma and one year of experience in related hospital work and one year of on-the-job training in electrocardiography; or an equivalent combination of education and experience.