Job Class Profile: Cardiology Technician

Pay Level: LX-18 Point Band: 437-461

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	3	3	4	4	2	2	2	1	4	
Points	140	50	25	19	60	43	41	21	43	442

JOB SUMMARY

The Cardiology Technician is responsible for performing non-invasive procedures in cardiology. This includes preparing and performing electrocardiograms (ECGs), preparing patients for 24 hour Holter Monitors, Exercise Tolerance Testing and assisting physicians in the Cardiac Pacemaker Clinics and with the assessment of patients with cardiac and other disorders.

Key and Periodic Activities

- Prepares patients for 12 and 15 lead electrocardiogram (ECGs) tests, provides information about the procedure, and performs the test.
- Prepares patients for 24/48 hour Holter Monitor device (ambulatory recorders), provides information about the test, connects patients to the monitor, and upon return disconnects them.
- Prepares patients for Exercise Tolerance Testing (ETT), explains information about the procedure, and monitors patients before, during, and after the testing.
- Prepares and explains procedures to patients undergoing Stress Testing.
- May assist physicians in pacemaker and defibrillator checks, prepares patients, explains procedures, performs testing on devices, and arranges follow up appointments.
- Types reports of the ECGs interpretations read by the physician.
- Performs some clerical functions related to patient appointments and file maintenance, some minor housekeeping functions, equipment maintenance, cleaning, and stock supplies.
- May provide orientation to new cardiology staff and train nursing staff to perform ECGs.

SKILL

Knowledge

General and Specific Knowledge:

- Electrocardiograms.
- Testing procedures and guidelines.
- Patient safety and confidentiality.
- Medical Terminology.

Formal Education and/or Certification(s):

- Minimum: Training varies: Skills can be learned on the job including some type of relevant

diploma (equivalent to 1 year, i.e. Licensed Practice Nurse), or require completion of a 2 - 3 year Cardiology Technician Program, but is not registered.

Years of Experience:

— Minimum: 1-2 years.

Competencies:

— Communication Skills.

— Cardiology equipment.

— Computer skills.

Interpersonal Skills

— A wide range of interpersonal skills are used to listen and provide information to patients, physicians and staff, to provide care and comfort to patients during testing, and to work co-operatively with other people to complete work. May have to deal with angry or upset patients and be able to deal with the situation appropriately, and use skills to instruct patients about procedures, or nurses and other students on how to perform ECGs.

— Communications occur with employees in the immediate work area, organization (physicians, nurses), and patients as well as the supervisor and students.

EFFORT

Physical Effort

— The demands of the job occasionally result in considerable fatigue, requiring periods of rest, and a need for strength and endurance.

— Physical effort is required to lift material and equipment less than 10 lbs. There is a requirement to assist patients who weigh over 50 lbs. to move from side to side, in order to place electrodes on their body, or to hold or support them during stress tests.

— When performing testing there is a constant requirement to stand; however, they also are required to walk to patient areas of the hospital to perform tests. When typing ECG reports, sits and uses the mouse to enter reports into a computer.

— During testing uses gross motor skills to assist patients and occasionally operates machines that require controlled movement.

Concentration

— **Visual** concentration is constantly required during testing, i.e. to ensure electrodes are in place and in the proper position, to monitor the tracings on the screen, to locate the rib space, and for reading and writing information.

— **Auditory** concentration is constantly required when testing to listen to physicians directions, when performing blood pressure checks, and responding to team members who may be asking questions.

— Other sensory demands are occasionally required (i.e., **touching** patients to determine the location of rib spaces in preparation for electrocardiograms, for stress testing, and for placement of the Holter monitor leads).

— The **repetitive** activities performed that require **alertness** are related to setting up tests. A **higher level of attentiveness and alertness** is required when patients are being tested to

ensure their safety (i.e. performing stress tests require patients to use a treadmill).

- There is **often lack of control over the work pace** due to the patient's level of tolerance to the testing, or when physicians are called away from the department. If this happens then some tests are delayed or postponed.
- There are some **time pressures and interruptions** due to emergency requests for service. These requests are given priority and as a result, this then extends the waiting time for scheduled appointments.
- **Exact results and precision** are required with electrode placement.

Complexity

- Tasks or activities are typically well-defined and repetitive requiring the use of similar skills and knowledge.
- Problems regularly are well-defined, can be addressed following guidelines, or solved in a team setting. Occasionally, there are highly technical tasks.
- A typical challenging problem is ensuring patients are prepped properly for their testing. If they are not then this would lead to interference in the picture quality.
- There are guidelines that can be followed to address some issues advice from physicians, nurses, supervisor, and manuals/textbooks.

RESPONSIBILITY

Accountability and Decision-Making

- Activities are performed in a team setting; however, should there be a cardiac abnormality while testing, a decision can be made to bring the patient to the Emergency Department and then notify the physician. Can also suggest to the physician to discontinue certain types of testing such as stress testing, if it is discomforting to the patient.
- Formal approval is required to order supplies and new equipment.
- Exercises discretion and judgement when performing ECG testing, i.e. deciding to perform either a 12, 15 lead, or rhythm strip test based on the patient's results.
- Provides physicians and the healthcare team with information related to patient's test results and provides patients with instructions about the testing procedures.

Impact

- Work tasks and activities are generally prescribed or controlled.
- Work has an impact on patients, within the immediate work area, and within and outside the organization.
- Resources that are impacted are processes and systems, information, facilities, health and safety, and corporate image.
- When procedures are performed accurately, a diagnosis can be made for the patient causing a positive impact on health and safety. In the event of an error or mistake, there are negative impacts on patients, their health and safety, corporate image, and would require immediate attention. Possible errors that can happen would be misinterpreting an ECG test or incorrect placement of lead hook-ups. The consequences could result in a misdiagnosis, and or inappropriate treatment of the patient
- Consequences or impacts of errors are mitigated, as the technologist or the physician normally

identifies errors within hours of its detection.
Development and Leadership of Others
— Not responsible for the supervision of staff. — Provides occasional orientation to new staff, on the job training, and training to new nurses on how to perform ECGs.

WORKING CONDITIONS

Environmental Working Conditions
— There is a requirement to wear masks, gowns and gloves, and take other precautions as required. — There is a limited likelihood of receiving minor injuries or illnesses and no likelihood of receiving any fractures, partial, or full disability when performing their activities. — Regularly exposed to glare from machine monitors, limited lighting, bodily fluids, infectious diseases, and odours. Occasionally, exposed to shocks from the cardiology equipment, sharp objects, radiation, and possibly physical danger to themselves as a result of assisting patients with testing (i.e. stress testing), as they could become weak and require physical support.