

Job Class Profile: Cardiology Technologist II**Pay Level: LX-27 Point Band: 682-716**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	4	4	4	6	3	4	4	5	3	
Points	187	67	25	29	90	87	83	107	32	707

JOB SUMMARY

The Cardiology Technologist II is responsible for performing advanced highly specialized technical work in the field of cardiology. This includes performing, and interpreting, routine and specialized cardiology tests such as Electrocardiograms, Exercise Tolerance and Cardiac Nuclear Stress Tests, Ambulatory Blood Pressure Monitoring, and assisting Cardiologists with clinics. In addition, assists in the direction and operation of the Cardiac Diagnostic Department including the supervision of staff.

Key and Periodic Activities

- Supervises the day-to-day operations of the department including scheduling and assigning work, providing direction and assistance in caseload assignments, conducting audits of work activities, participating in performance appraisals and the selecting of new staff. Also, completes daily payroll time records, approves short-term leave, arranges education in-services for all staff, i.e. CPR, fire safety, etc., and schedules and chairs staff meetings. Provides orientation to new staff, and coordinates student placements.
- Assists the division manager with the department's budget plans and expenditures; reviews departmental tenders for equipment purchases, maintains inventory control of supplies; assists with the collection of workload and utilization data; completes applicable reports; develops, maintains, and revises policies and practices; acts as the resource person for the department; and participates in committees.
- May performs a variety of cardiology related tests with some performed independently while others requiring observation by a physician, which includes: Exercise Tolerance Testing (ETT), 12 and 15 lead Electrocardiograms (ECG), 24, 48, and 72 hour Holter Monitoring test (ambulatory recorders), Ambulatory Monitoring (Loop recorders and event monitors), Cardiac Nuclear Stress Tests, 24 hr Ambulatory Blood Pressure Monitoring, and Signal Averaging ECGs for genetic studies. Depending on the tests, takes and records patients blood pressure, monitors patients before, during, and after testing; terminates testing if patient responses to testing warrants it; downloads information into the computer; analyzes and interprets findings against patient symptoms, medications, condition, etc.; identifies any abnormalities; and takes appropriate action as required. Transfers physicians written report of tests to the computer and prints reports for the family physician.
- Conducts pacemaker and Implantable Cardioverter-Defibrillators (ICD) Clinics which involves inspecting incisions to determine infection, interrogating the devices using a programmer,

Key and Periodic Activities

- performing various tests to determine whether devices working capacity, identifying any abnormalities, programming the devices; and taking appropriate action as required by the activity including contacting the Cardiologist who overviews the clinic.
- Participates in the establishment and development of policies, procedures, and practices within the department including ensuring critical incidents are reported, and infection control and radiation guidelines are followed. May represent the department at meetings, providing input into program activities, and coordinating cardiology related activities/projects for a site or a regional basis.
- Identifies equipment problems and safety concerns and ensures equipment is maintained.
- Ensures diagnostic procedures are explained to patients and standardized written instructions are provided to them.
- Provides instruction to nursing staff and other medical personnel on how to perform some cardiology tests.
- Evaluates new equipment and purchases supplies.

SKILL

Knowledge

General and Specific Knowledge:

- Knowledge of:
 - Electrocardiograms to analyze Cardiac Arrhythmias.
 - Cardiology equipment and devices (pacemaker and ICD).
 - Testing procedures and guidelines.
 - Departmental policies and procedures.
 - Patient safety and confidentiality.
 - Medical Terminology.

Formal Education and/or Certification(s):

- Minimum: 2-3 Year Specialized Post Secondary Diploma.
- Registered Cardiology Technologist (RCT) (Current) with the Canadian Society of Cardiology Technologists (CSCT).
- 30 continuing education credits annually.

Years of Experience:

- Minimum: 4-5 years.

Competencies:

- Independent technical and clinical knowledge.
- Patient care and focus.
- Basic life support (BLS).
- Calibration of equipment.

Interpersonal Skills

- A wide range of interpersonal skills are used to give instructions, deal with upset or angry people, provide care and comfort, ask questions to gain information, and listen to information from patients. Skills are used to communicate information or direct information to physicians, healthcare, and departmental staff. In addition, uses interpersonal skills to teach, guide, mentor staff, gain the co-operation of others, conduct formal interviews, and facilitate meetings.
- Communications occur with patients, employees in the immediate work area including the supervisor, students, department, and outside the department, but within the organization. Occasionally, there is contact with suppliers/contractors, sales representatives, professional associations and peers outside the organization.

EFFORT

Physical Effort

- The demands of the job occasionally result in considerable fatigue, requiring periods of rest and a need for strength and endurance.
- When testing, physical effort is required regularly to lift materials and equipment, push or transport machines, i.e. IV poles, ECG machines, and crash carts between 25 – 50 lbs. Occasionally, there is a requirement to push or pull patients who weigh over 50 lbs. in wheelchairs, stretchers or assist them to the procedure bed or during stress testing, stand behind or hold them to ensure they do not fall off the treadmill.
- When performing testing there is constant standing. Regularly works in awkward positions to place electrodes on patient's body for testing. When working on the computer, regularly sits, using the mouse for fine finger work. May occasionally have to drive to other sites to deliver training.
- Regularly uses gross motor skills to assist patients with the procedures and operate machines that require controlled movement.

Concentration

- **Visual** concentration is required during testing to observe patients and to stare, read or interpret monitor and/or test results.
- **Auditory** concentration is required during testing to listen to blood pressure changes, patient's responses during ETT testing, physician's instructions as well as other healthcare workers.
- Sensory demands are also required during testing to **touch** patients to determine the location of rib spaces in preparation for electrocardiograms, to perform blood pressure assessments and in the performance of cardiopulmonary resuscitation.
- The **repetitive** activities that require **alertness** are the application of electrodes to patients' body, data entry and observing monitors for any abnormalities and patients to ensure their safety. A **higher level of attentiveness and alertness** is required when patients are being tested such as on the treadmill to ensure their safety and during monitoring of screens to identify any abnormalities with test results.
- **Lack of control over the work pace** occurs during emergencies (i.e. stat calls to perform testing) or when the clinic physician is called out of the department some tests are delayed or postponed. In addition, there is the unpredictable number of patients that are seen or admitted to hospital (i.e. ECG testing does not require appointments). There are **time pressures and**

interruptions due to the demands for the service, emergencies, and deadlines to complete payroll, time schedules, and other administrative functions.

- **Exact results and precision** are required to record patient's demographic and medical information; for placement of electrodes of patient's body; and to assess test results.

Complexity

- Tasks and activities are similar, in terms of skill and knowledge required, and are repetitive and well-defined. Some tasks may be different and unrelated, but again, require similar skills and knowledge.
- Problems tend to have a limited number of guidelines or procedures that require creative problem definition and analysis and the development of solutions but can often be solved in a team setting.
- Examples of typical challenging problems occur when performing routine tests such as identifying unexpected conditions and then deciding on the best plan of care, troubleshooting equipment, and managing staffing issues.
- There are guidelines that address issues, the Biomedical Department for equipment problems, and there is advice and guidance from physicians, nurses, supervisor, manuals/textbooks, Human Resources, and CSCT.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are moderately prescribed or controlled.
- Activities are performed in consultation with the supervisor; however, can make independent decisions regarding the day-to-day supervision of the department by assigning work, scheduling staff, approving short-term leave requests, purchasing routine departmental supplies/equipment, consulting with staff on performance issues, and organizing training.
- Formal approval is required for travel, policy changes, staff overtime, education and long term leave requests, and capital equipment purchases.
- Exercises discretion and judgement on confidentiality matters related to staffing, and there is a high degree of independent discretion and judgement during testing, analyzing data, patient safety and decisions around what course of action to take with patient's results.
- Provides physicians and the healthcare team with information related to patient's test results, patients with instructions about the testing procedures, and advice and recommendations to staff related to workload and administrative functions.

Impact

- 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, finances, facilities, and health and safety.
- When procedures are performed accurately, a diagnosis can be made for the patient causing a positive impact on health. In the event of an error or mistake, there are negative impacts on patients, their health, finances, and corporate image.
- Examples of possible errors that can happen would be misinterpreting an ECG test or mistakes

in patient identification. The consequences could result in a misdiagnosis, and extra or inappropriate treatment of the patient.

- Consequences or impacts of errors are mitigated, as reports are read by the physician and typically identified within hours of its detection.

Development and Leadership of Others

- Responsible for the supervision of a medium size work group (5 to 10 employees).
- Provides on-the-job advice/guidance, direction, feedback, and delegates tasks. Provides orientation to new employees, organizes on-the-job training, formal classroom instruction, and acts as a technical mentor.
- Has team lead responsibilities in providing guidance and support to staff and the department regarding cardiology testing and resources, policy and procedures, and equipment and product purchases. Has project lead responsibilities for developing policies and procedures, education information, and the purchase of major equipment for the department.

WORKING CONDITIONS

Environmental Working Conditions

- There is a requirement to wear masks, gowns, gloves, and goggles when situations require isolation precautions. Otherwise, universal safety precautions such as hand washing, and safety practices are followed when bending or lifting or performing tests. There are also precautions taken when exposed to radioactive isotopes in the Nuclear Medicine Department.
- 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.
- When performing testing there is constant exposure to distracting noise, radiation, and glare from the machine monitors and regularly exposed to infectious diseases, and odours. Occasionally, exposed to bodily fluids and waste, wet or slippery floors, awkward or confining spaces, sharp objects, heavy equipment, and physical dangers or threats (i.e. patients who are unstable or are under the influences of alcohol or drugs or physical danger to themselves as a result of assisting patients with testing (i.e. stress testing), as patients could become weak and require physical support).