Job Class Profile: Laboratory 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	5	4	2	5	4	4	4	2	3	
Points	233	67	13	24	120	87	83	43	32	702

JOB SUMMARY

The Laboratory Technologist II provides administration, coordination, maintenance, enhancement, implementation, training and support of the Meditech Magic Laboratory Information System (LIS), Middleware Computer System, and the Instrument Manager System. Work also includes troubleshooting issues, creating and maintaining telecommunication sites, building system dictionaries, performing test codes, and creating customized reports for statistical workload and quality control reporting.

Key and Periodic Activities
— Provides administration, coordination, maintenance, and implementation of all facets of the LIS, Middleware Computer System, and the Instrument Manager System which is used as a data management solution that stands between laboratory instruments and the laboratory information system, linking the two.
— Collaborates with Information Management teams and vendors in the co-ordination and installation of system interfaces, and other systems issues.
— Develops and updates, as required, training guides for LIS and Instrument Manager Systems; serves as an ongoing resource person; and co-ordinates and delivers training to system users.
— Provides troubleshooting within all aspects of the LIS and Instrument Manager Systems in regards to interfaces, reporting, accurate registration, and workload measurement. Investigates errors on both LIS and Data Innovation systems; and provides corrective action as required.
— Provides support to end users of LIS and Data Innovations; provides advice and recommendations to internal and external stakeholders; and identifies process gaps and implements solutions.
— Facilitates system changes and enhancements in keeping with consistent and current medical laboratory standards of practice; implements new laboratory tests through proper test code mapping; validates; and implements enhancements.
— Provides maintenance and administration of laboratory test dictionaries; maintains accurate reporting of information (i.e. collection of tubes, special instructions, routing of specimens, preferred testing centres, and user notes for certain tests); and analyzes the impact of additions or edits to the complete dictionaries with any new tests.
— Creates and monitors telecommunication sites used to print all laboratory reports within hospitals, clinics and doctor offices, ensures accurate printing or electronic viewing of report information, determines where reports print, as well as, who receives them.

Key and Periodic Activities

— Creates code assignments and develops customized reports of workload measurement, departmental, quality assurance and control, and clinical utilization activities.

— Collaborates with quality control staff to assist with audit reports, daily error logs, to develop and implement auto-validation rules, and to ensure correct reporting of the LIS systems.

— Liaises with other provincial healthcare providers to facilitate the evolution and development of a patient electronic health record through a provincial standard Meditech dictionary.

SKILL

Knowledge

General and Specific Knowledge:

— Meditech and Data Innovations Middleware Systems.

— Computer programming and interfaces.

— Adult learning principles.

— New guidelines, standards, and developments in all disciplines.

Formal Education and/or Certification(s):

Minimum: Graduation from an accredited program with a 3 year Diploma in Medical Laboratory Technology; Registration as a General Registered Technologist (R.T.) with the Canadian Society of Medical Laboratory Sciences (CSMLS). Training in the Meditech and Data Innovations Middleware systems.

Years of Experience

Minimum: 4 – 5 years of experience is required.

Competencies:

— Ability to troubleshoot LIS issues.

— Ability to develop training guides, and customized computer dictionaries.

— Ability to develop customized reports.

— Analytical and assessment skills.

— Calibrate and operate machinery.

— Oral and written communication skills.

— Computer technical skills.

Interpersonal Skills

— A range of interpersonal skills are used to perform activities such as listening to and asking questions to system consultants to troubleshoot areas of the system; providing routine and complex information to staff and the manager; communicating, instructing /teaching/ training staff on the systems; facilitating/moderating and working collaboratively with staff to convey information regarding the systems; and providing expert advice or guidance to users of the system.

— Communications occur with employees within the immediate work area, department, and outside the organization. Other contacts occur with the manager, government employees, suppliers or contractors to troubleshoot issues with the systems, sales representatives, internal and/or external subject-matter expert, and professional advisors.

— The most significant contacts are with the manager/director for guidance and with system consultants to troubleshoot and address any issues.

EFFORT

Physical Effort

— Work demands do not result in considerable fatigue requiring periods of rest.
— Work may occasionally include lifting or moving objects up to 10 lbs (i.e. manuals, pipettes, etc.).
— Occasionally there is a requirement to walk and stand and to drive between sites.
— Constantly there is a requirement to sit at a desk for extended periods to answer telephone calls or work on a computer gathering information and reviewing sample processes in order to fix a problem.
— Occasionally, this class uses hand tools that require accurate control and steadiness and requires fine finger and precision work when using the computer mouse.

Concentration

— **Visual** concentration is required to work on the computer to respond to emails from vendors and technical support, to correct or troubleshoot the systems, monitor screens, develop reports, build new tests into the system, and to validate reports being transmitted to doctors and the pathways of the transmission.
— **Auditory** concentration is required when listening to information from vendors, and when giving training, advice and information.
— **Repetition requiring alertness** is required to perform validation of tests. Validation requires the running of many levels of testing on samples capturing a variety of results to ensure validity.
— Work is impacted by **lack of control over the pace of the work** as it manages systems in a number of sites and often requires troubleshooting multiple sites simultaneously. There are **time pressures and deadlines** to implement new instruments or when there are system upgrades. There are regular **interruptions** from phone calls, visits from the technologists for information, or for troubleshooting inquiries.
— There is requirement for **eye/hand coordination** to perform some tests such as loading samples on the machines, or to use the computer mouse.

Complexity

— Tasks and activities are different/unrelated and require the use of a broad range of skills and a diversity of knowledge.
— Problems can be simple where a limited number of solutions exist, and they can be addressed by following procedures and/or guidelines. At times however, problems have a limited opportunity for standardized solutions and may be more complex. Occasionally, tasks require creative problem definition, analysis, and solution development that may be solved in a team setting.
— Typical challenges/problems involve troubleshooting issues with the systems which may include investigating the way samples travel within the system track, what and when rules were triggered, and if they did not trigger, why not. Challenges can also involve performing audits

on specimens, and making contact with the technologist to fix the error or repeat the test.
— Complexities tend to be solved through consulting with technical advisors of the systems; review and troubleshoot issues in the test environment; review standards and guidelines; and consult with reference books, or the internet.

RESPONSIBILITY

Accountability and Decision-Making

— The systems are subject to checks and balances to ensure a controlled and monitored system even though daily work tasks are performed independently.
— As work is performed independently decision in the day-to-day management of the computer systems including making changes such as additions and edits to the systems and to reports or printer can be made without formal approval.
— Approval is required to complete some edits or additions to the systems, or in situations which could have a major impact on test results or the reporting of tests.
— There is some discretion to exercise within predetermined limits and procedures for situations related to delays in report printing and when equipment is not working properly.

Impact

— Tasks performed have an impact within the immediate work area (i.e. staff), department, in and outside the organization (i.e. doctors offices, and clinics), and on patients. Incorrect reporting of results has a significant impact on the patient as this impacts their diagnosis and treatment plan.
— Activities could either negatively or positively impact on the patients' well-being.
— Work activities impact equipment (i.e. causes delays in testing), processes and systems (i.e. information, built in dictionaries, transmission of test results, calculation rules), material resources (i.e. equipment and inventory used), health and safety, finances, human resources (i.e. workload), and corporate image (i.e. incorrect reporting).
— There are checks and balances in place such as daily reports printed for review, and verification of accurate results. In addition, any new test or changes made to the systems are first done in a test environment before moving into the live system where they are tested and monitored to ensure accuracy.
— Typical examples of mistakes or errors include building incorrect rules for testing into the system. These rules allow test results to be released automatically if they fall within the set of guidelines, and are not typically reviewed by a technologist. Thus, this does not trigger repeat testing and may affect a patient's treatment. Another typical error is incorrectly setting up printers and reports to print and/or inaccurate locations. These errors can be detected and resolved usually within hours of awareness. Errors are typically identified by this class, other technologists, or a physician.

Development and Leadership of Others

— Does not have formal supervisory responsibilities.
— Provides other development and leadership activities such as on-the-job guidance/advice, feedback, orientation, delegation of tasks, training, and direction to staff.
— Although not on a daily basis, as the situation warrants, performs in a team lead role and acts as a technical mentor or advisor on the LIS, printers, etc.; offers feedback and support to

management on solutions to identify process gaps; provides formal classroom type training, evaluates staff for competency on the systems, and trains other healthcare professionals on the systems.

— May also perform project lead activities with respect to the LIS, specifically as new tests, analyzers, or sites are added.

WORKING CONDITIONS

Environmental Working Conditions
— Typically does not require special precautions or the use of safety equipment; however, does work with human samples and thus, during these occasions, are required to wear gloves, masks, goggles, safety glasses, and to wear a laboratory coat and must follow universal safety precautions.
— The potential for minor illness is limited and unlikely as well as for other illnesses or injury resulting in partial or total disability.
— Occasionally exposed to bodily fluids and waste, infectious diseases, works around heavy equipment, and travel to various sites, sometimes in adverse weather conditions.