

Job Class Profile: **Computer Programmer II**

Pay Level: **CG-29** **Point Band:** **622-675**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	4	4	1	4	4	4	4	2	2	
Points	187	67	6	19	120	87	83	43	21	633

JOB SUMMARY

The Computer Programmer II provides programming techniques to the reporting structure of provincial software database systems (i.e. Client Referral Management System (CRMS)) and provides custom created reports built on retrieved data. Provides training and technical support to users on software/databases and performs system testing and data integrity verification within supported database structures.

Key and Periodic Activities

- Builds custom reports using various programming techniques and tools.
- Provides technical support to database systems within the organization.
- Creates training material and provides training to end users of the custom software utilized.
- Performs ongoing testing of system functionality as systems continue to evolve.
- Verifies data integrity, modifies user noted documentation errors to make client information as accurate as possible to user specifications.
- Performs system evaluation and research.
- Gathers information to aid in project completion undertaken within the department.
- Participates in system upgrades and rollout to end users.

SKILL

Knowledge

General and Specific Knowledge:

- Computer programming, systems design, and hardware systems.

Formal Education and/or Certification(s):

- Minimum: 3 Year Specialized post-secondary Diploma in Computer Studies.

Years of Experience:

- Minimum: 2 years experience with programming and systems design.

Competencies:

- Ability to write code and extract information using software such as Excel, Notepad, Word, Quick Reports, MS Access, etc.

- Ability to repair and/or reconfigure software and/or hardware systems.
- Presentation/training skills.
- Strong analytical and communication skills.

Interpersonal Skills

- Interpersonal skills include listening to system users and providers when giving and receiving information, when providing solutions to issues, and when describing procedures to effect results. Provides ongoing training to staff on software use or makes formal training presentations in user group sessions. Deals with angry and upset users on occasion when system failures affect their ability to get work completed in a timely manner. Usually, the ability to listen coupled with the ability to offer solutions creates a positive outcome.
- The most significant contacts are employees within the immediate work area regarding day to day activities that require interaction to complete tasks assigned; employees within the department - day to day activities to get things done; and employees with OCIO which aid in day to day issue resolution with CRMS that usually manifest at the development level.

EFFORT

Physical Effort

- Occasionally required to lift objects up to 25 lbs. May need to move a piece of equipment for a demonstration/training like laptop or a console.
- Fine finger/precision work and sitting using a computer and answering telephone occurs on a constant basis.

Concentration

- **Visual** concentration is constantly required for report generation and data scrutinization from database information retrieval, or the verification of documents and spreadsheets, or when coding for data structures like SQL and VBA in MS Access).
- **Auditory** concentration/strain is experienced when listening to end users to decipher the nature of the problem and understanding the concepts needed to extract database information required to create meaningful output.
- **Higher than normal levels of attentiveness** is a constant requirement as attention to detail with regards to clinical data moves in CRMS, data integrity when providing reports on clinical data and statistics, reports on financial data, and testing system functionality to ensure proper outcome for software usability, is necessary.
- **Time pressures and deadlines** occur on a regular basis and are affected when information is needed in the form of reports for departments like Community Nursing to allow them to continue to provide child immunizations, or when a department needs information to clean up their paper charting files.
- **Interruptions** are experienced on a constant basis from phone, user email or face to face discussions with users.
- **Lack of control over the work pace** is experienced when dealing with report requests or when covering the help desk.
- **Eye/hand co-ordination** is needed on a regular basis within most software, using the mouse to create graphic selections in programs and keyboarding.

- **Exact results and precision** is required on a regular basis when reporting data information or for solutions to problems encountered by end users of the supported systems.

Complexity

- Tasks and activities are generally related and repetitive with standard processes and procedures, and occasional different tasks for which no guidelines or procedures exist.
- Problems may be addressed by following established procedures or may require that practical solutions be found.
- A typical problem or issue that requires resolution would be co-ordinating report design and data verification. Troubleshooting and testing system issues present the most challenges.
- When addressing challenges/problems/issues incumbents can typically reference manuals, policies, procedures, other technical individuals within the department, the internet, and their own knowledge base acquired through previous troubleshooting.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are highly monitored and controlled.
- Can assign tasks laterally where needed without direct supervisory approval. This is done regularly to effect solutions. Can also decide when training sessions are to be held and the content of training handouts and which problems to prioritize when given multiple tasks ensuring deadlines are adhered to.
- Supervisory approval is required for client data release in reports as well as for committing to the development of custom report generation and/or software. Changes to major documentation like software user manuals require formal approval before being released. Any changes to policies or access forms also require supervisory approval.
- User manuals may explain how to accomplish something, however, another method may actually work more effectively. Discretion is used to modify the approach to these issues. Discretion is also exercised in the acquisition of information presented in training sessions.
- Guidelines exist for daily operations as well as a knowledge database that has information with solutions previously used. When dealing with questions or problems with no clear or definite solution incumbents must use discretion to reference the existing avenues of possible solutions to make the best decision related to that issue.

Impact

- Tasks and activities have significant impact on immediate work area, the department, organization and clients/general public. Co-ordination of testing and data verification impacts both inside and outside the organization as well as clients/end users which encompass medical personnel and the general public.
- Resources impacted include processes and systems, information, finances and human resources. If training is not scheduled or documents are not ready there is direct impact to the work environment. System testing impacts levels of hardware/software as well as network layers - equipment/processes and systems. Impacts also felt on information and finances as support is provided to some financial systems. Health and safety are also impacted since CRMS is a provincial informational database housing clinical information for community health.

- There are policies and checks in place to prevent errors but with the ever changing nature of the systems the changing knowledge needed by end users mistakes can occur. When errors occur they are corrected with auditing to ensure it is documented, however, the significance can be far reaching if, for example, clinical information is misunderstood during the time prior to the mistake being rectified.
- There are built-in mechanisms in the software systems which are utilized for audit purposes to control clinical documentation. As well, reports are run and verified against production data spot checks. Continual testing and trouble shooting is ongoing with feedback to the organization and development team.
- The time frame associated with the identification and resolution of errors depends upon the issue but normally occurs within 24 hours or less. Programming issues may be a month or longer if sent outside the organization.

Development and Leadership of Others

- No responsible for the supervision of staff.
- Provides on-the-job advice to end users, feedback to the development team and colleague interaction, on the job training for the security team for CRMS, classroom training to various professional groups and users, and acts as a mentor/advisor when dealing with end users/colleagues/and development teams.

WORKING CONDITIONS

Environmental Working Conditions

- There is no requirement for safety equipment or precautions.
- There is no likelihood of minor cuts, bruises, abrasions, injury, or illness causing disability.
- Regularly exposed to the glare from a computer.
- Occasionally exposed to noise, dust, limited lighting and ventilation when dealing with systems.