



Provincial Job Description

TITLE:
**(469) Nuclear Medicine Imaging
Information System Technologist**

PAY BAND:
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FOR FACILITY USE:

SUMMARY OF DUTIES:

The Nuclear Medicine Imaging Information System Technologist is responsible for Nuclear Medicine Information System (NMIS), Radiology Information System (RIS) and Picture Archive Communications System (PACS) development and support including the integration of new technologies and service goals with imaging processes.

QUALIFICATIONS:

- ◆ Nuclear Medicine Technology diploma
 - ◆ Certified and registered with Canadian Association of Medical Radiation Technologists
 - ◆ Licensed and registered with Saskatchewan Association of Medical Radiation Technologists

KNOWLEDGE, SKILLS & ABILITIES:

- ◆ Advanced knowledge of Nuclear Medicine Imaging operations and of the specific disciplines integrated processes, testing procedures and function of the RIS (Radiology Information System), PACS (Picture Archive Communication System) and Nuclear Medicine Information System (NMIS).
- ◆ Advanced knowledge of computer systems integration in a clinical environment and of interfacing RIS/PACS/NMIS to external systems and RIS/PACS/NMIS peripherals.
- ◆ Advanced written and verbal communication, organizational, interpersonal and computer skills.
- ◆ Decision making, analytical, and problem solving skills.

KNOWLEDGE, SKILLS & ABILITIES (cont'd):

- ◆ Ability to work independently and as a member of a team.
- ◆ Ability to instruct, collaborate and evaluate performance.
- ◆ RIS/PACS/NMIS Software training and maintenance
- ◆ Valid driver's license, where required by the job.

EXPERIENCE:

- ◆ **Previous:** Forty-eight (48) months previous discipline-related experience as a Nuclear Medical Radiation Technologist to consolidate knowledge and skills required to provide imaging services for Nuclear Medicine, including twenty-four (24) months user experience working with the Radiology Information System, Picture Archive Communication System and Nuclear Medicine Information System.

KEY ACTIVITIES:

A. System Development and Documentation

- ◆ Determines how RIS/PACS/NMIS software will be configured and how the workflow is designed to best integrate technology with the provision of efficient and timely Nuclear Medicine Imaging Services.
- ◆ Develops RIS/PACS/NMIS solutions that are complementary to operational needs and resource challenges by performing user requirements definition, software evaluation and selection, system configuration setup, validation, training and documentation.
- ◆ Processes system change requests while working within the software options/functionality/limitations, with consideration of best practice guidelines, regulatory issues and operational needs.
- ◆ Identifies system software programming limitations to ensure optimal patient care outcomes and works with vendors to develop solutions.
- ◆ Researches, evaluates and implements additional and upgraded system functionality.
- ◆ Verifies, validates and recommends or rejects the implementation of software upgrades/changes (version, release or patch), as well as hardware and/or operation system upgrades.
- ◆ Configures, tests and validates interface communications between the RIS/PACS/NMIS and various radiology modalities, and between the imaging processes and other computer systems, both internal and external to the Health Region.
- ◆ Participates in local and/or external projects involving the RIS/PACS/NMIS.
- ◆ Develops, writes and monitors compliance of supporting procedures, policies and reports.
- ◆ Pursues customized software changes designed to improve Nuclear Medicine operations.
- ◆ Evaluates new equipment and technology for system suitability and use.

B. System Maintenance / Troubleshooting / Support

- ◆ Sets up and maintains security access for users of RIS/PACS/NMIS applications.
- ◆ Troubleshoots and evaluates reported or recognized problems.
- ◆ Informs and advises Imaging management about any system functionality issues that will impact Nuclear Medicine and imaging services.
- ◆ Performs demographic maintenance to ensure integrity of RIS/PACS/NMIS database.
- ◆ Monitors RIS/PACS/NMIS operations for system degradation.
- ◆ Supports the operational system needs of all the various divisions of Nuclear Medicine/Medical Imaging and the RIS/PACS/NMIS needs of the end-users of Medical Imaging.
- ◆ Provides limited hardware support by evaluating hardware issues and resolving or forwarding to IT Services as required.

C. Administration / Coordination / Management Reporting

- ◆ Provides functional advice/technical expertise and problem solving suggestions related to Medical Imaging as supported by RIS/PACS/NMIS functionality and diagnostic imaging reporting requirements.
- ◆ Provides evaluation of and/or produces documentation for Medical Imaging processes, policies and procedures.
- ◆ Builds RIS files and manages the documentation and reporting of RIS workload statistics.
- ◆ Communicates with departments and various services or agencies regarding issues, needs, service requirements or proposed changes that may have an impact on RIS/PACS/NMIS functionality.
- ◆ Coordinates system downtime events and resolutions.
- ◆ Prepares written and/or oral reports for various departments, and management personnel.
- ◆ Maintains documentation records as per requirements.
- ◆ Provides information and statistical reports for business case submissions for capital expenditures for software/hardware purchase.

D. Quality Assurance / Quality Control

- ◆ Maintains database integrity.
- ◆ Develops, generates and validates statistical data from the RIS/PACS/NMIS; including (but not limited to) the use of SQL (Structured Query Language) and other third-party software products.
- ◆ Leads the development of validation test scripts, and reviews outcomes to ensure that changes do not adversely affect laboratory operations.
- ◆ Follows preventative maintenance programs and recognizes systematic malfunctions and maintains event logs.
- ◆ Provides system development and support of Quality Assurance/Quality Control programs as required by local protocols, government regulations and diagnostic imaging licensing.

E. Education and Training

- ◆ **Participates in continuing education activities in order to maintain expertise and competency in Medical imaging, state-of-the art equipment and technology.**
- ◆ **Provides ongoing training, guidance and leadership to users and end-users of the RIS/PACS/NMIS and inter-related systems.**
- ◆ **Prepares and distributes communications and training material related to RIS/NMIS and inter-related systems functionality.**
- ◆ **Monitors system use by other staff and re-educates as required, provides feedback to Medical Imaging managers on the competency of other staff and identifies potential issues.**

The above statements reflect the general details considered necessary to describe the principal functions of the job and shall not be construed as a detailed description of all related work assignments that may be inherent to the job.

Validating Signatures:

CUPE:

SEIU:

SGEU:

SAHO:

Date: January 9, 2014