**Job Summary:**

The Simulation Technologist serves as a technical expert who is able to set up, operate, maintain, troubleshoot, and in some cases repair simulation equipment, hospital-type equipment used in simulation activities, and AV/IT equipment used in simulation activities.
The Simulation Technologists also instructs and assists simulation educators/faculty and learners in the use of technical equipment used in simulation.
In addition, assists in operational activities such as staff and maintenance scheduling, and inventory/purchasing functions.  The Simulation Technologist is familiar with the various modalities of simulation education and has a good grasp of simulation educational principles; thus is able to assist in the development, setup, and delivery, and takedown of simulation education sessions.
They will also assist in project planning, staff on boarding, and commissioning activities as required.

**Key Accountabilities:**

**Advisory**

* Assists instructors in selecting appropriate modality of simulation to meet learning objectives and which is appropriate to selected learners – manikin, part task trainer, SP, etc.
* Advises instructors during the design and running of scenarios.
* Assists with other staff from the simulation team to develop training programs and clinical scenarios.  Involved with scenario planning and design and can give advice on the integrity of the scenario by contributing to testing.

**Inventory Control/Purchasing**

* Maintains stock levels to meet maintenance needs.
* Makes recommendations for the purchase of equipment, supplies, and materials required for simulation-based sessions.

**Quality Assurance**

* Maintains systems, staff availability and scheduling, and equipment to a high standard.
* Ensures compliance with the legal and regulatory.
* Actively involved in implementing quality improvement programs using simulation to promote standards and policies.

**Simulation Equipment**

* Sets up and uses functionality of equipment as appropriate for the requirements of each simulation activity and overall activities of the center.
* Maintains storage areas to a high standard; selects appropriate storage areas for equipment.
* Maintains the clinical and educational equipment to a high standard including cleaning and basic maintenance.
* Attends vendor training sessions, conferences, etc. for training on simulation, hospital, and AV/IT equipment**.**
* Operates and is able to troubleshoot hospital equipment used in the simulation/in situ environment (beds, pumps, ventilators, etc.).
* Control, program, maintain, and troubleshoot patient simulators (voice and physiological parameters) during scenario-based training sessions, open days, and demonstrations.
* Maintains an equipment inventory and schedule of maintenance and technical activities.
* Maintains equipment including routine cleaning and care, advanced maintenance (including parts repair and replacement), and coordinates with vendors to send equipment for repair/servicing when needed.

**Simulation Environment**

* Set up and operate equipment/AV system in rooms including equipment, supplies, moulage, etc. for simulation activities
* Take down and debriefing
* Uses appropriate checklists for environment/simulation setup

**Audiovisual equipment/LMS**

* Has an implicit knowledge of LMS and AV systems and can assist and advise clinical educators to maximize use.
* Oversees installation, installs, tests, and operates IT and AV equipment and software or delegates to appropriate technologists.
* Operates AV/LMS systems in context of overall simulation infrastructure.
* Operates AV system components/functions including cameras, recording/playback, exporting, etc.; troubleshoots AV system; understands interface with hospital AV systems.
* Operates AV systems remotely and uses mobile AV systems.

**Script or scenario**

* Involved with scenario planning and design and can give advice on the integrity of the scenario by contributing to testing.
* Assists with the running of scenarios including directing and coordination of scenarios.
* May be involved with the educational aspects of scenarios including debriefing/feedback.
* Instructs actors or acts during scenarios; acts as voice of manikin during scenarios.

**Education**

* Collaborates with other staff from the simulation team to run training programs and clinical scenarios.
* Supports learners to maintain a safe learning environment.
* May be involved with the educational aspects of scenarios including debriefing/feedback.
* Assists with other staff from the simulation team to develop training programs and clinical scenarios.
* Provides and implements solutions to enhance the delivery of simulation-based education through technological developments and creation of artifacts, such as moulage.
* Assists with the piloting and delivery of simulation-based training and other educational activities undertaken during the simulation project, commissioning, and operational phases.
* Troubleshoots technical issues with mannequins and equipment and can mobilize resources to ensure functionality of equipment for course requirements.

**IT/Technical Duties**

* Coordinates with Technical Services (IM and Biomedical Engineering) to ensure the AV/IT system, simulation equipment, and hospital-type equipment for simulation center-based and in-situ training is always operational.
* Contributes to the strategic planning of the technical infrastructure of the simulation centre in relation to its mission statement.
* Reports any technical issues or risks to the Operations Manager that could impact on delivery of services.

**Coordination of Activities**

* Maintains awareness of scheduling issues in relation to availability of physical and technical resources.
* Coordinates and maintains operations manuals in conjunction with vendors and supplies teaching aids to support the clinical educators.

**Professional Development**

* Participates in professional and educational activities to maintain professional competencies and current knowledge base.

*In view of the evolving needs and opportunities, this position may be required to perform other duties as assigned and reporting relationships may vary.*

Requirements:

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|  | **ESSENTIAL** | **PREFERRED** |
| Education: |  | * Bachelor’s Degree or Diploma in a relevant technical or clinical field.
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| Experience: | * 2+ years’ experience as a technician-technologist in a simulation center, hospital, or related technical environment.
 | * 2+ years’ experience as a technician in a simulation centre including experience in maintaining an equipment inventory and maintenance schedule.
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| Certification and Licensure: |   | * Certification or licensure in a healthcare field (medicine, nursing, or allied health) or IT/engineering related field.
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| Job Specific Skills:  | * Demonstrated ability to install, operate, maintain, and troubleshoot simulation, hospital, and IT/AV equipment and software used in a clinical education environment
* Ability to communicate technical information to non-technical audiences
* Demonstrated adaptability and resourcefulness
* Ability to work independently and as part of a team
* Ability to acquire new skills and learn new procedures
* Proficiency in Microsoft Office suite
* Fluency in written and spoken English.
 | * Ability to autonomously control the physiological parameters of a patient simulator in a realistic manner
* Awareness of latest simulation technological developments and products in simulation
* Demonstrated understanding of curriculum development
* Familiarity with Clinical Information Systems.
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