

**JOB DESCRIPTION**

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| JOB DETAILS: |
| Job Family | Allied Health |
| Job Title: | Simulation Technologist  |
| Job Identifier: Position #: |  |
| Job Grade |  |
| Division / Department: | Clinical Planning – Simulation Center |
| Position Holder: |  |
| Prepared on: | 10 July 2012 |
| HR Representative | Geoff Instone |
| Revised on: | 20 November 2013 |

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| ORGANISATIONAL CONTEXT  |
| Sidra Medical and Research Center will be an ultra modern, all-digital academic medical center which is being designed and planned to the best international standards in sciences. It will offer specialty care for women and children.Sidra’s Vision is: *“Sidra Medical and Research Center will be a beacon of learning, discovery and exceptional care, ranked among the top medical centers in the world”.**A*chieving this vision will encompass three essential missions:World Class: \* Family Centered Care \* Medical Education \* Biomedical ResearchPart of a collaborative effort entitled "one program in multiple institutions," Sidra will work closely with Weill Cornell Medical College in Qatar and Hamad Medical Corporation in regard to all three missions, raising the standard of health care throughout the country and providing valuable opportunities for research and learning. |

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| 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. Will also assist in project planning, staff on boarding, and commissioning activities as required. |

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| DIRECT RELATIONSHIPS |
| **Reports to:** Operations Manager, Simulation**Direct Reports:** None |

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| 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.
* Monitors stocks and disposables including parts and plant, appropriate to the workload.
* 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 requirements in Qatar, health and safety regulations/guidelines, and the Society for Simulation in Healthcare (SSH) and other simulation center accreditation requirements.
* Actively involved in implementing quality improvement programs using simulation to promote Sidra 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.).
* Controls, programs, maintains, and troubleshoots patient simulators (voice and physiological parameters) during scenario-based training sessions, open days, and demonstrations.
* Demonstrates the operation of the equipment to educators and teaches other users.
* 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.
* Operates manikins and other simulation equipment and troubleshoots technical and non-technical issues.

**Simulation Environment*** Sets up and operates equipment/AV system in rooms including equipment, supplies, Moulage, etc. for simulation activities
	+ Initial physical state
	+ During simulation activity
	+ 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 Sidra’s 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 and functions within Sidra’s overall technical environment.
* 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*** Assists the Operations Manager with rostering appropriate staff to simulation to provide optimal technical support at various locations and 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.
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|  PHYSICAL ENVIRONMENT |
| * Requires ability to move, set up, and take down simulation and related equipment of various kinds.
* Driving to area hospitals, universities, and other offices may be required.
* Will involve operating simulators, hospital equipment, computers, audiovisual, and other technical equipment.
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| QUALIFICATIONS, EXPERIENCE AND SKILLS - SELECTION CRITERIA |
|  | **ESSENTIAL** | **PREFERRED** |
| Education: | * Bachelor’s Degree in an engineering/technical/IT or clinical field or Diploma/Certification in similar field with at least 2 years experience in a technical environment
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| Experience: | * At least 2 years experience as a technician-technologist in a simulation center, hospital, or related technical environment
 | * At least 2 years experience as a technician in a simulation center 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
* Demonstrated proficiency in the use of Microsoft Office applications
* 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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| APPROVALS: |
| Recommended by Hiring Manager: | Approved by Human Resources: | Approved by Director: |
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| Signature | Signature | Signature |
| Date: | Date: | Date: |