State of the Art: Skills Centre for Health Sciences

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Health professionals and their patients have been benefiting from state-of-the-art training acquired at the futuristic Skills Centre for the Health Sciences since it opened on April 17, 2008. This facility aims to improve patient care by allowing professionals in all health fields to learn and practice techniques on virtual patients. The goal is to foster a more progressive, innovative, and technology-focused model of education through simulated learning environments. Michelle Murray, coordinator for the centre, says “the response from the medical community has been overwhelming.” Thus far, physicians, residents, nurses, dentists, radiation therapists, and even medical students have improved their skills using virtual reality simulation and mechanical models.

The 4000 square foot skills centre, located in the Bethune Building on the Victoria General Site, is a joint initiative of the Capital District Health Authority, the IWK Health Centre, and Dalhousie University. Construction cost $1.5 million and the facility houses $1.5 million in equipment. In addition, the centre has been generously sponsored by Johnson and Johnson Medical Products, Alcon Canada, Olympus, Stryker, Karl Storz Endoscopy Canada, and Medline Canada.

The Skills Centre is a facility for continuing medical education and will enhance the teaching of practical skills. Dr. Jaap Bonjer, director of the Skills Centre, District Chief of Surgery for Capital Health and Head of Dalhousie University’s Department of Surgery, believes that this facility will improve patient safety, keep Atlantic Canada at the forefront of medical care and facilitate the recruitment of healthcare professionals to the region.

The Skills Centre will have an important role in the training of new physicians and has been incorporated into the post-graduate medical training program at Dalhousie. Traditionally, junior residents have acquired practical skills on the wards and in the operating room. However, the hospital environment does not always allow for individualized feedback or the repetition and practice of difficult procedures. Dr. Harold Cook, Dean of Medicine at Dalhousie, sees the simulated experiences at this facility as an essential component of modern medical education. Individual practice accompanied by feedback is an effective method for improving resident performance in surgical skills. Virtual simulators at the skills centre enable residents to practice techniques and to receive instantaneous feedback, highlighting both strengths and weaknesses of the performed procedure.

Medical students at Dalhousie have been able to use this facility during sessions for special interest groups. First and second year students have been able to practice skills such as suturing and insertion of a Foley catheter. Virtual reality simulators allow the medical student, an observer in the OR, to attempt laparoscopic procedures—perhaps determining whether this is an area of interest. Ultimately, the skills centre is a facility where all members of the medical community can learn in an environment free from the ethical and legal complications involved in the treatment of human patients.

REFERENCES