

Holy Name Medical Center Using Israeli Technology and Meeting Israeli Physicians

ANY GROUP SEEKING to boycott products with strong Israeli connections would probably have to think twice when it comes to Simbionix, one of the world's leading providers of medical education and simulation-training products for medical professionals and the healthcare industry as a whole.

Simbionix's corporate headquarters are in Cleveland, and its research-and-development Center of Excellence and International Operations is in Israel. Founded in 1997, the company is



Holy Name Medical Center Interventional Radiologist Kevin Herman, MD (left); Yitzy David, clinical research coordinator, at Holy Name's Institute for Clinical Research, and John H. Rundback, MD, director of the center's Interventional Institute, perform a virtual abdominal aortic aneurysm (AAA) procedure

committed to delivering high quality products, advancing clinical performance, and optimizing procedural outcomes.

Last month, physicians at Holy Name Medical Center in Teaneck spent a day training to use the Simbionix PROcedural Rehearsal Studio (PRS), a virtual reality simulation system, to rehearse a complete endovascular aneurysm repair procedure on a virtual model created by using a patient's exact anatomical figures. The system uses a virtual studio

Holy Name Hospital

displayed on a computer screen.

National Study

The training was part of a national study to evaluate the operative and clinical benefits of patient-specific, pre-procedural rehearsals for optimizing percutaneous (through the skin) abdominal aortic aneurysm procedures.

"The software mimics the actual anatomy of a patient, allowing physicians to practice this complex, minimally invasive procedure," said Dr. John H Rundback, director of Holy Name's Interventional Institute. Dr. Rundback is the Simbionix PRS study's principal investigator.

Dr. Rundback, who was part of a Holy Name Medical Center team that visited Israel in preparation for this study, said the equipment allows clinicians to create a patient-specific, three-dimensional virtual anatomical model based on the patient's CT (Computed Tomography) and

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MR (Magnetic Resonance) scans.

A computed tomography scan generates a three-dimensional image of the inside of an object. An MR scan uses magnetic and radio waves to create pictures of tissues, organs, and other structures within the body, which can then be viewed on a computer screen.

"Once the virtual model has been exported to the simulation environment, the physician can determine, evaluate, and assess the appropriate access strategy, select tools and equipment, and choose the most effective fluoroscopic views. The physician can use the virtual model of the patient's exact anatomy to evaluate and practice the intervention," said Dr. Rundback.

Improving Results

The result of the situational simulation provided by Simbionix will be to improve results and reduce recovery time, he said.

Holy Name Medical Center is the first hospital in the New York metropolitan

area to implement the Simbionix PRS.

Use of the Rehearsal Studio is part of a clinical trial that Holy Name's Institute for Clinical Research is conducting to investigate the benefits of patient-specific medical simulation on patient care and clinical outcomes.

Israel-Holy Name Cooperation

It was the second time in one month that Holy Name had partnered with Israeli medical personnel. During the first week in June, the medical center welcomed physicians from Western Galilee Hospital in Nahariya, Israel, as part of the Partnership2Gether Medical Task Force of the Jewish Federation of Northern NJ.

The Israeli physicians met with Holy Name's medical and administrative leadership and were given a tour of the facilities.

The Western Galilee Hospital delegation included Dr. Olga Azrilin, the hospital's senior neurologist who trained mainly in the Ukraine and is now on the faculty of Bar-Ilan Medical School; Dr. Bella Gross, Western Galilee's chief of neurology who is also director of neurology at Bar-Ilan Medical School; and Dr. Atzmon Tsur, a specialist in physical rehabilitation and sports medicine. Head of his department at Western Galilee, he also teaches at Bar-Ilan Medical School.

Erez Ben-Zvi, Simbionix's product manager, who was at Holy Name for the Rehearsal Study's launch, was not surprised that the medical center was dealing extensively with Israel.

"The combination of American medical know-how and Israeli technical ingenuity is a key element in the successful development of every Simbionix solutions.