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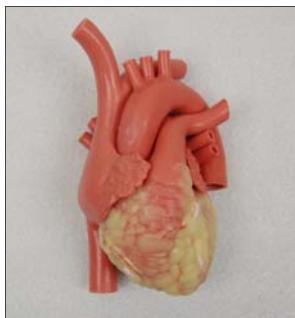
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Realistic surgical models saving lives

By Amanda Korman

Berkshire Eagle Staff

GREAT BARRINGTON — . In the oven, three chalk white pelvises bake. On a nearby table, a disembodied heart beats. It sounds like science fiction, but on Route 7 just south of town, it's actually just a typical day at the Chamberlain Group, a locally owned business that since 1999 has designed and manufactured thousands of models of lifelike human innards for use as for use as medical teaching tools around the world.

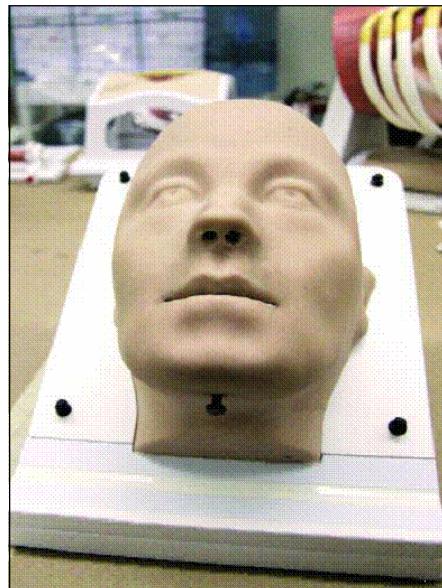


Photos by Holly Pelczynski / Berkshire Eagle Staff

The CABG Heart is used to train doctors and residents in heart surgeries.

Owners Eric and Lisa Chamberlain fell into the Business of surgical simulation modeling in 2000 after careers in feature film special effects. “We were so grossed out when we started this business,” Lisa Chamberlain said. “I didn’t even want to go to the doctor in those days.” Now, Chamberlain and her husband have put their artistic flair to work in the medical world, where surgical simulation is taking root as a new teaching protocol. “Most surgeons have learned the craft in operating rooms on live patients,” Chamberlain said. “Surgical simulation has become the new wave.”

Not only anatomically accurate, the Chamberlain Group’s models of nasal passages, fingers, stomachs, bones, valves — you name it — are also real to the touch, made with a combination of materials like urethane or silicone. “We’ve been to medical school at least two and a half times now,” Chamberlain said jokingly, citing the C-sections, gastric bypasses, heart valve replacements and mastectomies (breast removals) that she and her husband have attended in order to learn what goes on underneath the skin.



Photos by Holly Pelczynski / Berkshire Eagle Staff

Maxillary Sinus Trainer used to practice sinoplasty.

The company employs 20 designers and manufacturers who work on each step of the creation of a lifelike uterus, torso or vein, to name a few of their creations.

Artist Stephen Thurn joined the Chamberlains on their switch from film to medicine the same basics that art comes from,” Thurn said. “I wouldn’t in a million years have imagined myself in medicine ... [now] I’m pretty well-versed in anatomy and lingo. I can get in a room with a surgeon, and not everything goes over my head.”

The Chamberlain Group’s clientele are medical device companies, mostly U.S.-based, that distribute models to places such as teaching hospitals or companies developing new medical procedures. Without a sales team, the Chamberlain Group has managed to bring their models to 48 countries—most recently Chile—essentially through word of mouth, said producer Connie Griffin.

Locally, Chamberlain’s products can be found in the training sessions of the da Vinci robot used for advanced surgery at Berkshire Medical Center.

Before using the machine on live patients, doctors learn to manipulate its deft arms using Chamberlain’s rubbery models.

State Rep. William “Smitty” Pignatelli, who recently visited the South County business, spoke to how it represents a new kind of industry for the county. “It’s a new wave of manufacturing,” Pignatelli said. “We talk about traditional manufacturing—GE and the paper mills; this is a reinvention and carving out a new niche.”



Photos by Holly Pelczynski / Berkshire Eagle Staff

Above, a worker at Chamberlain prepares a mold of a chest cavity. Realistic human analogs such as these are useful medical teaching tools.