

A dummy, yes, but one with class

Nursing school uses human patient simulators to teach medical skills

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Meet Stan D. Ardman. He's your "standard" kind of guy. He's 33, doesn't smoke and doesn't have asthma, hypertension or anemia. He breathes, bleeds and cries like other New Age men.

And yet in the coming years, hundreds, maybe even thousands, of people will attempt to figure out what ails him.

Stan is a human patient simulator new to town and to Lancaster General College of Nursing & Health Sciences. The computer-model-driven mannequin will be the guinea pig on which nursing and medical students, paramedics and

emergency medical technicians learn their crafts.

"It makes perfect sense when you think about learning," said Marjorie Lamberson, development coordinator at the nursing college. "Here you can make mistakes. We can replicate all kinds of medical emergencies. That patient down the street may or may not have a certain condition, but we can make it happen here."

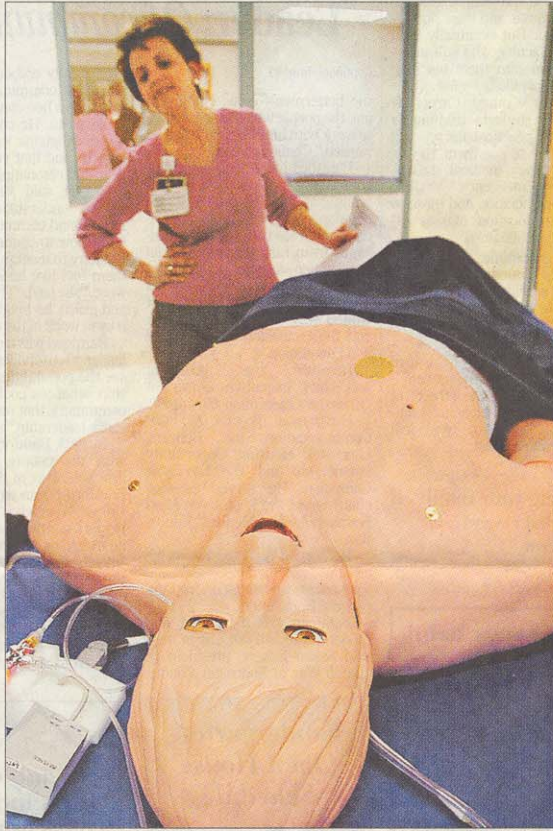
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College of Nursing &
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Stan has 30 preset conditions, each with its own set of symptoms. Each condition can be modified, and new combinations can be created from scratch to really stump students.

Stan can blink his eyes, sweat, bleed and urinate, as well as perform other bodily functions the rest of us take for granted. His pupils can dilate, his tongue can swell, his heartbeat can race or stop and his pulse varies. But what really makes Stan outstanding is that his genitalia can be changed so he's — gulp — suddenly a female patient.

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Deb Grove / Intelligencer Journal

"Stan D. Ardman," a new high-tech mannequin at Lancaster General College of Nursing & Health Sciences, will be the guinea pig for students learning new medical procedures. Marjorie Lamberson, college development coordinator, said the \$1.2 million mannequin system sets the school apart from others.

Dummy: Smart

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Students working to save Stan's life can practice diagnosing patients in emergency settings given what information they have from the patient's history and what they can glean from his physical state.

They practice treating patients by giving Stan CPR, injecting him with specific medications, defibrillating him, inserting tubes in his chest and running IV lines.

"He will react just like a human, so if (a student) does the wrong thing, he is going to start crashing," said Joe Corvino, clinical simulation coordinator, or Stan's keeper.

The whole setup includes Stan and two other mannequins: a baby and a less sophisticated but portable adult model.

The rubbery patients positively or negatively react to treatment, depending on how well students do their work. And along the way, students can pick up the tricks of the trade that come with real-life experience.

For example, if students are too forceful when inserting a tube into one mannequin's mouth, its front teeth might break off, just as real teeth would.

Not only can instructors speak for the patients through a microphone system, but each incident can be paused so students have time to think about the correct way to proceed. And students' work can be viewed by instructors through one-way glass and recorded for students to watch later.

"This will be a real part of

the learning experience and really what sets us apart from other schools," Lamberson said.

Stan and his friends didn't come cheaply, though. The college started getting financial support to purchase the mannequins and the complex computer system that operates them nearly three years ago.

This morning, Sen. Rick Santorum, who helped acquire federal and state funds to purchase the \$1.2 million system, is scheduled to cut the ribbon to the new simulation lab at Lime and Lemon streets, the trio's home.

Corvino is still getting to know the mannequins and their operating systems. But eventually, he'll help train faculty, who will incorporate them into their teaching modules, most likely by fall.

Lancaster County Career & Technology students training to be licensed practical nurses will get a chance to use them, too, as will emergency medical staff at Lancaster Emergency Medical Services Association and those in continuing-education classes offered by the college.

In the meantime, nursing and emergency medical students will have a bridge between their classroom work and treating real patients — a step that can be nerve-racking for many.

"We're really hoping this will be a good adjunct to the real clinical experience up the street" at Lancaster General Hospital, Lamberson said. "This is really an ideal learning environment."