

COLUMBIA MISSOURIAN

Missouri hospital helps train military personnel

By PHILLIP O'CONNOR/St. Louis Post-Dispatch

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ST. LOUIS — Dan Bruzzini, an Air Force doctor, sits behind a one-way mirror prepared to provide a handful of military medical personnel a glimpse of what they can expect once deployed to "bad-guy land."

On a table in the adjacent room, a sheet covers a \$250,000 mannequin-like machine that resembles a young child with a bad belly wound and a less obvious head injury.

Bruzzini keys a microphone. The simulation begins.

"There's been an explosion at a downtown marketplace," he says over an intercom. "Expect casualties in 30 to 60 seconds."

He says medics have found a 6-year-old boy under a collapsed wall. At Bruzzini's command, the team removes the sheet. For the next 20 minutes, using a computer program that manipulates the boy's vital signs and other body functions, Bruzzini throws a series of medical problems at the team. The strain is obvious as they struggle to keep the "patient" alive.

It's a feeling Lt. Col. Bruzzini knows well. He based the scenario on his experience in a six-month Afghanistan tour in 2007.

For several years now, Saint Louis University Hospital has been among the final stops for many Air Force and Air National Guard medical personnel headed to combat zones. Here, Bruzzini and more than a dozen other Air Force and Air National Guard doctors, nurses and technicians teach an intense two-week program designed to prepare the students for the serious injuries they are certain to treat in Iraq and Afghanistan.

"You have to give people the tools, the training and the experience beforehand," said Bruzzini, 42, of Webster Groves. "Otherwise, you're setting them up for failure."

The partnership between the Air Force and the hospital came about, in part, because of the downsizing of the military medical system that began more than a decade ago. The cuts closed military hospitals. As a result, most Air Force medical personnel now tend to work in smaller clinics and treat few serious injuries.

"They typically don't get to see gunshot and stab wounds," said Capt. Scott Fallin, administrator of the St. Louis program. "Being here in the inner city prepares them for some of the blunt-trauma injuries they will see."

Students spend the first three days in the classroom reviewing basics of trauma care.

The class, typically about 18 to 20 students, then rotates through the emergency room, intensive care and burn units, working side by side with Air Force personnel who double as members of the hospital staff. Medics also ride along with emergency medical technicians.

Almost 2,000 people have gone through the St. Louis program since it was established in 2003. The Air Force conducts similar programs, known as the Center for Sustainment of Trauma and Readiness Skills, or C-STARS, at hospitals in Baltimore and Cincinnati.

Brig. Gen. John D. Owen of the Missouri Air National Guard helped get the program off the ground in St. Louis. He has visited the major American military trauma hospitals in Iraq and Afghanistan. At both Balad and Bagram, Owen said, staff told him that physicians, nurses and technicians who went through the program now show up ready to take care of the most critically ill patients the first day rather than needing a couple of weeks to get acclimated.

"They've worked with the equipment. They've worked with the injuries. They are confident," Owen said. "Talking to the physicians at those hospitals, they know this training saves lives."

Sr. Airman Clayton Luker, a medic from Belle Plaine, Minn., said he wished he'd had the training the first time he deployed to Afghanistan in 2009.

"It was a little overwhelming," said Luker, who is returning to Afghanistan later this year. "This prepares you for that."

Although the training is not a pass-fail situation, faculty members keep an eye out for those they think might not be prepared for the rigors of deployment or who might need additional training.

"Saint Louis University Hospital, for a lot of these folks, has been real wake-up call," Fallin said. "A lot of these people have never seen someone pass away in front of them."

For many participants, the program also is the first time they've trained on military equipment.

In the case of some Air Guard personnel, the learning curve might be even steeper.

"You may have a medic who's a bank teller ...," Fallin said.

Maj. Randy Snoots has been a critical care nurse instructor in the program for more than three years. He recently returned from a six-month tour in Afghanistan that allowed him to provide the students with the latest information from the field. But just as helpful, he said, was simply exposing them to a trauma-patient environment.

In the hospital's intensive care unit, several students watched as a doctor sought to calm a restless patient who had several tubes protruding from him and was moaning and thrashing.

"You can read the book all day, but they need to see that," Snoots said.

While the hands-on patient care is invaluable, some instructors believe the simulators may be the most effective training tools, offering realistic battlefield situations. In addition to the scenario involving the boy, students also must sometimes react to chemical attacks, ambushes or improvised explosive device attacks.

"We don't have too many IEDs going off in St. Louis," Fallin said.

The simulators teach the students to operate in austere conditions, where personnel, medical supplies, blood, operating rooms and evacuations might be limited or unavailable.

After each simulation, an instructor meets with the students to review a video recording of the action.

Bruzzini said that in almost 90 percent of the simulations involving the boy, the patient dies.

This time, the team failed to identify a dropping heart rate, rising blood pressure and quick breaths that indicated a severe head injury. In Afghanistan, Bruzzini's patient survived. But he said repeatedly that students learn more from their mistakes than their successes.

"In the debrief, they all knew exactly what it was," Bruzzini said. "They knew, they can get it on the test, they can get it when you ask the question. But when you expose them to the fog and friction of war, they didn't. Now having seen and missed it, they won't again."