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Burn Center: Orlando team's game will help save lives in disasters

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If terrorists ever attack a Florida theme park, a video game developed by recent University of Central Florida graduates in a cramped downtown Orlando office could help make sure that doctors and surgeons can properly treat burn victims.

For the past year, 360Ed, a start-up company that makes educational video games, has been working on Burn Center. In graphics and feel, their creation resembles reality-based games such as Madden NFL football or Grand Theft Auto -- but it has a much more important goal.

"September 11 awakened us to the fact that we have to prepare for these mass-casualty type of events, and the best way to prepare is modern technology, simulation and games," said Ben Noel, 360Ed's chief executive officer. "Instead of simulating it in a field experience,

which can be very expensive, we are simulating it on a computer, which can be played over and over."

360Ed worked with the Florida Department of Health and the University of Florida College of Medicine to create the game, which the Orlando Sentinel was allowed to preview Wednesday. It was born from a post-Sept. 11 federal mandate that Florida be able to handle a disaster or act of terrorism that could leave up to 2,000 people with severe burn injuries.

The state's four burn centers couldn't possibly handle that number. So state officials decided to train the surgeons, nurses and other medical professionals who work in Florida's 21 trauma centers to set up makeshift burn units.

"With 2,000 patients, you are going to have to spread the wealth around, so to speak," said Dr. David W. Mazingo, director of UF's Shands Burn Center and a collaborator on the game.

Hands-on training wouldn't be practical, so UF approached Noel, executive director of UCF's graduate school of video-game-design and development.

"They said, 'If we give you a playbook, can you make like a Madden football for mass-casualty emergency response?' " said Noel, a former executive at Electronic Arts, which makes the football game. "I said, 'Yeah, we aren't creating any new technology here; we'd just be taking content to places it hasn't been before.' "

With a \$1.6 million federal grant, Noel and about 15 employees, most of them recent graduates of the UCF interactive school, toiled in a second-floor suite of the Bank of America building to make the simulation. If it's successful, Noel hopes to take the game beyond the state by selling it to hospitals and medical schools worldwide.

The premise of the game is that bombs have just gone off at a theme park. Players earn points based on how well they treat patients.

The first phase is a race against time in which the player has to quickly assess and triage 40 victims. The second phase takes place in the intensive-care unit, where players make treatment decisions during a simulated 36-hour period. To get training certification from the American Burn Association, players must reach a certain score.

Burn Center isn't for the faint of heart. The game features screaming people, many of whom have gruesome burns and are covered in blood. In fact, some of the 360Ed team had a hard time looking at the real photos provided by UF to ensure the graphics in the game were realistic.

In October, surgeons and doctors at Florida trauma centers will start playing the game online to help work out any bugs.

The game is aimed at surgeons and doctors who have already had burn training but may need a refresher. So, Mozingo said, it had to be both engaging and medically accurate.

To pull this off, artists, designers and programmers from 360Ed, who are mostly in their 20s, and the surgeons and doctors from UF, who are mostly middle-aged, spent a lot of time together. It took about six months for the two groups to learn each other's languages.

"They had to teach me . . . the basics of gaming and programming, and I had to teach them burn surgery," said Mozingo, 50, who is not an avid gamer. "I would spend time with them, and they would come up and make rounds with me -- they saw the patients, saw the surgery and went to the emergency room."

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