

MHS Learn to Launch Awareness Tools, Prerequisite Web-based Training on Virtual Reality Exposure Therapy

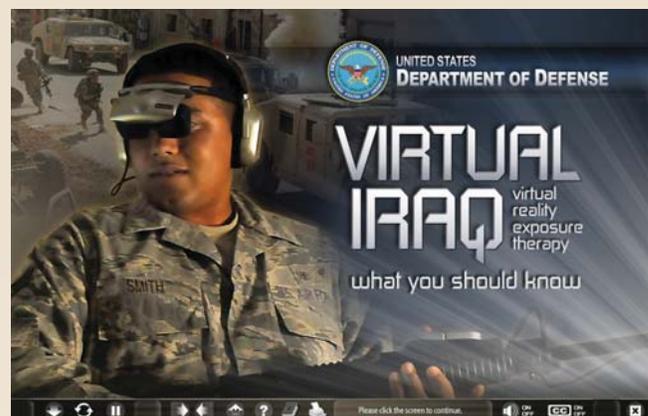
The Military Health System's enterprise learning management portal, MHS Learn, will soon launch awareness tools and prerequisite web-based training for the Department of Defense on Virtual Iraq. This virtual reality exposure therapy system is used in the treatment of post-traumatic stress disorder.

The MHS Learn team built the online awareness and training for the Air Force Office of Telehealth, Imaging and Cybermedicine for the Air Force Surgeon General's Directorate of Modernization, previously led by recently retired Air Force Lt. Col. Timothy Lacy, M.D., Chief, Telehealth, Imaging and Cybermedicine, and now headed by Air Force Lt. Col. Antonio Eppolito, M.D., Chief of Telehealth.

Injury and/or severe psychological shock can cause post-traumatic stress disorder and although sufferers may appear in good health, they endure persistent mental and emotional distress. Symptoms may include sleep disturbances, substance abuse, and constant, vivid recall of the trauma. Exposure therapy has been shown to help PTSD sufferers confront their trauma and guide their emotional processing towards healing.

The use of virtual reality in exposure therapy is increasing within the Military Health System. "Leveraging 3-D gaming technology, virtual reality exposure therapy allows PTSD sufferers to safely re-experience the torment that haunts them," says Lacy.

The therapy involves patients describing the circumstances of their trauma as the therapist customizes a computerized, virtual environment to match their descriptions in a controlled and safe manner. For example, in *Virtual Iraq* therapists can recreate the sights, sounds and smells of an improvised explosive device



This image shows the title screen for one of the awareness tools and some of the gear used in *Virtual Iraq*. MHS Learn is launching online awareness tools and prerequisite web-based training on the therapy in June.

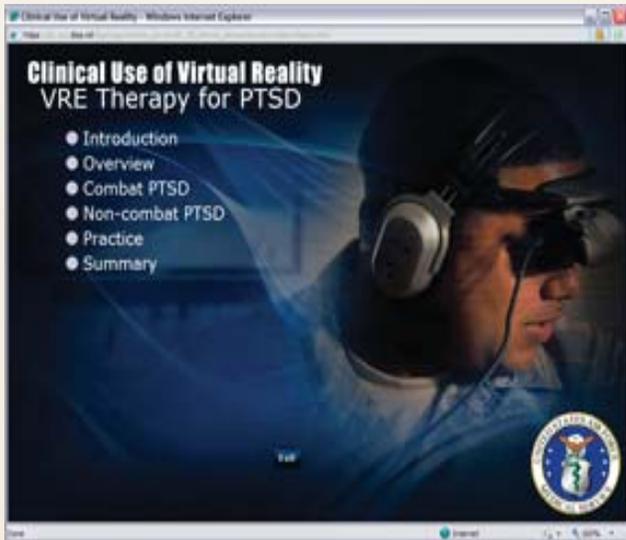
exploding on a Humvee or a gunfight during an urban foot patrol. The therapist can also manipulate the level of trauma severity and change environmental characteristics such as dusk, dawn, sandstorms, day or night.

To generate a virtual environment, clinicians must learn how to use the *Virtual Iraq* technology. The MHS Learn web-based training will give providers a technological foundation and a demonstration of the skill sets required for hands-on clinical application training.

The MHS Learn web-based training will show practitioners how to use the hardware and software, and how to develop effective patient scenarios. The online training also includes refresher courses on understanding and treating PTSD as well as the clinical use of virtual reality.

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MHS Learn to Launch Virtual Iraq Web-based Training



This image shows the title screen from the Clinical Use of Virtual Reality web-based training launching soon on MHS Learn.

Web-based training is vital to promote the use of virtual reality exposure therapy, Lacy says. "We know prolonged exposure therapy works and we have a great number of therapists in the Air Force that use prolonged exposure therapy, so we have a good solid background.

"The use of virtual reality requires a completely new skill set. One has to become comfortable with the technology, with the equipment, with interacting with a patient while manipulating a virtual environment, and helping a patient walk through various scenarios."

"We encourage people to seek care as early as they're able and to not be afraid of the mental health clinics and the mental health care system," Lacy says. "We're all in this together and we want to help our wounded warriors get back on track."

The concept of *Virtual Iraq* is credited to Dr. Albert "Skip" Rizzo, a clinical psychologist at the University of Southern California Institute of Creative Technologies. Rizzo and his colleagues adapted the video game *Full Spectrum Warrior* to create *Virtual Iraq*. In its current form, *Virtual Iraq* represents the collaborative efforts of USC/ICT, Naval Medical Center San Diego, Virtually Better Inc., and the Geneva Foundation.

The Air Force has deployed the *Virtual Iraq* system at military treatment facilities at the following Air Force Bases: Andrews, Eglin, Elmendorf, Langley, Lackland, Moody, McGuire, Ramstein, Travis and Wright-Patterson.

The MHS Learn *Virtual Iraq* web-based training is an Air Force Wounded Warrior initiative and is scheduled to be launched in June at <https://mhslearn.csd.disa.mil>.



This image shows the title screen from the Virtual Iraq System Overview web-based training on virtual reality exposure therapy.

DoD/Department of Veterans Affairs Data Synchronization Program – Medical Product Data Bank Reduces Costs, Improves Patient Safety

Differences in how hospitals and suppliers electronically communicate information about products wreak havoc up and down the supply chain, adding costs and potentially impacting patient safety. Tied to the commercial supply chain, government is not immune to these problems. The government has been building the Medical Product Data Bank to create an authoritative, accurate and synchronized source of true product information to serve as a data backbone supporting federal healthcare supply chain processes. Funded by Department of Defense and Department of Veterans Affairs joint incentive funds, MEDPDB provides access to synchronized enterprise and site-level data, giving hospitals accurate and consistent data at their fingertips, resulting in improved processes and reduced costs.

Using MEDPDB, government health care professionals can quickly identify sourcing opportunities, as well as ways to reduce costs in areas where hospitals can leverage more advantageous contracts. The DoD/VA are successfully synchronizing data in the materials information systems of more than 270 military and veterans' hospitals with product data from more than 30 supplier partners and two major distributors. The MEDPDB technology is helping DoD/VA hospitals locate the right product and price on a consistent basis, and providing optimal long-term value through more effective negotiations of contracts.

Started in 2003, the project has identified \$47 million in cost avoidance opportunities in the purchasing of medical products. DoD/VA hospitals have also moved more than \$33 million of manual purchases to more efficient electronic methods.



DoD/VA are making greater sense of the data housed in their own hospitals' materials management systems, allowing more meaningful analyses of spending and transparency. The MEDPDB enables the DoD/VA to evaluate price variables between contracts for the same item across their respective health systems, and potentially use joint negotiating power to establish better supply contracts. They are uncovering price variances on products, leading to savings opportunities that previously would have been impossible to find. For example:

- The average price for a certain intravenous set shows \$115 for the DoD and \$75 for the VA per unit, representing a potential savings for DoD of \$240,000 a year, or 34% on that one item.
- The average price per unit for pre-washed sterile gauze shows \$110 for the VA and \$65 for the DoD, representing an opportunity for VA to save up to \$350,000 a year, or 40% on that one item.

Visibility of spending information based on accurate, synchronized data is yielding powerful results, and provides transparency to government supply chain transactions, meeting the President's goal of open government. The MEDPDB serves as a model for the rest of industry that data synchronization using a single source of true product data is possible to do with a rapid return on investment.

Four DHSS Products To Be Exhibited at National Conferences

Four DHSS products will be featured at exhibits in educational conferences throughout the United States in May.

During the week of May 17-21, MHS Insight and MHS Learn will be exhibited at the Association of the United States Army Medical Conference in San Antonio, Texas. Information on the conference is available at www.ausa.org.

Also during May 17-21, Patient Safety Reporting will be featured in an exhibit at the National Patient Safety Foundation in Orlando, Fla. Information on the conference is available at www.npsf.org.

The Defense Occupational and Environmental Health Readiness-Industrial Hygiene application will be exhibited at the American Industrial Hygiene Conference and Exhibition in Denver, Col., May 22-27. For more information, please click onto www.aihce2010.org.

For more information about DHSS and its products, please click onto health.mil/dhss.

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