

VVMC

takes their show on the road

WHEN YOU SEE A DISTINCTIVE RECREATIONAL VEHICLE (RV) MAKING ITS WAY UP AND DOWN I-70, TAKE NOTE. You won't be able to miss it! Emblazoned on its sides are the words, "Mobile Medical Training Lab" and its sole purpose is to improve your care. This lab travels the Central Rockies using Human Simulators to teach medical professionals current treatment methods through hands-on training. The vehicle, which sits on a custom-built, 40-foot chassis, is not the RV that your parents bought when they retired and decided to see the USA. It is the latest word in simulation training, a key element in the Vail Valley Medical Center's (VVMC) continuing effort to ensure top-notch care for valley residents and visitors alike.

VVMC serves two intersecting communities: the resort, which clusters around the ski slopes of Vail and Beaver Creek,





and the local families, who live the entire length of the Valley, from East Vail through Dotsero, a distance of more than 50 miles.

Sure, most know the Medical Center for its efficient, caring emergency room services and renowned expertise in orthopedics – a must in a ski area. But it is much more. It is a busy hospital serving a spread-out rural population and has to maintain competency in high-risk, low-frequency procedures, so that, at any given moment, the medical staff across the Valley is prepared to deal with situations they might not normally see. In the words of VVMC president and CEO Doris Kirchner, “In a rural environment, such as Eagle County’s, accessing expert training and exposure to rapidly changing technology and methodology can be a challenge.”

And meeting that challenge is where the Mobile Medical Training Lab comes in. It brings together two innovative concepts: the first is the use of high-tech mannequins to simulate medical situations, and the second is situating the training in the specially equipped RV, known to VVMC staff as “the bus”, so that it can be delivered to the valley’s medical personnel wherever they work. It also serves other hospitals and is already in demand as far away as Aspen and Steamboat Springs. It is the only facility of its kind in Colorado and Wyoming.

Kirchner was sold on the potential of simulation training when she saw it in action at Johns Hopkins University, and she was determined to bring it to VVMC. The medical center has invested in the entire “Sim family” of high-tech mannequins, which can show realistic symptoms and react to treatment. Each member of the “family” is fully capable of crying, bleeding, blinking and simulating virtually any human function that might occur in a real medical emergency. It includes an androgynous Adult Sim, with the capability of changing from man to woman, as training requires; a Newborn Sim, Baby Sim and Sim Junior; and a Sim Mom, who can present pregnant and give birth either conventionally or by C-Section.

The mannequins are controlled by a suite of software which allows VVMC’s five clinical educators to run pre-programmed scenarios which simulate high-risk medical situations. Using either a computer terminal or a hand-held SimPad, educators can manipulate patient vital signs and other physiological parameters in response to the performance by medical teams of life-saving procedures. This

“SIMULATION ALLOWS DOCTORS, NURSES AND TECHNICIANS TO PREPARE THEMSELVES FOR EMERGENCIES WHICH COME UP INFREQUENTLY AND TO PRACTICE PROCEDURES THEY DO NOT OFTEN USE.”



effectively recreates the high-pressure environment of a real emergency. The educators can also design scenarios in their areas of expertise, which are then programmed by VVMC's computer science and audio-visual savvy Sim technician.

Inside, the vehicle holds two patient care areas, which replicate the hospital environment. There are patient monitors, medical gases, suction capabilities, ventilators and all the specialized equipment needed for these intricate, potentially life-saving training sessions. A central control room, with dedicated computer stations and WOW (Wireless on Wheels) technology, allows educators to control the simulation learning experience, creating an endless variety of medical scenarios that challenge the medical teams involved.

What are the benefits of simulation training? The best person to ask is Mary Hinz, VVMC's Clinical Simulation Educator. An organ transplant nurse, who moved into clinical development and education and has private sector experience in healthcare technology, she brims with enthusiasm for the VVMC program. "Simulation," she explains, "adds tremendously to our competency education. We are able to create real-time situations and go through them again and again, helping our staff members maintain their level of expertise. Simulation allows doctors, nurses and technicians to prepare themselves for emergencies which come up infrequently and to practice procedures they do not often use." She emphasizes that the simulation exercises are performed in a safe learning environment that hones communication skills and builds effective teamwork.

Thanks to the software, all aspects of the simulation are recorded in a log, an impor-

tant tool for the debriefing session, which follows. "This is when team members can ask questions of each other and the educators, and resolve the issues which come up under pressure," Hinz adds. What's more, the simulations performed on the bus can be recorded and streamed live, broadening their scope as teaching tools, and the facility also benefits the region's first responders. Eagle County Ambulance District and the Western Eagle County Ambulance District are enthusiastic about how the simu-

lation exercises can enhance their training. School districts, the Boy Scouts, in fact any organization which needs expertise in CPR, can benefit from the realistic experience of practicing with the mannequins.

This type of high-tech excellence is not inexpensive. The Mobile Medical Training Lab is expected to cost just under \$2 million for a five-year program. Almost \$500,000 was raised through the medical center's annual dinner dance. Dedicated volunteers and board members have also contributed to the fundraising efforts. The bus and the expert training it delivers are the latest in a long line of projects where VVMC and the community have worked together to bring the finest healthcare to the mountain area.

According to Hinz, all of the participants are very enthusiastic about the mobile training lab, starting with the medical center's most senior physicians. "To watch a team go through a simulation is to see a group of dedicated professionals, totally engaged in perfecting how they work with each other for the benefit of the patient."

In other words, you're in very good hands at VVMC. **W**_{mag}

Alpine Mobile Physicians
HOUSE CALL CARE

"Taking it to the streets"...
slopes, resorts, condos, hotels, homes and more
We bring the service to you!

**Full Service • Altitude Illness • Expedited X-Rays • Mobile Pharmacy
Illness & Minor Injury • Oxygen Service • IVs • Medical Equipment**

The same Credentialed Doctors you see in Vail's ER
Founder: Dr. Larry Brooks / Advisor: Stewart Greisman

In Special Memory of Charles Tuft

970-376-8376 • 888-MOBL-PHYS
www.AlpineMobilePhysicians.com

In cooperation with Vail Valley Medical Center