

# Restoring Independence

The Driver Rehabilitation Program helps veterans with spinal injuries get back behind the wheel.



Army veteran William Mitchell enters his van on an Under Van Lift.

BRUCE MORRIS

**A**rmy veteran William Mitchell lost the use of his legs after a motor vehicle accident in 1999. He spent nine long months in the hospital receiving treatment and rehabilitation and wondering how his life would ever be the same again.

Mitchell has since driven himself to Louisiana in his wheelchair-accessible van and soon plans to visit Alabama, and later, California to visit his brother in Pasadena.

“Don’t focus on what you *can’t* do—focus on what you *can* do.” That’s the advice Mitchell offers as a mentor on

the Spinal Cord Injury unit at the Dallas VA Medical Center. He is also a graduate of the Driver Rehabilitation Program offered through the Physical Medicine and Rehabilitation Service at the facility.

The Driver Rehabilitation Program offers hope to patients who long to return to an active life after receiving an injury that leaves them with limited mobility. Mitchell credits it with helping him reclaim much of his own life. “The only reason you won’t get something out of this program is if you don’t want it,” he says.

The Dallas VAMC has made significant advances in the rehabilitation services it offers and is now considered one of the premier facilities in the country for helping those with spinal cord injuries. Shirley Chapman, a driver rehabilitation specialist at the facility, says the combination of technology, equipment and expertise offered there is difficult to find elsewhere, and they regularly receive requests for consults from other rehabilitation centers, even those in the private sector.

VA offers vehicle modifications and subsidies for veterans with limited mobility to install equipment that allows them to manipulate every feature that any other driver would adjust, Chapman said. For some 100 percent service-connected veterans, VA will purchase and install the technology and offer up to \$11,000 for a new vehicle. VA prefers to install the equipment on new vehicles, but will retrofit any vehicle less than three years old and with less than 35,000 miles. The cost for the materials and labor can be as high as \$50,000.

Seventy-five percent of patients in the SCI ward at the Dallas VAMC are involved in some level of the Driver Rehabilitation Program, but most are only learning how to enter and exit their vehicle. When VA provides a patient with a wheelchair, the department is required to provide rehabilitation and training on how to safely get into and out of their vehicle, Chapman said. Ten percent of the veterans seen are quadriplegics, but are still able to participate in the program.

In addition to helping patients with spinal cord injuries take control of their lives, the driver rehabilitation training simulator can also help patients with substance abuse disorders realize the impact alcohol and drugs can have on their driving ability.

“We can adjust the responsiveness and accuracy of the simulator to reflect different levels of alcohol in the blood,” Chapman explained. “It lets the patient see in a safe and controlled environment just how debilitating these substances can be.”

The Driver Rehabilitation Program also supports “mature” drivers. When physicians or family members are worried about the driving abilities of older veterans, the program can determine through a variety of tests, including a traditional driving test, whether or not they are fit to drive based on reaction time and capacity.

“Our goal is to keep people on the road as long as possible—provided it’s safe for them and everyone else,” Chapman said.

In fact, she added, that attitude is a guiding force for the entire rehabilitation program. “What I hear most of ten [from patients] is, ‘I never thought I’d be able to drive again,’” Chapman said. “Finding out about this opportunity really changes their spirit—they begin thinking about all the other things they might be able to do again, and that’s incredibly exciting. We’re trying to restore independence.”

Mitchell echoes that sentiment. “Talking with some of the other guys, the biggest thing for us is the feeling of independence—of not needing to have people help us all the time.”

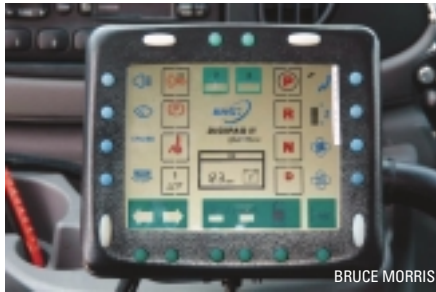
That regained independence might be the most valuable outcome of this effort. When a veteran suffers a spinal cord injury, their spouse or other family members routinely take on additional obligations, adding stress to the family dynamic, according to Chapman. But recovering the ability to drive eases that tension. “I’ve become the errand-runner in my family—I do all the shopping, I go to the cleaners, I can go out to eat,” Mitchell said proudly. “Everything I used to do before, I can do now.”

Mitchell’s van looks like any other from the outside, but people still ask him questions when they see him entering or exiting. “Kids come

*Navy veteran Dwight Roach hopes to begin the Driver Rehabilitation Program at the Dallas VA Medical Center in March.*



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*Left: The Digi-Pad system controls vehicle operations; right: VA offers six different steering wheel orientations based on the patient’s specific needs.*

up to me all the time and ask me to do it again,” he joked while entering his car on his Under Van Lift (UVL).

The UVL is one piece of equipment VA can add to a vehicle. Most of the vehicle controls are operated through either the Digi-Pad or Digi-Tone system. The Digi-Pad system works through a touch-sensitive screen allowing the driver to select the operation they want to perform. Digi-Tone achieves the same result by having the driver press a button for a set period of time. One tone might signal a right turn, while three tones might turn on the windshield wipers. The Digi-Tone button can be located anywhere around the driver, depending on their abilities.

Drivers are given three different

modes for starting the car—a remote control, a button on the dashboard, and a handheld fob device. The handheld device can be touched to four different points on the tailgate to start the car. VA included these options for both medical and mechanical reasons. Some diseases, such as multiple sclerosis, can be exacerbated by extreme heat, so the ability to remotely start the car and the air conditioning is vital to patient health. Multiple modes of entry also ensure that if there is a technical problem or a battery runs out, the user can still enter the vehicle.

Patients use the VA training van to complete their driving test with the Department of Motor Vehicles. According to Chapman, they must



Driver rehabilitation therapists Shirley Chapman, left, and Julie Allen with the driver training van at the Dallas VA Medical Center.

complete a driving test just like anyone else applying for a license—including parallel parking. “It’s a little frustrating since these drivers will be parking in handicap spots anyway, but parallel parking measures one’s ability to control the vehicle better than any other exercise could,” Chapman noted.

Dwight Roach was paralyzed three months ago as the result of a staph infection and has been in physical rehabilitation ever since. If his therapy proceeds as scheduled, he should begin the Driver Rehabilitation Program in March. VA has already begun working on modifications to his vehicle. “The program sounds really interesting and fun—I really want to drive again,” he said.

Roach isn’t yet ready to participate in the program, according to his doctors and therapists. Patients must have reached their full rehabilitative potential in arm strength and mobility before entering, since most of the modifications will be tailored to their abilities. Patients also must be able to sit upright for two hours.

Seven patients are actively working in the program, and 15 patients per month are seen for pre-driving evaluations to determine their driving fitness. Patients who live within 50 miles of the medical center have the

option of requesting driver training in their community, which helps them fully participate in the program and prepares them for driving in their neighborhood.

Patients using high-end driving equipment must complete at least 20 hours of training before they can graduate. Most patients train for more than 30 hours, but many using the standard mechanical controls and the push-right angle hand controls can complete the training in 10 hours or less.

While the majority of current patients are older veterans who suffered spinal injury as a result of staph infections, osteoarthritis, or motor vehicle accidents, the program is making the necessary preparations for an anticipated boost in their enrollment because of the Dallas VAMC’s status as a Polytrauma Network Site providing care to veterans of Iraq and Afghanistan who received their injuries as a result of blasts.

As the therapist for a driving program, Chapman gets asked about her driving skills all the time. “So far, I haven’t had an accident or a ticket. But if you ask my husband, he’s a much better driver,” she said with a smile. **VA**

By Chris Henson

## VA Medical Centers With Driver Rehabilitation Programs

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