How is the VA system adapting and responding to the needs of a younger generation of veterans returning from Iraq and Afghanistan?

CIFU: Up until GWOT was initiated in 2003 the average age of veterans (upper 50s), was actually outpacing that of the average U.S. citizen (mid 40s), so the VA had been focusing for years and continues to focus on older adults, in terms of health care, rehabilitation, fitness — everything.

In 2003, a new cohort came in of folks who are part of this GWOT activity, and this has begun to lower the average age of veterans. A lot of them are still on active duty and the VA is still caring for them, which is what a lot of people don’t know.

The majority of the Iraq and Afghan injured who we are caring for on a fairly acute basis remain soldiers and Marines and sailors and airmen, while they are getting their care. This is a
Want to take your facility to the next level?

VO₂ Testing with CardioCoach can get you there.

CardioCoach™ VO₂ Testing Systems
- Extremely Simple to Use
- Aerobic & Anaerobic Threshold Detection
- Calories Burned During Exercise
- Measures CO₂ for R/Q
- Target Heart Rate
- Peak VO₂

Metacheck™ Weight Management System
- Measures Resting Metabolic Rate (RMR)
- Calculates precise "Weight Loss Zone"
- Quick and Easy to Implement

1-800-396-4048 / www.KORR.com
new trend that has occurred in the VA and the military. It used to be that when you got injured you became a veteran on the plane going home. Now, they actually keep you active duty for a pretty long time. It is a volunteer force and the military wants to stand by its people, and hopefully get them back into service, but at the very least let them know that they are standing behind them.

Even though DoD and the VA are brethren, it used to be that you felt like you were being dumped out of the military and into the VA. A lot of these guys today want to stay in.

They get injuries, even some that are devastating — amputations, spinal cord injuries, burns, brain injuries — and they want to go back. God bless them, they are protecting you and me and we are glad to take care of them.

A lot of the folks who we are working with in our activities, with our exercises, are young men and women who are still on active duty. And that mix of veterans and ages has been good because it actually has brought the vets and the active duty guys closer together. We are seeing linkages between 50-year-old vets from Vietnam and 20-year-old guys from Iraq, and they are exercising together, or doing some activity together; it is kind of cool and great to see.

The VA system has responded well to this shift in needs for veterans, and the increase in combat-related injuries, especially in the area of brain injuries, which is your specialty. What are some of the ways that the VA is meeting these new challenges?

CIFU: The system is changing. In 1992, the military realized that we were going to have some of these problems: brain injuries. And they formed a partnership with the VA back then in 1992, and set up four centers of excellence in brain injury care (our VA here in Richmond is one), everything from research and getting them up and moving to exercising and get-
travel allowance or a bed is made available to go to a farther VA that offers those services. In general, servicemembers and vets are extremely grateful and really a joy to be with. It can be a challenge for their families, though, and the VA really does a good job of wrapping a warm embrace around people, making them feel like they are special. Once you get any of these injuries you have five years from the time of the injury to report it and get into the system. But once you are in the system, you have a lifetime of care for that problem at no cost.

As the war continued into 2005, the VA, in partnership with the military, put up the polytrauma system of care, which is a tiered system across all 155 VAs. In the system, the four designated centers — the original four centers of excellence that we started in 1992 — as truly state-of-the-art polytrauma rehab centers. The VA is divided into geographic regions, called VISINS, and each of these 22 VISINS has a Level II site, which provides everything you would need for rehab in an outpatient standpoint. So, that includes the doctors, exercise professionals, psychologists, therapists, any type of specialist one could need. We have over 600 clinics that are part of the VA system, which are all linked into a single network to get these folks back to productivity. By 2007, this new polytrauma system was fully operational. The four main sites have gotten the most funding and equipment because they are seeing the most patients and are dealing with the more serious injuries and needs.

The goal is to provide the services as close to the patient’s home or their military base as possible. However, if you need a service that is not available at your local VA, you are paid a travel allowance or a bed is made available to go to a farther VA that offers those services. In general, servicemembers and vets are extremely grateful and really a joy to be with. It can be a challenge for their families, though, and the VA really does a good job of wrapping a warm embrace around people, making them feel like they are special. Once you get any of these injuries you have five years from the time of the injury to report it and get into the system. But once you are in the system, you have a lifetime of care for that problem at no cost.

CIFU: That is my specialty. They brought me in as National Director to deal with the guys with the most serious injuries. There have been approximately 2,500 severe brain injuries since the war started, 150 spinal-cord injuries, 1,300 amputations, and 550 burns. Top-quality care is available through our four Level I polytrauma centers, and its 22 Level II sites. We get them in the system and follow up with them for years to come — a lifetime of healthcare and support.

The big problem that people are getting: We have had close to if not more than 25,000 with mild brain injury, such as a concussion or multiple concussions, and have not had them recognized immediately or treated right away, so they are having persistent symptoms like balance and memory problems.
We are currently involved in a program where we are screening 750 guys who are returning from Iraq who have this exact problem, which is being called post deployment syndrome. We are screening them to see which of the elements they have. How is their pain? What are their stresses? How is their memory, balance, coordination and social functioning skills? All of the symptoms are looked into.

**GRF** Can you talk more about this "post deployment syndrome" and the best treatment approaches to help veterans that are struggling with this condition?

**CIFU:** Veterans are experiencing two to three concussions in the span of four to six months and none of them are being treated because they are not saying they have problems. So, they come back and they have had problems for six months, and they have been stressed out in deployed situations, and the brain has not had time to heal. The brain injury causes the brain to have difficulty processing and healing right. So, you will see persistent balance problems, difficulty with interacting with the public, memory deficit, sleep disorders — many symptoms. When you are that far out from the injury, it makes treatment harder.

We are dealing a lot with this post-concussive disorder, or what the military calls post-deployment syndrome because it includes many other factors. So they have a brain injury, plus combat stress, back pain, depression and maybe even alcohol use — any number of layers of possible other problems.

For more serious brain injuries, we’ve got what we call emerging consciousness programs at the four Level I polytrauma sites, for those who are coming out of comas, for example. And residential programs are available for those who are recovering, so they can have time to get their daily functioning skills back before they have to go home.

**GRF** What new equipment is being used to help rehabilitate those returning with some of these serious head injuries?

**CIFU:** For diagnosis we use state-of-the-art medical fitness equipment, such as the Balance Master by Neurocom, which we have used for years for initial testing and rehabilitation. And as a next step, in terms of rehabilitation and reconditioning, we use equipment such as a KoreBalance machine or other balance board pieces of equipment.

With this type of equipment and technology, therapists can improve these balance deficiencies. The way we balance is our inner ears: what we feel in our feet and our body and what our eyes tell us. So we play with their heads and challenge them by moving the balance plate they are standing on or changing the background and stimulus to their eyes, to address these issues they may be having, and force them to use their inner ear. Because that is usually the problem they have after a blast injury. Their inner ear mechanism, their labyrinthine balance mechanism has been screwed up. The idea is to consistently increase the amount of...
I was able to visit the Center for the Intrepid. The CAREN there is really cool. They are using it for high level troops – injured Army Rangers and Special Forces, for example, to make sure they don’t have any deficiencies or weaknesses before they go back into training or on deployment. This really is the highest-tech thing I have seen.

Please talk about the importance of fitness and getting those who are injured moving and active as soon as possible. What are some of the ways the VA system is accomplishing this?

CIFU: The hallmark of rehab is early activity. Whether you are rehabbing someone who has lost a limb or suffered a spinal-cord injury or even suffered a sports-related back or neck injury, the best treatment really is getting them back to being active as soon as possible.

Even if they are in a wheelchair or missing a leg, and they can’t fully walk, use whatever muscles you can. Get the heart pumping and reconditioned, get the bones weight bearing and get the muscles stressed. In every research study we have ever done, early activity is the only thing that consistently has been shown to be effective.

Our Kineseotherapists, which is a unique position to the VA, are available to just get people up, moving and exercising. The VA has embraced this specialty because they realize how important it is. Getting out of bed and into a pool or doing recreational therapy can do wonders in helping vets get stressors that you are putting on them, as you gradually go from the machines to the real word and activity.

In the area of new technology, there is the CAREN – or computer-assisted rehab environment. It is a virtual reality world built around a balance master. They have one at Walter Reed Medical Center and one in San Antonio. It is a geodesic dome that has 360 or so projectors – sort of like a planetarium. And in the middle of this is the patient, who is suspended with a harness and on a multidirectional treadmill balance plate, so you can run and jump and meanwhile the entire world around you is virtual. It really is cutting edge, and is great for people who are at an extremely high level and for people who have severe injuries and difficulty moving.
In the area of fitness centers and equipment, please talk about how the VA system is improving facilities and adding new and improved equipment.

CIFU: The VA has done a lot over the past few years in terms of improving fitness centers and support as well as improving what is available from a fitness-equipment standpoint. The four polytrauma sites have gotten any and all fitness equipment that has been requested as well as specialized equipment for guys with really serious injuries, such as virtual reality machines. We’ve got some great technology for guys who are limited in what they can do in terms of movement.

We’ve got all kinds of cardio equipment that has Wii incorporated into them, for example, or games to stimulate and motivate them. All four site have built specialized residential settings and outpatient settings that have mini-gyms in them with a full cardio and weight room, all available for veterans and active duty guys who are recovering from injuries. The VA has always invested heavily in exercise equipment across the country. Over the past few years we have been able to get the resources to go out and get the latest and the greatest stuff out there.

Outdoor exercise courses or PARS courses, which are at many locations and have exercise stations outside, are popular with veterans and are well-used by our weight management program called Move.

CIFU: At the national office, recreational therapy is a specialized office, and at every major VA there are at least several recreational therapists. We have 12 here at Richmond, which is phenomenal. We have full-court wheelchair basketball games, kayaking in the pool, trips to pro games, for example. These things are supported by VA and DoD employees, and a lot of veterans volunteer organizations such as The Paralyzed Veterans of America Organization and the Wounded Warriors Foundation.

We have a heated therapeutic pool at Richmond as part of our programming and it is used primarily by outpatients with musculoskeletal pain. But it is also used for our inpatients from Iraq and Afghanistan with all types and severity of injuries.