Bruce M. Gans, MD, Executive Vice President and Chief Medical Officer, Kessler Institute for Rehabilitation

Committee on Veterans' Affairs
Testimony by
Bruce M. Gans, MD

May 5, 2010

Good morning, Senator Akaka and Members of the Committee. Thank you for inviting me back to testify before this Committee regarding progress that has been made in the diagnosis and treatment of traumatic brain injuries (TBI) and our experiences working with the VA to provide treatment and rehabilitation to service members and veterans.

I am Dr. Bruce Gans, a physician specializing in Physical Medicine and Rehabilitation (PM&R). I hold the positions of Executive Vice President and Chief Medical Officer for the Kessler Institute for Rehabilitation in New Jersey. I am a past-president of the Association of Academic Physiatrists (the society that serves medical school faculty members and departments), and the American Academy of PM&R, which represents approximately 8,000 physicians who specialize in PM&R. Currently, I serve as Chair of the Board of the American Medical Rehabilitation Providers Association (AMRPA), the national association that represents our Nation's rehabilitation hospitals and units. At the UMDNJ-New Jersey Medical School I am a Professor of Physical Medicine and Rehabilitation. In the past, I have practiced in academic medical centers as a faculty member at the University of Washington in Seattle, Tufts University in Boston, Massachusetts, Wayne State University in Detroit, Michigan, and the Albert Einstein College of Medicine in New York. In Detroit I also served as President and CEO of the Rehabilitation Institute of Michigan for 10 years.

Kessler Institute for Rehabilitation is the largest medical rehabilitation hospital in the Nation. We operate specialized Centers of Excellence to treat adults with traumatic brain injuries, spinal cord injuries, amputations, strokes and many other neurological and musculoskeletal diseases and injuries. We also operate more than 70 sites for outpatient rehabilitation services in New Jersey that provide medical care, physical therapy, prosthetic fabrication and fitting, cognitive rehabilitation treatment, high technology wheelchairs and electronic assistive device fittings, and many other services.
We are also a major medical rehabilitation education and research facility. In cooperation with the Kessler Foundation and the UMDNJ-New Jersey Medical School, we train physicians, therapists, psychologists, and many other disciplines to provide rehabilitation services and run rehabilitation programs. We also conduct many research programs and projects to advance the knowledge and science of medical rehabilitation. Much of this research is funded under Federal grants from the National Institutes of Health (NIH), the National Institute for Disability and Rehabilitation Research (NIDRR), other Federal and state organizations and private foundations.

Previous Testimony

When I testified before this Committee in 2007, I expressed concern that the civilian rehabilitation providers in this country were capable, available and interested in providing high

quality rehabilitation care and treatment to service members and veterans but they were not being utilized. In particular, providers wanted to make themselves available to patients from their own communities so that long stays in far distant care centers could be prevented. I noted that there was little evidence of cooperative planning among the DoD, VA, and civilian sectors to make the best services available in a timely way in home communities.

At that time I recommended the creation of a Coordinating Council on which leaders from all three stakeholders would participate in order to work together to strike a balance between building up care delivery capacity in Military Treatment Facilities (MTF) or VA health centers, and utilizing private partnerships when they were more cost effective and more appropriate for the needs of service members and veterans. I also urged targeting case management and care coordination services so that individual patients and families could be helped to navigate among the military, VA, and private sectors to help make their care seamless and effective with a view to long-term needs once they returned to their home communities.

In addition, I recommended that there be close collaboration and cooperation among the DoD, VA and the private TBI research community (especially the TBI Model Systems programs of NIDRR) to study the effectiveness of current treatment approaches, and to develop new breakthroughs in how to care for all levels of TBI, from mild, to moderate or severe. The allocation of research funds that could be used to sponsor research partnerships among the DoD, VA and private research community was also proposed.

The Current State of TBI Rehabilitation

Happily there have been some advances in the state of the art for treating individuals with serious brain injuries. Many of the most advanced and innovative approaches have not yet found their ways into common practice. The newest innovations have not been fully researched to prove their efficacy, but clinical experience and some retrospective studies are showing much promise.

Diagnosis

New diagnostic tools such as Functional Magnetic Resonance Imaging (FMRI), Magnetoencephalography (MEG), Magnetic Resonance Spectroscopy (MRS), quantitative Electroencephalographic brain mapping (QEEG) and Near Infrared Spectroscopy (NIRS) are all non-invasive methods of observing brain activity and responses to treatments. These evaluative tools are allowing clinicians to be aware of patient responses when behaviors cannot be observed, and serving as guides to how treatments should be modified.

Treatment

Innovative treatments are also being utilized. Pharmaceuticals are being much more aggressively used to help patients be aroused from coma, better organize their thinking, and control difficult behaviors. Multiple drug “cocktails” used by expert clinicians appear to have beneficial effects. Supplemental uses of nutraceuticals are also being pursued, and intriguing clinical experience being accumulated. Physical modalities are being applied with much more intensity to attempt to help patients. They include peripheral nerve stimulation, brain stimulation by direct or magnetically induced currents, and neurofeedback.

More interestingly, the use of these diagnostic and therapeutic modalities together, with multi-modal interventions, may be more effective than the conventional "one at a time" approach used previously. Clinical experience gained at Kessler Institute and other centers in this regard has prompted the development of significant research projects to test these findings. A large study of this type is expected to begin shortly at Kessler Institute in partnership with the International Brain Research Foundation and the Kessler Foundation.

Workforce Shortages

There is a shortage of trained and experienced clinicians with experience in the treatment of TBI patients. Physicians in PM&R or Neurology, neuropsychologists, physical therapists and other rehabilitation disciplines are all highly sought after because of the demands of treating these patients and the shortage of available talent. For this reason, in part, patients have waited for prolonged periods to access treatment centers, and been shunted to regional or national centers of excellence, both the VA Polytrauma Rehabilitation Centers, and occasionally at institutions like Kessler.

Care Delivery and Coordination Among the DoD, VA and Civilian Providers

The proposed Coordinating Council was never pursued and, at least to my knowledge, the VA did not develop any organized method of identifying high quality providers in communities to supplement or obviate the need for them to hire scarce staff to treat patients internally.

It is not my place to detail the changes in care delivery capacity of the VA or their relationship with the military. It is clear that the VA has strengthened the care delivered through its Polytrauma Rehabilitation Centers and Polytrauma Network, and their coordination with the MTFs. I have personally had the opportunity to visit the Polytrauma Rehabilitation Center in Richmond, Virginia, and the Center for the Intrepid in San Antonio, Texas, and was impressed by both of these facilities.

In an effort to gauge the current status of the relationship between private providers and the VA and DoD and to share with this Committee, I communicated with more than 16 medical and administrative leaders in the field. These individuals ranged from rural providers to large national companies, and included community hospitals and large academic health systems. I asked these leaders to share with me their views on how care is being provided to patients in their communities, and what their facility experiences have been in working with the VA or the DoD.

It appears that little has changed since 2007 regarding the use of local care providers for TBI care. Some private sector rehabilitation hospitals experienced a transient increase in referrals for evaluative services. Most if not all, had established relationships with TRICARE so that they could see patients and get reimbursed for the care they hoped to provide. The most common word used to describe the situation was "frustrating". Repeatedly, I heard comments such as, "we have high quality services available, but patients and their families are being uprooted to distant care settings for long periods of time. When they finally come back to their home community, there is little available to them for their long term needs."

One interviewee contrasted the TBI situation to that of Amputees. He pointed out the significant research partnerships among the DoD (DARPA in particular), VA, private centers and commercial interests to develop new advanced prostheses. He also pointed out that the vast majority of prosthetic care delivered by the VA is done through private contractors.

Another individual commented that there has been a substantial increase in the availability of case management services. While individuals who work with specific patients are now more available, families have expressed great frustration that they don't have contact with physicians and direct care providers; so the availability of case managers is not sufficiently helpful since they haven't got access to the care itself.

I can speak most readily about the experience of my own hospital, Kessler Institute for Rehabilitation. Since March of 2007, Kessler Institute has cared for 10 service members. Two patients currently are receiving inpatient care at our hospital. All were Active Duty at the time of admission. All 10 had serious TBI. Three also had Spinal Cord Injuries. One had multiple amputations as well as the TBI. Six of these patients were injured in theater, five from IEDs. The other four patients were injured in motor vehicle accidents. VA funds supported two of the patients while Tricare sponsored 9 (one patient transitioned from VA to Tricare while at Kessler).

Ironically, one of the first patients in this group was the son of Denise Mettie, the parent who testified to this committee just before I did in 2007. Our chance meeting on that day led to her pressing for Evan to be referred to Kessler for ongoing care. Her experience of needing to be a strong and uncompromising advocate for her loved one has been a common thread for many of the families of the patients we have seen. Only with sustained pressure were many of these patients allowed to be referred to us. This observation is similar to the experience described by other leaders in the field whom I interviewed.

TBI Research Cooperation

There have been some advances in the collaboration among the DoD, VA and private sector in rehabilitation research. The Polytrauma Rehabilitation Centers have initiated work with the TBI Model Systems for data contribution and other purposes. Also, research centers around the country have been applying for funding from DoD solicitations in this area, and a number of active projects are underway at centers such as our own, Spaulding Rehabilitation Hospital and Harvard University, and Rehabilitation Institute of Chicago. The research being conducted ranges from retrospective reviews of secondary data to assess outcomes and long-term effects, to clinical trials of innovative treatment approaches in the hope of finding breakthroughs in care.

Overall Assessment of the Relationship between the VA and Civilian Providers

The VA has clearly improved its capacity to care for patients with TBI. It has not done so with an eye to the long term needs of patients who return to more remote communities, however, and has, instead, chosen to strengthen its internal capacity.

While I may have a limited sample, it appears that family members are dissatisfied with their inability to access providers of choice outside of the VA system, and that the case management system is not consistently resulting in better access to care. These observations may not be

generally applicable, but seem to be on target for the most severely injured patients and their families.

The research collaborations are encouraging, but not pushing the envelope far enough or fast enough. The truly innovative neurodiagnostic and therapeutic work appears to be being conducted outside of the VA, not within it. In fact, the conventional research establishment is showing some resistance to the most innovative approaches (multi-modal treatment protocols, for example).

Recommendations

It is important to commend the VA and the DoD for their hard work and the progress they have made in the acute and early-phase care of patients with TBI. My concerns remain for the breadth and depth of that capacity and the anticipated life-long needs of a new generation of brain injured veterans.

I still contend that collaboration with the private sector and enhanced efforts in this regard are the right thing to do. As large as the TBI problem in the military sector is, it is dwarfed by the magnitude of the problem in the civilian population. Over a million brain injuries occur in the US every year. Admittedly, not many are blast injuries, but when it comes to rehabilitation care, that is not a major distinguishing feature. Hence, the capacity in the civilian sector will not only be great, it will be available for the long term. The VA and DoD should work for strategic alliances with civilian providers so that a sustainable infrastructure of care delivery capacity for service members and civilians is available now and for the foreseeable future. This could be accomplished beginning with creating the Coordinating Council I recommended previously.

Congress could create incentives for the VA and DoD to improve collaboration by establishing a budget item for each to support this activity, and structuring the budgets so that rather than being penalized at the local level, a VA facility could access special supplemental funds if it found a way to utilize local resources to create a sustainable care delivery capacity.

In particular, the VA and DoD should develop a method of early identification of individuals who are clearly going to be destined for medical discharge because of their injury. This "pre-discharge" determination should be a guiding condition that triggers care planning based not on regionalized care delivery within the VA, but prioritizes accessing closer to home providers that will be life-long resources to the patients and their families.

Congress could prioritize the research budgets for both the VA and DoD to promote searching for breakthrough research to dramatically advance the state of treatment and rehabilitation of TBI. Whether it supports stem-cell techniques to develop brain grafting possibilities, multi-modal rehabilitation interventions, or tele-rehabilitation, it should place a premium on dramatically improving our care capacity, not just incrementally advancing it.

Further emphasis on funding training for TBI-related health professionals in more innovative ways is also an important possibility. For example, while the VA does currently support medical residency training and some fellowship training, there are administrative barriers for some of these positions to utilize advanced training settings outside of the VA. Rules should be changed

as needed to allow trainees to learn in the most appropriate settings, regardless of whether they are within a VA or a civilian facility.

The VA should explore how the innovative health care delivery ideas contained in the recently passed Health Care Reform legislation may be relevant to this population. In particular, demonstrations of an Accountable Care Organization focused on the TBI population could be implemented. Being charged with managing the best outcomes for the best value, regardless of provider setting, might stimulate new levels of collaboration. Similarly, establishing a demonstration Medical Home for TBI patients could show another way in which the care coordination resources and medical management obligations could be integrated to the benefit of patients and their families.

Conclusions

In closing, I would like to express my gratitude to the men and women of our armed services and the agencies themselves for their dedication and sacrifices to defend and protect our country. I hope that these observations and suggestions can help to provide more and better care for those who have given so much for our Nation.

Thank you for giving me the opportunity to contribute to this discussion.