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POLYTRAUMA CENTER CARE AND THE TRAUMATIC BRAIN INJURY PATIENT: HOW SEAMLESS IS THE TRANSITION BETWEEN THE U.S. DEPARTMENTS OF VETERANS AFFAIRS AND DEFENSE AND ARE NEEDS BEING MET?

HEARING

BEFORE THE

SUBCOMMITTEE ON HEALTH

OF THE

COMMITTEE ON VETERANS' AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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THURSDAY, MARCH 15, 2007

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON VETERANS' AFFAIRS,
SUBCOMMITTEE ON HEALTH,
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:20 p.m., in Room 334, Cannon House Office Building, Hon. Michael H. Michaud [Chairman of the Subcommittee] presiding.

Present: Representatives Michaud, Hare, Salazar, Miller.

Also Present: Boyda, Kline, Herseth.

OPENING STATEMENT OF CHAIRMAN MICHAUD

Mr. MICHAUD. I call this hearing to order. I apologize for the lateness. We were over voting. We had to wait for the appropriators to get there before we could close the vote, so I apologize.

The Subcommittee on Health will be hearing from distinguished individuals this afternoon. I would like to welcome the Ranking Member, Congressman Miller of Florida, of this Subcommittee. I look forward to working with him on this very important issue, as well as Congressman Phil Hare.

In order to expedite the process, since we are running behind, I would ask unanimous consent to have my opening remarks submitted for the record. Hearing no objection, so ordered.

I would now like to recognize Mr. Miller, the Ranking Member of the Subcommittee on Health, for an opening statement.

[The prepared statement of Chairman Michaud appears on p. 33.]

Mr. MILLER. Thank you very much, Mr. Chairman. In lieu of time, I have an opening statement that I would like to submit for the record, and I ask unanimous consent to add it directly.

[The prepared statement of Congressman Miller appears on p. 33.]

Mr. MICHAUD. Without objection, so ordered. Without objection, any member who wishes to submit an opening statement for the record may do so.

I also ask unanimous consent that all written statements be made part of the record. Without objection, so ordered. And I ask

unanimous consent that all members will be allowed 5 legislative days to revise and extend their remarks. Without objection, so ordered.

The first panel we have here today I would like to welcome Dr. Barbara Sigford of the Department of Veterans Affairs and accompanying her is Dr. Lucille Beck. We look forward to hearing your testimony and to having a frank discussion about meeting the needs of our veterans.

So without further ado, Doctor.

STATEMENT OF BARBARA SIGFORD, M.D., PH.D., NATIONAL PROGRAM DIRECTOR, PHYSICAL MEDICINE AND REHABILITATION, VETERANS HEALTH ADMINISTRATION, U.S. DEPARTMENT OF VETERANS AFFAIRS; ACCOMPANIED BY LUCILLE BECK, M.D., CHIEF CONSULTANT FOR REHABILITATION, AND DIRECTOR, AUDIOLOGY/SPEECH PATHOLOGY, VA MEDICAL CENTER, VETERANS HEALTH ADMINISTRATION, U.S. DEPARTMENT OF VETERANS AFFAIRS

Dr. SIGFORD. Thank you. Good afternoon, Mr. Chairman and members of the Committee. I am Dr. Barbara Sigford. And I serve as——

Mr. MICHAUD. Could you turn your microphone on, please?

Dr. SIGFORD. It is on. Oh, is that——

Mr. MICHAUD. Pull it closer.

Dr. SIGFORD. Okay. I feel like I am yelling. But clearly you are having trouble hearing. Is that better?

Mr. MICHAUD. Yes.

Dr. SIGFORD. Okay. I am the VA's National Program Director for Physical Medicine and Rehabilitation. And joining me this afternoon is Dr. Lucille Beck, the VA's Chief Consultant for Rehabilitation.

I really want to thank you for this opportunity to talk about the Veterans Health Administration seamless transition process from the perspective of the polytrauma system of care.

The mission of the polytrauma system of care is to provide the highest quality of medical, rehabilitation, and support services for veterans and active duty servicemembers injured in the service to our country.

This is a system consisting of four Polytrauma Rehabilitation Centers at Tampa, Richmond, Minneapolis, and Palo Alto. And they provide the most acute intensive medical and rehabilitation care for the complex and severe polytraumatic injuries, including brain injury.

We also have 21 Polytrauma Rehabilitation Network Sites, which manage the post-acute sequelae of polytrauma, and 76 Polytrauma Support Clinic Teams located at local medical centers throughout the 21 networks and across the country that provide care closer to home for the stable sequelae of traumatic brain injury and polytrauma.

Our system of care has been designed to balance the need of our combat injured for highly-specialized care and their needs for local access to lifelong rehabilitation care.

Facilities in the Polytrauma System of Care are linked through a telehealth network that provides state-of-the-art multipoint videoconferencing capabilities. We are able to use this to extend our access into our local communities, and to provide more specialized care closer to home for our combat injured.

Case management is also a critical function in our Polytrauma System of Care, and it is designed to ensure the lifelong coordination of services for patients with polytrauma and traumatic brain injury. Every patient seen in one of our polytrauma rehabilitation programs is assigned a case manager who maintains the contact with the patient and the family in a proactive manner to assess their ongoing needs and emerging problems, and provide any necessary supports and arrange for any necessary continued or new treatment.

We transition people through our system from the most intensive regional facilities to the more local facilities through warm handoffs from case manager to case manager. Each case manager remains actively involved until the new team is well versed in the care of that patient.

A critical area is the transition from DoD to VA, and our severely injured veterans and servicemembers and their families make transitions that are really unknown in the civilian sector. They must transition across space, time, and systems, and we have put many processes in place to make sure that patients moving from DoD to VA receive their care at the appropriate time and under optimal circumstances for their safety and convenience.

In looking at their needs, I have identified three key elements in providing this transition: the continuity of medical care, psychosocial support for the patients and families, and logistical supports such as transportation and housing. And we have addressed all of these needs.

In terms of medical care, the PRC's receive their advanced notice of potential admissions. After notification, they initiate a pre-transfer review and follow the clinical progress of the patient until transfer. Our PRC clinicians are able to complete a pre-transfer review of the electronic medical records at the medical treatment facilities by a remote access capability and up-to-date information about the patent in the progress notes, about medications, laboratory studies, results of imaging are all available.

We also identify or access additional clinical information through the Joint Patient Tracking Application, which allows us to see the care these individuals received in Iraq and Landstuhl, Germany.

And in addition to the medical record review, it is very important that we have clinician-to-clinician conversation about medical issues. And this is also in place. So we talk physician to physician, nurse to nurse.

We have stationed a certified rehabilitation registered nurse at Walter Reed who follows the ongoing clinical progress and reports to our teams at our Polytrauma Rehabilitation Centers. And she is available for up-to-date information. We also have VA social workers at ten of the military treatment facilities (MTFs) who are able to assist with medical records.

In terms of psychosocial support for transition, the needs for psychosocial support include the psychological support, education

about rehabilitation and the next setting of care, and information about benefits and military processes and procedures.

The VA social workers at the ten MTFs are able to do this. Our Certified Rehabilitation Registered Nurse (CRRN) provides a lot of in-depth counseling and education to our families and patients while they remain at Walter Reed. We also have admission case managers at our Polytrauma Rehabilitation Centers who make initial contacts with the patients and families so they can meet the team. And we assess what they will need when they reach our PRCs, so we can have those arrangements in place.

We also have veterans benefits liaisons in the MTFs to provide early briefings on the benefits for patients and families.

Upon admission to the Psychosocial Resource Center (PRC), our senior leadership meets with the families to assure that their needs are being met, and we have support services in place to help meet those needs. We have an Army liaison officer, a uniformed officer, at each one of our PRCs who can address ongoing military issues and concerns such as housing, military pay, and the non-medical attendant orders.

In terms of logistical support, when we transition individuals, we coordinate with our social workers to provide the necessary transportation and housing. We have Fisher Houses at two of our PRCs. And they will be planned and under construction at the other two PRCs.

Overarching all of these efforts is the addition of a new OIF/OEF program manager at our sites who will oversee the coordination of care and services provided to all of our veterans and families, and really assure that all of them receive the case management and support that they need.

We can't neglect then the transition from the Polytrauma Rehabilitation Center to the community. This is also very important, and the needs of the patient at this transition remain the same. Records for our medical care are readily available through remote access across the VA system. In addition, our transferring practitioners have personal communication to support the electronic record. Followup appointments are made prior to discharge. Again, our proactive case management system assists with on-going support and problem solving in the home community while continually assessing for new and emerging problems.

In terms of logistical support, each of our Polytrauma Rehabilitation Centers team members carefully assesses the expected needs at discharge for transportation, equipment, home modifications, and makes arrangements for those needs.

Finally, I would like to again recognize that the VA is committed to providing the highest quality of services to the men and women who have served in our country. It is important to note that last week the President created an Interagency Task Force on Returning Global War on Terror Heroes, which is chaired by the Secretary of Veterans Affairs, and this Committee will respond to the immediate needs of returning Global War on Terror servicemembers. The Heroes Task Force will work to identify and resolve any gaps in service for servicemembers.

And as Secretary Nicholson has said, "No task is more important to VA than ensuring our heroes receive the best possible care and services."

The VHA's work is to provide a seamless transition for high-quality medical, rehabilitation, and support services for veterans and active-duty servicemembers injured in the service of our Nation. We are helping to ensure that our heroes do receive the best possible care.

This concludes my statement. And at this time, I would be pleased to answer any questions that you may have.

[The prepared statement of Dr. Sigford appears on p. 35.]

Mr. MICHAUD. Thank you very much, Doctor. We really appreciate it. At this time I would ask unanimous consent that Ms. Herseth of South Dakota, Mr. Kline of Minnesota, and Ms. Boyda of Kansas be invited to sit at the dais for the Subcommittee hearing today.

Hearing no objections, so ordered.

Doctor, I have a couple of questions. There are concerns that the VA may not have sufficient programs in place to monitor the mental healthcare needs of veterans with TBI, especially in rural areas. What steps is the VA taking to monitor the mental health of veterans with TBI? And what mechanisms are there to monitor the mental health status of a TBI veteran after the veteran returns home, especially in rural and underserved areas?

Dr. SIGFORD. That is an important question. And we have put in place what we are calling our Polytrauma Support Clinic Teams, which will be—which is the third step that I mentioned in the Polytrauma System of Care. These teams have—it is an interdisciplinary team of clinicians who are trained to assess and monitor all the needs of the polytrauma patient, which include mental health needs in addition to perhaps their physical or cognitive needs.

As necessary these teams will be seeing these patients in regular followup. That is our expectation that they will see them on a regular and routine basis to meet their needs, identify any mental health needs. And if they are unable to manage the needs, then identify the appropriate resources, which they would need.

Mr. MICHAUD. I saw a list of the new polytrauma centers that are going to be established. Is that where the teams are going to work out of, or are they going into the rural areas to help as far as addressing the access issue for veterans in rural areas?

Dr. SIGFORD. Well, they will operate out of—out of the medical centers to which they are assigned. They will have at their disposal certainly the option to go out to other rural areas if that meets the needs or if the need is identified in those rural areas.

They also have, as I mentioned, telehealth at their disposal, which I think is going to be an incredibly useful tool to meet those needs in the rural communities.

We also have all of our primary care professionals trained to screen and identify problems due to TBI and ensure that an individual is referred to the appropriate resources.

One of the areas I would like to stress is that this is an area that requires specialized care, and we want to make sure that people

get the specialized care they need. We will be doing that through these specialized teams. It is a team effort.

Mr. MICHAUD. What concerns me are the options. If you look at a veteran, in northern Maine, they have to go to the VA Medical Center in Maine. Then they move to Boston where they would have to travel about 9 or 10 hours to get there. So, the concerns I have with rural areas is making sure that veterans have access to the help that they deserve, locally and without an unnecessary travel burden.

Can you also tell us about the Department's staffing capacity to meet the range of needs of these veterans? You know, physical, rehabilitative, and mental health? And how can the VA best address these needs?

Dr. SIGFORD. Well, we actually have quite a long history of meeting the needs of traumatic brain injury and rehabilitation patients. As we began to admit individuals with polytrauma, brain injury plus other injuries, we had a good deal of experience and knowledge about what types of resources we needed to do this. We have based our staffing plans on our experience, and have been able to and are providing those appropriate staffing ratios.

Mr. MICHAUD. Mr. Miller.

Mr. MILLER. Thank you. The DoD uses ICD–9. Does the VA use the same diagnostic code?

Dr. SIGFORD. Yes. They are used nationwide, civilian, DoD, VA.

[The information from Dr. Sigford follows:]

ICD–9–CM is used for diagnostic coding in all healthcare settings including the VA and DoD health systems. It is used universally for morbidity statistics, reimbursement, reporting, and research. While most familiar as diagnostic codes, ICD–9 is also used for inpatient procedure coding (ICD–9–CM, Volume 3).

Mr. MILLER. Civilians, though, are moving to ICD–10, I guess, or 11, and my concern is ICD–9 has no actual TBI code. We are finding this out in DoD, in particular, where there could be four or five different diagnoses, any of which could be TBI, but they are all called organic psychiatric disorders.

My concern is why would we continue to use that code? It is obviously not an organic psychiatric disorder for TBI patients. Are we looking at what needs to be done? Somebody told me it may even be statutorily necessary to change the codes, can you explain that?

Dr. SIGFORD. To my knowledge, there is no code for TBI in the ICD–9, or the ICD–10, or the ICD–11. There are codes that reflect traumatic brain injury, such as intracerebral hemorrhage. Typically those occur—intracerebral hemorrhage due to trauma. That would be one of the codes that would tell us it is the traumatic brain injury.

[The information from Dr. Sigford follows:]

No date has been set for implementation of ICD–10–CM for disease coding by the United States. Implementation of ICD–10–CM will be based on the process for adoption of standards under the Health Insurance Portability and Accountability Act of 1996. There will be a 2 year implementation window once the final notice to implement has been published in the *Federal Register*.

VHA has identified several problems with TBI coding in ICD–9–CM: (1) there are no actual TBI codes in ICD–9–CM, TBI is described as open or closed skull fracture or intracranial injury without skull fracture; (2) cognitive and memory disorders associated with TBI are coded as mental health problems rather than neurological dis-

orders or symptoms of brain injury; and (3) under ICD–9–CM coding guidelines, injuries are not associated with each episode of care, making it difficult to associate symptoms with TBI and to track the costs of TBI.

ICD–10–CM offers significant improvements over ICD–9–CM. There are specific codes for TBI differentiated as diffuse or focal brain injury, cerebral edema, laceration, contusion, and hemorrhage of the brain by side of injury. ICD–10–CM makes other important changes in TBI coding such as utilizing the Glasgow Coma Scale for coding TBI and a new category for post-traumatic headache. There is a mechanism to associate symptoms (sequelae) with TBI that will allow VHA and DoD to track TBI care.

However, limitations continue to exist in ICD–10–CM. Cognitive and memory problems associated with TBI are still mapped to mental health conditions (personality and behavioral disorders due to known physiological conditions).

VHA is working with the National Center for Health Statistics (NCHS), which has responsibility for the maintenance of the ICD–9–CM diagnostic codes, to correct deficiencies in TBI codes. Perhaps the most important consideration—and the one to which Mr. Miller refers—is the overlap of TBI and psychological health conditions. The VHA proposal creates two new symptoms classes: cognitive symptoms associated with TBI and emotion/behavioral symptoms associated with TBI. Common TBI symptoms such as memory disturbances, cognitive deficits, irritability, emotional lability, and impulsivity are currently coded as mental health conditions. In the VHA proposal, these symptoms will be coded as neurological conditions when they are associated with TBI.

The VHA proposal provides diagnostic alternatives to coding TBI symptoms as mental health problems. In the VHA proposal, clinicians will select the correct diagnosis and will not use a mental health code to describe a neurological condition associated with brain injury. Mental health conditions will continue to be used for some diagnoses. Clinicians will decide when appropriate condition should be classified as a neurological diagnosis or an organic psychological condition.

Statutory changes are not necessary to modify ICD–9–CM. Improvements in ICD–9–CM are made through the maintenance process outlined below. The decision to implement ICD–10–CM is made by the Secretary of the Department of Health and Human Services. Congress has been actively involved in ICD–10–CM implementation. There have been several hearings and several bills have been introduced in Congress to mandate implementation. Once ICD–10–CM is implemented, known problems such as coding some symptoms of TBI as mental health conditions can be corrected through the code maintenance process. To the extent that it is feasible, changes in ICD–9–CM are incorporated into ICD–10–CM.

Mr. MILLER. Could I ask, to interrupt you, could you get an intracerebral hemorrhage from something else?

Dr. SIGFORD. Well, part of the code is intracerebral hemorrhage due to trauma. Yes, you could have an intracerebral hemorrhage due to something else. But there are a series of codes that do reflect different mechanisms of traumatic brain injury.

One of the reasons there is no single diagnostic code for traumatic brain injury is because there are multiple mechanisms of traumatic brain injury and different severities. There are also codes for concussion and post-concussion syndrome.

And, yes, we are interested in necessary changes to reflect the appropriate code for brain injury. We are—we are very interested in pursuing that.

Mr. MILLER. How does that happen? Can you give the Committee any information? Or if you want to take it for the record and get it back to us.

Dr. SIGFORD. I would like to take that for the record. It is a very complex process.

[The information from Dr. Sigford follows:]

Many symptoms associated with TBI are caused by other diseases. For example, headaches, memory problems, cognitive impairments, and mood changes can be due to many diseases. ICD–10–CM links these symptoms to brain injury and enables TBI symptoms to be tracked during the entire course of treatment. This is not pos-

sible under current ICD–9–CM coding guidelines because injuries are not coded each time a provider treats a patient with TBI.

VHA is working with NCHS to create a mechanism in ICD–9–CM similar to the one in ICD–10–CM. The VHA proposal will allow providers to associate TBI symptoms with neurological brain injury. For example, an acute trauma-induced memory disturbance would be represented as a pair of codes: one for acute manifestation of TBI and one for the memory loss itself. This change duplicates the ICD–10–CM code process and will enable VHA to track the costs of TBI care during the entire course of treatment.

VHA is working jointly with DoD brain injury and coding experts on a code proposal that will:

- Revise TBI codes to distinguish between conditions related TBI and mental health disorders
- Revise concussion codes to identify TBI and severity classification
- Add a new code for acute physical or sensory manifestations of TBI
- Add new codes for cognitive, emotional, and behavioral manifestations of TBI
- Revise and expand codes for persistent or residual effects of TBI

The new TBI codes will significantly improve diagnosis of TBI and operationalize the VA/DoD TBI definition within the existing structure of ICD–9–CM. Clinicians will be able to classify TBI by severity and to identify physical, cognitive, and emotional/behavioral manifestations of TBI. These improvements will allow DoD and VHA to provide better healthcare to servicemembers and veterans and to identify, track, and report TBI more accurately than is possible with current ICD–9–CM diagnostic codes.

One of the most important benefits of the proposal will be the coding of cognitive and emotional/behavioral symptoms of TBI without resorting to mental health diagnoses. The code proposal addresses the concerns raised by veterans, veterans groups, and Congress that veterans with brain injuries receive mental health diagnoses that cause unintended stigma and may restrict access to necessary healthcare services.

Code Revision Process

1. Disease codes are revised at least annually by the NCHS ICD–9–CM Coordination and Maintenance Committee. Responsibility for maintenance of the ICD–9–CM is divided between the NCHS and Centers for Medicare and Medicaid Services (CMS), with classification of diagnoses managed by NCHS and procedures (Volume 3) managed by CMS.
2. Suggestions for modifications come from both the public and private sectors. Interested parties submit recommendations for modification prior to a scheduled meeting. These meetings are open to the public; comments are encouraged both at the meetings and in writing. Recommendations and comments are carefully reviewed and evaluated before any final decisions are made. No decisions are made at the meetings. The ICD–9–CM Coordination and Maintenance Committee's role is advisory. All final decisions are made by the Director of NCHS and the Administrator of CMS.
3. NCHS is currently reviewing VHA's code proposal. The proposal will be presented at the March meeting of the ICD–9–CM Coordination and Maintenance Committee and will be considered for implementation in the October 1, 2008 update. The implementation process involves posting the proposal and committee minutes for public comment, consulting with interested parties, and preparing the necessary changes in the tabular list, index, and official guidance. If the codes cannot be implemented in time for the October update, NCHS has the option to implement the codes in a mid-year (April 2009) update. To the extent feasible, changes in ICD–9–CM will be reflected in ICD–10–CM. In other words, the improvements VHA is proposing for ICD–9–CM will also improve ICD–10–CM.

NCHS web links:

http://www.cdc.gov/nchs/about/otheract/icd9/maint/maint.htm
http://www.cdc.gov/nchs/data/icd9/draft_i10guideln.pdf
ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/ICD10CM/2007/

Mr. MILLER. A 2006 report from the VA Office of Inspector General (IG), found that long-term case management needed some improvement. The question is, have you addressed the long-term case management vulnerability reported by the IG's office? If so, how?

Also, I want to know is home-based care provided or made available to TBI patients after their discharge from a Polytrauma Center?

Dr. SIGFORD. Sure. Now, in terms of the IG Report, you are speaking of the report from July of 2006; is that correct?

Mr. MILLER. Correct.

Dr. SIGFORD. We have done a tremendous amount to address those concerns, which really reflect the evolution of our process of case management from the time that those individuals were initially contacted.

We do now have a very formalized system of case management in place, where we have two social work case managers and a nurse case manager assigned to 12 inpatients, a ratio of approximately two social workers for every 12 inpatient patients. We have a dedicated outpatient social work case manager and nurse case manager in each one of our Polytrauma Network Sites. And at our Polytrauma Support Clinic Teams, there will be dedicated case managers.

In addition, we have developed handbooks and training materials for our social work case managers. We are expecting proactive followup that they don't just wait for someone to develop a problem. They make the phone call and check routinely on each of the patients who have been in our Polytrauma System of Care.

Oh, I'm sorry, the home-based. Thank you. Certainly all of our patients are eligible for the same home-based care as any other veteran or active duty servicemember who is eligible for care in the system. We can put those services out into the home for them, such as homemaker home health, home-based primary care. We can send physical and occupational therapists out to the home as needed. So it is available.

Mr. MILLER. Thank you. I see the red light.

Mr. MICHAUD. Thank you, Mr. Miller. I want to thank Mr. Hare for yielding his time to Ms. Boyda of Kansas, who has to go to the floor shortly, for questions. Thank you.

STATEMENT OF THE HONORABLE NANCY BOYDA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Ms. BOYDA. Thank you so much, Mr. Hare. Thank you. And thank you for inviting me, Congressman Michaud, and thank you for your leadership as the Chairman of this Subcommittee. You are a true friend and ally to America's veterans. Thank you.

I come before you today because our Nation's troops face a grave and growing crisis due to a startling inadequacy in our military healthcare system. The problem has simmered quietly for a decade. But now in the flames of the war of Iraq, it has disrupted into a full boil.

America's military hospitals are rightly renowned for their near miraculous ability to heal bleeding wounds and fractured limbs. Our military doctors have helped thousands of soldiers recover from injuries they endured in the service to our Nation.

But our doctors and expertise, while far reaching, is not boundless. For all their remarkable ability to repair physical wounds, they lack the background and the tools to deal with the—to heal the damaged mind.

Since the Iraq war began in 2003, almost 1,900 soldiers have suffered a traumatic brain injury or TBI. Their symptoms are pervasive and heartbreaking. Soldiers that were once outgoing, active individuals, are now introverted and without energy. Mothers and fathers no longer recognize their sons and daughters, and wives and husbands no longer recognize their spouses.

For these troops, things that you and I take for granted, our personalities, our attentiveness, our vocabulary, are ability to walk and talk and use the bathroom unassisted has vanished in the blink of an eye, lost in the crash of a Humvee or in the flash of an IED. The wave of traumatic brain injuries in Iraq flooded a military healthcare system that was sadly ill prepared to treat TBIs.

As the Department of Defense has scrambled to upgrade their capabilities, they have frequently turned to civilian experts on TBIs for guidance. In some instances, the DoD has even permitted soldiers to receive care at a civilian hospital where doctors have decades of experience in treating traumatic brain injuries.

But according to some very disturbing reports, the Army has rushed other brain injured soldiers into medical retirement, effectively terminating their access to civilian care. When these reports are considered in the light of the recently uncovered and deplorable conditions at Walter Reed, a picture emerges of a military healthcare system that is overburdened, underfunded, and inadequate for our soldier's needs.

It breaks my heart to imagine that soldiers who gave so much to their Nation, who in the case of a TBI sufferer sacrificed the very clarity of their thoughts, would receive anything less than world-class treatment.

The hour has come for Congressional action. And the responsibility for reform begins in this Subcommittee. I ask you to approach this crisis with open minds and leave no option off the table.

Perhaps veterans and active duty soldiers could benefit from easier access to civilian care. Perhaps the Department of Defense can mount an aggressive push to develop expertise in TBIs. Or, perhaps, the best approach is something else entirely. Regardless, any plan of action must recognize the demands placed on a soldier's family when his mind is fundamentally altered by injury.

I do not claim that even conscientious legislative action can cure every troop afflicted with TBI. But relieve every—or relieve every burden that families face as they care for a wounded soldier. But this Subcommittee can call the attention of their plight and ensure that they benefit from the very best that our Nation can offer. We owe nothing less to our brave soldiers and to our families.

So thank you again for speaking out. This is an issue that I hear about often in my district, as we have many veterans of both—of Vietnam and certainly now of the Iraq OEF and OIF. So thank you for your service.

I know that you are doing what you can to pull all the resources together. And this is an urgent request to do everything that we can. And you have my full support on that. Thank you so much.

Mr. MICHAUD. I want to thank the Congresswoman for your interest in this very important issue. I look forward to working with you.

Ms. BOYDA. Thank you.

Mr. MICHAUD. And your Subcommittee on Military Personnel as well.

Ms. BOYDA. Thank you so much.

Mr. MICHAUD. Now, I am pleased to recognize Mr. Kline who is also on the Military Personnel Subcommittee.

STATEMENT OF THE HONORABLE JOHN KLINE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

Mr. KLINE. Thank you. My microphone doesn't work. I'll move. Let me scoot over here. Technology whips us again.

Thank you very much, Mr. Chairman, for allowing me to join you today, add my remarks to the gentle lady's. It is nice to look at problems from a different perspective sometimes.

We, of course, have been spending a lot of time and energy in the HASC Military Personnel Subcommittee. But it is clear there is an overlap.

Let me ask unanimous consent to just enter some prepared remarks in the record, if I could.

Mr. MICHAUD. Without objection, so ordered.

Mr. KLINE. Thank you, Mr. Chairman.

And then say how delighted—this is so complicated up here.

Mr. MICHAUD. That is quite all right.

Mr. KLINE. How delighted I am that you are here. As you know, we have a Polytrauma Center in Minneapolis that we are actually very proud of. I think they are doing some innovative work and some very good work. And I know that you are very familiar with that.

I would like to, though, address my concerns and questions to an issue, which you discussed in your remarks as I was entering the room. And that is this break in care. This lapse in care, if you will, that is occurring way too often. We struggle with it on the Armed Services side. The gentle lady, Ms. Boyda, was talking about defense medical care. You are here as part of the Veterans Administration. It is veterans' care.

But to our men and women who have been injured, whether traumatic brain injury or any other injury, it really ought to be much more seamless than it is.

I visited that VA hospital in Minneapolis, that Polytrauma Center, a couple of years ago with the former Chairman of this whole Committee, Mr. Buyer, and talked to Steven Kleinglass who heads that hospital.

And while we were—while we were discussing this sometimes breakdown in coverage, Mr. Buyer and I stepped aside to talk to a wounded soldier and his wife. And it was very clear in this conversation that they didn't understand what was going to happen next and who was responsible for it. There were questions like, "Well, we are supposed to go back to Walter Reed, but where do we get the orders?" And, "Who is going to pay for it?"

And it seemed—it occurred to me and to Mr. Buyer that that is the kind of question that should never be asked, should not have

to be asked by any wounded soldier, or their spouse, or family member. It should be a seamless issue for them. It ought to be taken care of.

You mentioned there was an active duty officer now, which is an important step toward fixing that. But even with that step, we have soldiers who are falling through the cracks.

We had a terrible tragedy in Minnesota with a Marine Reservist who had been back from combat and committed suicide. He had been identified to the VA hospital and to the system. And it seems to me that that just shouldn't happen. There is a breakdown in there.

I wondered if you could take—I don't know how much time is left in the green and red light system, but could you talk a little bit more? You mentioned you had some teams and so forth. We really have got to do better to fix that. And it may be a coming together of this Committee and the Armed Services Committee to weld this together. But I would be interested if you would just expand a little bit on what you see the Veterans Administration—what you are doing to fix that gap so we don't have any more soldiers, sailors, airmen or Marines fall through that crack and drop out of our care.

Dr. SIGFORD. Well, what we are doing from the VA side, as I mentioned in the opening remarks, is we are putting together a system of care, so that as soon as we are aware of an individual needing polytrauma or traumatic brain injury care, they are assigned a case manager who tracks them through the system.

Mr. KLINE. Let me interrupt just a minute. How are you first made aware of this? What makes you aware of this, the patient arriving, communication from the Department of Defense? How does that happen?

Dr. SIGFORD. It happens in multiple ways. First of all, from notification from—for our various—and it happens differently depending on the severity of the injury. For someone who is very severely injured, we receive direct contact from the medical treatment facility at which they are being cared for.

They contact our VA and assign social workers who then contact our social workers in our Polytrauma System of Care. And we then make all of the appropriate and necessary arrangements for that transfer.

For those patients who are not—who don't enter the system directly from a military treatment facility, they may enter on a referral from a CBHOC, or a Community Based Health Care Organization (CBHCO), or their medical command, their Guard command, their Reserve command, a friend, a buddy. We are willing to accept referrals from wherever they come.

And we are doing a tremendous—we have actually assigned all of our polytrauma network sites, the assignment of reaching out to their local communities, their Guard, their Reserve, the bases, the military commands, to let them know that we would like to care for these individuals.

Mr. KLINE. Thank you very much. And I see the inevitable red light has popped up. So thank you, Mr. Chairman. I do yield back.

[The prepared statement of Congressman Kline appears on p. 34.]

Mr. MICHAUD. Thank you very much, Mr. Kline.

Mr. Hare.

Mr. HARE. Mr. Kline, if you would like to take some of my time, because I am interested in the seamless transition too. And I know you had some additional questions. I have one question. And then I would refer the balance of my time to you.

In terms of the shortage of healthcare professionals, from your perspective, one of the issues faced by all neurobehavioral and the community-integrated rehabilitation programs, involves the national shortage of key providers such as occupational therapists, physical therapists, speech language pathologists, and other professionals. What steps is the VA taking to recruit and retain key providers in these areas?

Dr. SIGFORD. Well, we have—we have a number of mechanisms for recruiting providers. The majority of our facilities in the polytrauma system have academic affiliates. We serve as training grounds for PTs, OTs, speech therapists, physicians. And that is an incredible recruitment tool, because individuals come and they work with these patients at the VAs. And they want to continue that work.

This is—as a matter of fact, in Minneapolis, the VA is the prime spot right now for training PTs in training. And so once they are there and they see the care we provide and the opportunities, they love to come and work for us. We also are able to touch the professional societies, to bring in skilled professionals, which has also been very useful. In terms of retention, we provide—I think—first of all, we—well, we provide really challenging and interesting work opportunities for individuals, as well as the opportunity for ongoing education, which is important to professionals that they not just stagnate in, you know, doing one type of care. We really do provide them a wonderful opportunity in which to work. And we have great retention in this particular area.

Mr. HARE. Thank you, Doctor. I would like to yield the balance of my time to Mr. Kline.

Mr. KLINE. I thank the gentleman. And I realize that I have got way too big an elephant here to chew in these little bites.

But continuing on the theme of this continuous coverage, could you just take one piece of that? You mentioned the active duty officer that is assigned. Could you talk about the role of that person? And what that is doing to fill some of these gaps? Help us understand that role a little bit better. I had high hopes for it. I am not sure it is doing what I thought it was going to do.

Dr. SIGFORD. Right. We do have active duty Army officers right now assigned to each one of the four Polytrauma Rehabilitation Centers. They are the experts in military policy and procedure. And they are there to meet with the families on a day-by-day, hour-by-hour basis to solve any—to help them fill out the paperwork, understand the paperwork, understand the medical boarding process, get through the medical boarding process, provide them advice on the system. They are there.

Mr. KLINE. Is this a workload that they can handle? I mean, one officer at Minneapolis, I have no idea if that is enough in order to do that. But it is obviously addressing the problem that I described earlier of the family who was supposed to go back to Walter Reed, and they don't know where the orders are going to come from, and who is going to pay for it.

This officer trained or perhaps MOS in personnel and administrative policies could help with that. Is the officer enough, or do we need to do something about that? Do we need statute, or money, or is that—is one officer—is it working fine, and one officer is able to take care of those things?

Dr. SIGFORD. Currently our—currently given the current workload, one officer is fine. And this officer is part of the VA team. And really our VA teams are also very knowledgeable about many of the military. And they have really learned about many of the military processes and procedures. But at this time, and we constantly monitor and assess, one officer is sufficient.

Mr. KLINE. Okay. Thank you. I just have one last comment. I have been very excited about a concept that the Marine Corps has taken up with the will—recently called the Wounded Warrior Regiment with a Wounded Warrior Battalion on each coast. And dedicated Marine Corps personnel to help follow through and see that people don't fall through the cracks.

And I just think that we ought to be exploring all of these avenues, the activity duty officer assigned to the trauma center, our efforts on the part of the active duty military, the services, the efforts that are underway by the National Guard. We have a wonderful example in Minnesota.

We here in Congress, and this Committee, and in the Armed Services Committee, we really do need to be open to these ideas and supporting them in every way we can with probably legislation and resources.

Thank you. I yield back.

Mr. MICHAUD. I thank the gentleman. And I agree. This is an important issue, one that everyone in this room, and in your Committee, and our Committee as well, feel strongly about.

And if we are going to get to the bottom of it and do the best that we can to make sure our men and women in uniform and those veterans are taken care of, we have to do it in a comprehensive, bipartisan manner. And I look forward to working with the gentleman as we move forward this Congress.

I would now like to recognize Congresswoman Herseth.

Ms. HERSETH. Well, thank you, Mr. Chairman. I want to thank you and the Ranking Member for holding this hearing, and for the testimony provided today. I know that there were hearings in the prior Congress as well to explore the care that our men and women who are receiving traumatic brain injuries are receiving.

I appreciate the line of questioning and the focus of this Subcommittee hearing today on the seamless transition. I have a few questions that I think are related to that, but also go to the issue of a certain category of servicemember who, I think, is falling through the cracks.

And so if you could just answer these questions, if you have the information with you today, and if not, if you could take them for the record and provide the information.

What is the average length of stay at any of the four Polytrauma Regional Centers by a servicemember receiving care for traumatic brain injury?

Dr. SIGFORD. I would have to take that for the record.

[The information from Dr. Sigford follows:]

The average length of stay at our four Polytrauma Rehabilitation Centers for inpatient servicemembers injured at a foreign theater with a brain injury from March 2003 through September 30, 2007 is 43 days.

Ms. HERSETH. And does certain progress have to be made within 90 days for a servicemember to continue getting the full regiment of therapies?

Dr. SIGFORD. That is not part of our policy. No.

Ms. HERSETH. Are you aware that—well, it may not be part of the policies. Is it a practice, if certain progress has not been made by a servicemember within 90 days, to—that the case management has tried to move an individual to a long-term care department within a medical center or to another long-term care facility within the VA?

Dr. SIGFORD. Let me have you rephrase that question.

Ms. HERSETH. Your response to my first question is that it is not a policy——

Dr. SIGFORD. Right.

Ms. HERSETH [continuing]. Of the system of care to move anyone to a long-term care department or other facility if certain progress isn't made in 90 days. And so I will just rephrase the question simply. I understand your response is that it is not a policy. Are you aware of whether or not it has been a practice in any of the four regional facilities?

Dr. SIGFORD. Our clinicians provide services based on what an individual can tolerate and what they seem to be responding to. And I—these are individual decisions made by the individual clinicians and practitioners.

I am not aware that there is an automatic rule for staying at a certain number of days or that people are operating under those—you know, a certain number of days and you must go to long-term care.

But they are using their clinical judgment, you know, day in and day out to provide the appropriate or the right types of care for the individual.

Ms. HERSETH. And are you aware of—what is the percentage of individuals transferred to long-term care facilities of those that have received care at the Polytrauma Centers for traumatic brain injuries since Operation Enduring Freedom and Operation Iraqi Freedom?

Dr. SIGFORD. I would like to take that for the record as well.

[The information from Dr. Sigford follows:]

According to the VA's national database for inpatient rehabilitation, ten (10), or 2.2%, active duty servicemembers have been discharged from a Polytrauma Rehabilitation Center (PRC) to a Long Term Care (LTC) Facility between March 2003 and September 2007. This data does not account for patients who may have subsequently transferred to a LTC facility following initial discharge to an interim setting from a PRC, or for those who later transferred to LTC from a less restrictive care setting.

Ms. HERSETH. And do you know the number that have been transferred to private facilities ultimately?

Dr. SIGFORD. I will take that for the record and see.

[The information from Dr. Sigford follows:]

The four Polytrauma Rehabilitation Centers report that between March 2003 and September 2007, 24 active-duty servicemembers have been discharged to a private treatment facility.

Ms. HERSETH. The reason I pose these questions is I do think it relates to an issue of seamless transition. I have a constituent who now is receiving care at a private facility. And the sense from his family is that the Polytrauma Center in Minneapolis had given up on him, because certain progress had not been made by a certain period of time.

There was an effort by the case manager to—and they had to go through a couple of different caseworkers to feel comfortable that that person was actually serving as an advocate for them rather than an advocate for the facility, or for the DoD, or for the VA. It was very confusing to the family.

And we intervened to stop the medical retirement process, because for the full regiment of therapies to continue, they can't be medically retired for TRICARE to cover the cognitive therapy.

So he was transferred to Casa Colina in Pomona, California. You may be familiar with that facility. And he has made tremendous progress since.

And could you, perhaps, explain if you have tracked any of the individuals that have been transferred to private facilities, how you might explain their progress at these private facilities that they were not experiencing within the Polytrauma System of Care at the VA?

Dr. SIGFORD. Yes. I can't, obviously, comment on specific patients or patient care. But I think that really a critical point for people to understand is that when these patients are transferred to Polytrauma Rehabilitation Centers, they still have multiple medical problems, they are still recovering, and this period takes a—this takes a significant period of time.

What we know physiologically from brain recovery, is that there is—there is this lengthy period, particularly for the severely injured, for the brain to recover sufficiently to really get, you know, the most benefit out of rehabilitation. And that may not be in the first 2 weeks, or the first month, or maybe even sometimes the first 6 months before, you know, people can remain so medically fragile that rehabilitation is beyond them.

So there is a period, and oftentimes it happens in the Polytrauma Rehabilitation Centers, where we are maximizing the recovery of the brain to allow that progress to take place later.

Ms. HERSETH. I know my time is up. May I follow up with one more question? If you could take this for the record, I would appreciate your explanation.

My concern is that if there has been an effort, whether because there are funding battles going on between DoD and VA and there is a problem with this seamless transition, that certain individuals who have been transferred to long-term care departments or facilities within the VA never get the aggressive therapy again after they reach the point in time that you just described, where the brain is more fully recovered and that they would actually be responding to a greater degree to that regiment of therapy. Because they are not getting it at a long-term care facility.

If Cory had been transferred to a different floor at the medical center, he would have gotten up to an hour, 1 hour, of physical therapy a day. No occupational therapy, no cognitive therapy, and I am just concerned that there is something going on in practice, perhaps not in policy, that we have a subset of individuals who have fallen through the cracks who have far greater potential. But they are not getting it, if they were medically retired too early and for whatever reason aren't at the point in time that they would respond more positively getting that type of therapy.

So, again, thank you and if you had a further response to that point that I made, I would appreciate hearing from you.

Dr. SIGFORD. Yes. As I said, I am unable to discuss specific patients here.

Ms. HERSETH. I understand you can't discuss specific cases. However, in your explanation for why some are responding better in private facilities, I think your explanation is primarily that there is a time involved where had they stayed within the Polytrauma System of Care in the VA, they eventually would have made the same progress in your system.

Dr. SIGFORD. Mm-hmm.

Ms. HERSETH. And my question back to that response is I need to know then how many have been—how many didn't make it to that certain level of progress, that have stayed in your system, and whether or not they are making the kind of progress, especially those that may have been transferred to long-term care facilities?

Dr. SIGFORD. Now, those that stay within our system of care, within our Polytrauma System of Care, they are monitored. And they are brought back to the Polytrauma Rehabilitation Centers at a point when they become more responsive and more ready for that care.

Ms. HERSETH. Perhaps you could provide those numbers then more generally in terms of how many have returned and what their progress has been once they do return.

Dr. SIGFORD. There are few—very few——

Ms. HERSETH. Thank you.

Dr. SIGFORD [continuing]. That fall into that category.

Ms. HERSETH. Thank you. Thank you, Mr. Chairman.

[The information from Dr. Sigford follows:]

Of the 10 active duty servicemembers who have been discharged from a Polytrauma Rehabilitation Center (PRC) to a Long Term Care (LTC) Facility between March 2003 and September 2007, 70% (7) of the cases have been followed up for further services. The 3 cases that were not followed were admitted early in the development of the Polytrauma System of Care prior to initiation of the intensive case management system now in place. All sites currently have a case manager who is responsible for following all discharged cases for further services. Of those seven who have been followed, one has expired, two cases were re-admitted to the PRC, and the remaining cases continue to be monitored at their geographically proximal Polytrauma Network Site/Polytrauma Support Clinic Team locations for further services.

Mr. MICHAUD. Yes. Would you provide the actual numbers? What might be considered very few to you might not be very few to us. So if you could provide the numbers.

And I want to thank both of you for being here today. And we will be submitting additional questions for the record to be addressed. And just to give you an idea of where some of the ques-

tions are coming from, the Presidential Task Force went to great length, spent a lot of time, on the issue of seamless transition. They did their report back in 2003.

And they made several recommendations. So a lot of the questions that will be asked in writing will relate to what you have done so far on each one of those recommendations.

So once again, I want to thank you very much for coming this afternoon.

Dr. SIGFORD. Thank you.

Mr. MICHAUD. Okay. While they are setting up the table for the next panel, the panelists are Tina Trudel, who is President of the Lakeview Healthcare Systems, Inc.; Colonel Mark Bagg, Director of the Center for Intrepid; Karyn George, who serves as Delivery Manager, Military One Source/Severely Injured Services; Mr. Carl Blake, who is the National Legislative Director of Paralyzed Veterans of America; Mr. Adrian Atizado, who is Assistant National Legislative Director for Disabled American Veterans; and Mr. Tom Zampieri, who is the Legislative Director for the Blinded Veterans Association.

So we want to thank you all for coming here this afternoon. And we look forward to hearing your testimony. Once again, I want to thank our group of panelists for coming today. And we will start off with Tina Trudel.

STATEMENTS OF TINA M. TRUDEL, PH.D., PRESIDENT AND CHIEF OPERATING OFFICER, LAKEVIEW HEALTHCARE SYSTEMS, INC., EFFINGHAM FALLS, NH, AND PRINCIPAL INVESTIGATOR, DEFENSE AND VETERANS BRAIN INJURY CENTER AT VIRGINIA NEUROCARE; COLONEL MARK BAGG, CHIEF, DEPARTMENT OF ORTHOPAEDICS AND REHABILITATION, BROOKE ARMY MEDICAL CENTER, FORT SAM HOUSTON, TX, AND DIRECTOR, CENTER FOR THE INTREPID, DEPARTMENT OF THE ARMY, U.S. DEPARTMENT OF DEFENSE; KARYN GEORGE, MS, CRC, SERVICE DELIVERY MANAGER, MILITARY ONE SOURCE/SEVERELY INJURED SERVICES; CARL BLAKE, NATIONAL LEGISLATIVE DIRECTOR, PARALYZED VETERANS OF AMERICA; ADRIAN M. ATIZADO, ASSISTANT NATIONAL LEGISLATIVE DIRECTOR, DISABLED AMERICAN VETERANS; AND THOMAS ZAMPIERI, PH.D., DIRECTOR OF GOVERNMENT RELATIONS, BLINDED VETERANS ASSOCIATION

STATEMENT OF TINA M. TRUDEL, PH.D.

Dr. TRUDEL. I am Tina Trudel. Thank you members of the Committee on Veterans Affairs. I want to thank you for allowing me the opportunity to participate as a private citizen.

As you are aware, I presently serve as Chief Operating Officer of Lakeview Healthcare Systems, a national provider of brain injury services from hospital to home. I also serve as Principal Investigator of the Defense and Veterans Brain Injury Center at Virginia NeuroCare, and have been in the field of brain injury for the past 20 years.

Brain injury is a major health problem. Those with traumatic brain injury are adversely impacted by the chronic lack of funding and underdeveloped infrastructure in comparison to other diagnostic and disability groups.

While blast injury and combat-related TBI are now in focus, it is important to remember that military service runs a risk of TBI even in peacetime. With thousands of military personnel injured annually due to motor vehicle crashes, falls, training mishaps, other causes, the VA has a history of collaborating with private sector providers. I think some of that was alluded to by previous speakers. And often that collaboration is for some of the most difficult to treat.

A few veterans I am personally familiar with include a Marine who was injured in a fight. He has been receiving services through Lakeview since 1993. He had severe cognitive and behavioral challenges, including a history of significant self injury. He had been medically observed in VA settings, but they were not able to successfully implement an effective treatment plan.

Within our organization, he received intensive neurobehavioral treatment, one-on-one supports, assistive devices, skills training, and very successful collaboration with the VA for surgical repair of his self injury once his symptoms were under control. He now is able to reside in a community-supported living setting as a volunteer in his community and being able to visit his family.

I have also worked with a sailor who was injured in a motorcycle crash who has received services since 2004 through our organization. He had cognitive and behavioral problems, including aggressive outbursts. Additionally, he is blind with partial hearing loss. He was transferred among VA hospital sites due to his assaultiveness, including assaulting nurses.

In our care setting, he is receiving intensive neurobehavioral treatment and adaptive living skill training and is now transitioning to a community-assisted living setting.

A soldier recently was admitted to Lakeview who sustained a brain injury after a fall from a barracks balcony with a skull fracture and a frontal lobe injury that significantly impacted his thinking and mood. He was deployed to Iraq approximately 6 months after the fall with complaints of headaches and evolving poor task performance. He was declared insubordinate, and charged with dereliction of duties, and then was sent on leave where he ended up in a civilian psychiatric hospital that diagnosed him with mood disorder and TBI. He was treated at sites including Walter Reed and a VA Polytrauma Center, but was unable to manage when he returned to home. His family advocated for the opportunity for treatment in the private sector. He is presently at Lakeview and was approved for 1 month of rehabilitation.

That particular Lakeview program he is at is a contractor with the Maine Medicaid program. So if he were one of Chairman Michaud's civilian constituents, he would have been approved for 6 months of care and probably would have had some additional services available for transition. Also that would be true if someone with a similar profile were to present to our organization through most workers' compensation type organizations and were injured on the job.

At Monday's roundtable discussion, Dr. Jean Langlois of the CDC estimated 75,000 to 150,000 new brain injuries from the current war. While many of these will be mild in nature and have positive outcomes, some will need services beyond the typical VA medical-

focused infrastructure through models of post-acute care that allow for further treatment after hospital-level rehabilitation.

Such services in the private sector include neurobehavioral programs, residential rehabilitation, day programs, and home-based or outpatient services. While the VA provides some of these, there are gaps in their service system, particularly in more rural areas.

Research findings support that these models of care improve outcome, even for people who are months to years post injury, and especially for those who have the more severe injuries. These programs also reduce neurobehavioral problems, and, therefore, lower the risk for institutionalization, criminal justice contact, and substance abuse.

Lakeview's brain injury model has included neurobehavioral, residential, and community-integrated programs. We found it is very successful to focus on a person-centered inclusionary model that encourages the active participation of those with brain injury and their families in all aspects of treatment.

At times in larger systems such as the VA, those can be difficult things to accomplish. Program interventions facilitate reintegration through enhancing functional life skills, developing compensatory strategies, better self esteem and self control, vocational rehabilitation and supports for the family.

Along with licensed professionals, our program and many in the private sector, use therapy extenders and life coaches who actually deliver the services in real environments. This is very helpful and goes along with discharge planning to ensure success, because many people with brain injury cannot generalize from something they have learned in a clinic, an office, or a hospital to a real world environment. Therefore, good treatment often has to occur within the context of the real-world environment.

Lakeview has and continues to serve veterans. However, that opportunity seems to arise only after the veteran has experienced a time of treatment failures and often some behavioral or functional deterioration.

We are also very pleased to be involved with the Virginia Neurocare Defense and Veterans Brain Injury Center program. That program has a dual effort including community-based treatment of military personnel, while also advancing brain injury rehabilitation through education and research, as well as applied technology.

Our military participants are usually several months post injury and no longer require acute medical intervention. They present with complex cognitive, behavioral, and functional living problems, often with some physical disability. Depression, PTSD, substance abuse, fatigue, and stress are common complications.

Through that program, we are developing educational and therapy models that will be available for research and dissemination to facilitate these services being enhanced and spread in other settings. We are also working in collaboration with the University of Virginia and applied for a number of grants and assistive technology, including driver evaluation and rehabilitation using simulators and web-based resources.

Additionally, through the Defense and Veterans Brain Injury Center, we are advancing the use of portable wireless devices, in-

cluding a GPS technology project to allow people to access the community without being lost or confused.

Neurobehavioral treatment and community-integrated rehabilitation services are very much a challenge within the VA system. Many survivors need a therapeutic approach that allows for gradual, extended treatment and the possibility of long-term supported living. Living in non-institutional environments, and close to their home and family.

This treatment is not provided through a medical model but, instead, is achieved through a model that targets functioning on home and community settings. Such programs rely minimally on physicians and heavily on allied health, behavioral health, direct support staff, extenders, life coaches, a variety of personnel, as was mentioned previously, that are often difficult to recruit and retain with some national shortages.

It is a positive thing to note that there has been evolution of some parts of this treatment model within the VA Polytrauma Centers. And at the roundtable discussion, part of the brain injury awareness events on Monday, it was reported that four such programs are being implemented through the VA Polytrauma Centers.

Private neurobehavioral and community-based programs are available across the country. Some are funded through various means with Medicaid plans, waivers, and so forth. The VA would be wise to utilize some of these existing systems and to utilize resources such as the Brain Injury Association of America and the National Association of State Head Injury Administrators, both of which are non-profit organizations that have strong nationwide networks of brain injury service knowledge to access resources.

Also, it would be helpful to mobilize the physician education resources through such means as the CDC TBI toolkit. It is a very solid tool, well developed, and really needs to be out there as much as possible, as many National Guard members are seeing community physicians who may not have the same knowledge base and really need information on TBI.

As I mentioned before, there is a shortage of some of the allied health providers, particularly those in the OT, PT, speech professions, neuropsychology, behavior analysis, who are actually trained in brain injury rehabilitation and understand post-acute community environments and neurobehavioral care.

I know from my own experience that private sector providers are increasing salaries and bonuses to compete with lucrative practice opportunities in many states. The VA system, while being one of exceptional training with many resources, will continue to have to recruit and retain in this environment of a qualified workforce shortage and rising demand.

Additionally, if the VA were truly to recruit everybody that they would need to provide services that are needed throughout the country, even in more rural areas, the supply and demand problem would devastate the ability for the other pieces of the healthcare system who are reliant on these same personnel. We would then be running duplicate systems in some of these more rural environments, where there is not a population density to fully require services from both the private and the VA system.

These population concentrations are quite a challenge. And the VA clearly does the best job in developing regional TBI teams, which take time and effort to successfully implement. But it is not pragmatical for the VA in isolation to provide these types of services, especially in more rural areas. Optimal services should be as close to home, community, and family as possible.

There is significant benefit in blending the resources of regional VA services with private contractor services where available and needed, as well as to encourage consultation with experienced civilian providers so that a well-managed continuum of TBI services is available to all veterans close to home.

Lastly, the scope and complexity of TBI in the military and veterans community was recognized, years ago, and the Defense and Veterans Brain Injury Center was established in the early 1990s. Their role as coordinator of research, clinical, and educational development across the military and VA systems is critical. Without unified data, projects, and tracking across all branches of the military and VA, opportunities for research to advance brain injury rehabilitation, dissemination of best practices, and optimal service delivery to our men and women in uniform are lost, along with the translation of these advances to the civilian population.

I want to thank you, thank our men and women in uniform, and for all of you to know that I am only one of many in the civilian TBI community who are ready, willing, and able to help our veterans. Thank you.

[The prepared statement of Dr. Trudel appears on p. 37.]

Mr. MICHAUD. Thank you very much, Doctor.

Colonel Bagg.

STATEMENT OF COLONEL MARK BAGG

Colonel BAGG. Thank you, Mr. Chairman, Mr. Miller, and distinguished members of the Subcommittee. I am Colonel Mark Bagg, the Chief of the Department of Orthopaedics and Rehabilitation at Brooke Army Medical Center in San Antonio, Texas, and also the Director of the new Center for the Intrepid (CFI).

Thank you for inviting me here to testify before you to explain our mission of the Center and our vision for providing the absolute best outpatient rehabilitative care for our wounded warriors and America's veterans.

The mission of the Center for the Intrepid is to provide the highest quality of comprehensive outpatient rehabilitation for wounded warriors and veterans and to conduct leading edge research and continuing medical education in the field of prosthetics and rehabilitation.

Advanced rehabilitative services will be provided specifically to amputees and to those who sustain functional limb loss as a result of severe open fractures, soft tissue injuries, and burns.

Wounded warriors treated at the CFI are each assigned a full-time case manager. These professionals work closely with patients, families, and the staff to coordinate a customized plan of care, guide them through the medical evaluation board process, and facilitate a seamless transition of care from the DoD to the VA healthcare system.

Our occupational therapy section focuses on restoring health and function. Treatment activities are designed so that patients can successfully perform all activities of daily living.

To accomplish all of these tasks, we have a fully equipped apartment where patients work with a therapist in a real world living environment. Also available for use are two simulation systems, a firearm simulator and a driver simulator.

The occupational therapy staff is responsible for our very important community reintegration program. Our physical therapy section provides the full spectrum of physical therapy modalities. In addition, patients are challenged by a 21-foot climbing tower and a six-lane swimming pool. Adjacent to the pool, is an indoor surfing activity called the FlowRider, which we believe will improve balance, strength, coordination, and confidence.

PTs are also responsible for coordinating the adaptive sports program, which includes a running program, volleyball, swimming, scuba diving, kayaking, and basketball. And through the volunteer support of a variety of charitable organizations, patients have been offered the opportunity to snow and water ski, fence, shoot, ride horses, golf, and participate in a variety of other sporting events.

Our behavioral health section provides comprehensive mental health support while patients are undergoing their demanding physical rehabilitation.

Our prosthetic section utilizes standard production methods augmented by computer-assisted technology for designing, milling, and producing state-of-the-art prostheses on site.

We also have a military performance lab, which seeks to analyze human motion. It is comprised of two functional areas, the gait lab and a computer-assisted rehabilitation environment, otherwise known as a CAREN system. This is a three-dimensional rehabilitation simulator, which is the first of its kind in the world. It allows patients to be immersed in a whole host of virtual reality scenes. This lab will be central to the research mission of the Center for the Intrepid.

The CFI is staffed by 49 personnel, including active duty Army, GS civilians, contract providers, and nine full-time VA healthcare professionals, all working side by side to maximize patients' rehabilitative potential, ease the transition between the DoD and the VA healthcare systems, and facilitate reintegration back into society.

Over 600,000 Americans contributed to the fund, which established this Center. Their generosity expresses the profound appreciation America has for its gallant servicemen and women who defend freedom.

This Center is dedicated to our severely wounded military heroes whose selfless sacrifice entitle them to the best rehabilitative care our Nation has to offer.

In closing, let me again express my sincere appreciation to the Congress, to the Intrepid Fallen Heroes Fund, and to all American citizens who have made this Center for the Intrepid possible.

The Congress' strong support allows us to continue providing world class rehabilitation for those who sustain these very severe traumatic injuries.

The generosity of the Intrepid Fallen Heroes Fund allows us to continue to build on our successes in an absolutely incredible rehabilitation center. If you have not had the chance to visit the Center for the Intrepid or Brooke Army Medical Center, I invite you to do so.

Mr. Chairman, thank you very much for the opportunity to be here today. And I look forward to answering your questions.

[The prepared statement of Col. Bagg appears on p. 46.]

Mr. MICHAUD. Thank you very much, Colonel, for your testimony and thank you for serving our country as well. We appreciate it.

Ms. George.

STATEMENT OF KARYN GEORGE, MS, CRC

Ms. GEORGE. Good afternoon, Mr. Chairman, and members of the Committee. My name is Karyn George, and I am honored to be here.

Before I begin, I need to clearly state that my testimony is based on my personal views and does not represent the views of the Department of Defense or the Administration. I am a contract employee of the Department of Defense, and, therefore, I am a private citizen. I appear before you in that capacity today. My statements and opinions have not been cleared by the Department of Defense or the Federal Government. I do not speak on behalf of the Federal Government, the Department of Defense, Military One Source, or any of the military services, or the Military Severely Injured Center.

Again, thank you for the opportunity to present testimony on the care of wounded servicemembers. I will be testifying today from several perspectives. I am currently employed by Ceridian Corporation as a Service Delivery Manager with the Military One Source/Severely Injured Services, a virtual extension of installation services provided by the Department of Defense.

My professional and educational background includes a masters degree in rehabilitation counseling and over 20 years of experience providing case management and administrative oversight of programs designed to treat brain injuries and orthopedic impairments.

Thus, I am bringing you a varied perspective of one who has cared for those with mild to severe brain trauma and other related injuries.

As a service delivery manager, I provide oversight and supervision for the severely injured specialists in the Military One Source Arlington, Virginia Call Center, and for on-site counselor advocates placed at several military treatment facilities, and at the VA Medical Treatment Facility at Palo Alto, California.

The counselor advocates are charged with providing face-to-face advocacy, outreach, and support to wounded servicemembers and their families, while the severely injured specialists provide telephonic advocacy, support, short-term-problem resolution, and long-term monitoring of the needs of wounded servicemembers and their families. Prior to assuming this management position, I myself was a counselor advocate at Walter Reed Army Medical Center.

As counselor advocates were hired, they assimilated into those treatment facilities, and they assisted servicemembers and their families from injury through recovery and reintegration and back

to their communities. The counselor advocates became familiar with programs, resources, and key personnel at the medical treatment facilities and at the VA Medical Center.

I personally found some needs to be as varied as money for groceries to an individual needing to find educational or employment opportunities as they had become the primary breadwinner for the family.

A poignant comment from a wounded servicemember is that the system is a hunt and peck system. If you know what to ask, you will probably find and get the services. But many do not know what to ask, or who to ask, or have the voice to ask the right questions.

Military One Source/Severely Injured Services staff were trained to not only know what to ask, but who to ask, and when to ask in order to ensure that the servicemember continues to progress along the recovery continuum.

I believe that the challenge that we face is the leadership, acquisition, and coordination of all of the resources to assist the wounded and their families. It is not that there aren't existing programs. Each severely injured program has their own severely injured program.

The VA has the Seamless Transition Program. Department of Defense stood up the Military Severely Injured Center and Heroes to Hometowns. Department of Labor has RealLifelines and Operation Warfighter to assist with employment options. Countless non-governmental organizations have rallied with support of services, money, and goods.

I believe that the communication between the VA, Department of Defense, the military treatment facilities, the service programs, and non-governmental organizations is not fully robust, fully defined, easily understood, or consistent. At present, I believe the wounded and their families are not getting the very best that our country can give them.

You have already heard much about traumatic brain injury and its implications. So I would like to go straight to my recommendations. I have three recommendations.

One, I feel we need a single, central focal point for wounded and their families. A program that will provide injured services that will transcend all service branches and include Guard and Reserve units. This program must have clear direction from senior-level VA and Department of Defense, as well as Army, Marine, Navy, and Air Force command endorsement. This program direction must include a system of coordination and collaborations between the VA, Department of Defense, medical treatment facilities, service branches, non-governmental organizations, and Department of Labor, which will support a seamless and equitable delivery of services to all wounded veterans.

Two, I feel we need to expand options for care of veterans with brain injuries. I personally do not feel that the existing inpatient care units are meeting the needs of all traumatic brain injury cases. The VA outpatient clinics are not designed for this specialty population. I believe we need to establish collaborative and cooperative relationships between private community-based brain injury rehabilitation programs, Veterans Affairs, and the Department of

Defense that will allow servicemen and women with TBI to receive treatment as close to home as possible in a setting that is conducive to the attainment of skills and with staff that are—have a specialty in the rehabilitation of brain injury. This network of community providers can then compliment existing acute and outpatient services offered through the VA and Department of Defense.

Third, and most important, these wounded warriors and their families need a qualified advocate. The advocate must possess the skill sets to help the families to think straight, navigate through the systems, and transition successfully from the Department of Defense care to the VA medical care and on to productive quality lives in their communities.

Thank you for this opportunity.

[The prepared statement of Ms. George appears on p. 50.]

Mr. MICHAUD. Thank you very much for your testimony.

Mr. Blake.

STATEMENT OF CARL BLAKE

Mr. BLAKE. Mr. Chairman, Ranking Member Miller, thank you for the opportunity for—to testify today on what I think many here consider the signature health crisis of the Global War on Terror.

I would like to focus on a few key issues that relate to care being provided to servicemembers with traumatic brain injury at the VA Polytrauma Centers. PVA is particularly concerned about veterans who have experienced a traumatic brain injury but whose symptoms have been masked by other conditions.

We have heard anecdotally that this is a particular problem for veterans who have incurred a spinal cord injury at the upper cervical spine. Veterans who have incurred this level of injury as a result of a blast incident, often have experienced a TBI as well. However, their symptoms may be diagnosed as a result of their significant impairment at the cervical spinal level.

Unfortunately, they may not get the critical treatment needed at the earliest stage to address the TBI. We recognize that this is a difficult challenge facing physicians, nurses, and rehabilitation specialists, as they must decide what condition must be treated first, even while not necessarily realizing that other conditions exist.

PVA believes more research must be conducted to evaluate the symptoms and treatment methods of veterans who have experienced TBI. This is essential to allow VA to deal with both the medical and mental health aspects of TBI, including research into the long-term consequences of mild TBI in the OIF/OEF veteran.

Furthermore, TBI symptoms and treatments can be better assessed where previous generations of veterans have experienced similar injuries. Ultimately, it is important to point out that the care being provided to those severely injured servicemen and women who have incurred a traumatic brain injury at the VA is nothing short of extraordinary. This care is primarily being handled at the level one Polytrauma Centers located in Richmond, Virginia, Tampa, Florida, Minneapolis, Minnesota, and Palo Alto, California. These lead centers provide a full spectrum of TBI care for patients suffering moderate to severe brain injuries. I know because I have visited with a number of these patients at Richmond myself personally.

PVA is pleased that VA is also taking steps to establish level two Polytrauma Centers in each of its remaining VISNs for followup care of polytrauma and TBI patients referred from the four lead centers or from military treatment facilities.

PVA believes that the hub and spoke model used in the VA spinal cord injury service serves as an excellent model for how this network of Polytrauma Centers can be used.

Second level treatment centers, known as spokes, refer spinal cord injured veterans directly to one of the 21 spinal cord injury centers or hubs when a broader range of specialized care is needed. These new level two centers will better assist VA to raise awareness of TBI issues. There will also be increased access points for TBI veterans that will allow VA to develop a systemwide screening tool for clinicians to use to assess TBI patients.

Unfortunately, the ability of VA to provide this critical care has been called into question, particularly in recent weeks. PVA recognizes that the VA's ability to provide the highest quality TBI care is still in its development stages. However, it continues to meet the veterans' needs while going through this process.

We believe many of the problems highlighted in recent newspaper articles regarding the TBI programs at the four Polytrauma Centers is a result of Congressional inaction. The VA is not being prepared for success by a Congress that is not fulfilling its responsibility to provide proper funding in a timely manner.

We are especially concerned about whether the VA has the capacity and the staff necessary to provide intensive rehabilitation services, treat the long-term emotional and behavioral problems that are often associated with TBI, and to support families and caregivers of these seriously brain injured veterans.

Finally, the broader VA is unlike most, if not all, other healthcare systems in America. While the quality of care may be outstanding during early stage treatment at private facilities, probably most private facilities, those same facilities generally provide care in the short term.

On the other hand, the VA is the only real healthcare system in America capable of providing complex, sustaining care over the life of a seriously disabled veteran. The VA has developed its long-term program across the broad spectrum of services for many years.

Mr. Chairman and members of the Subcommittee, the task of providing this critical care to this segment of the OIF/OEF veteran population is certainly a daunting one. Without coordinated efforts by both DoD and VA, and on some level the private facilities, the backing of Congress through the appropriations process, the VA will struggle to adequately handle all of the expectations placed on it. Veterans with TBI, as well as their families, should not have to worry about whether the care they need will be there when they need it.

Mr. Chairman and Mr. Miller, I would like to thank you again for the opportunity to testify. And I would be happy to answer any questions that you may have.

[The prepared statement of Mr. Blake appears on p. 53.]

Mr. MICHAUD. Thank you very much, Mr. Blake.

Mr. Atizado.

STATEMENT OF ADRIAN M. ATIZADO

Mr. ATIZADO. Mr. Chairman, Ranking Miller, I am pleased to be here today at your request to testify on behalf of Disabled American Veterans on Polytrauma Center care and patients suffering from traumatic brain injury.

As my colleague here just said, TBI is becoming the signature injury of the Iraq war. Recently I had the opportunity to view a DVD produced by VA about the impact of TBI on a young soldier who was severely injured in Iraq. The film is a poignant illustration of extreme physical and emotional challenges faced by one brain injured veteran and his family.

Veterans with polytrauma and severe TBI will require extensive rehabilitation and life-long support. In our opinion, it is an ongoing rehabilitation and personal struggle. To recover is the best justification imaginable for ensuring a strong and viable VA healthcare system.

Military personnel who sustain catastrophic physical injuries and suffer severe TBI are easily recognized. However, VA experts note that the milder form of TBI can occur without any apparent physical injuries and when the soldier is in the primary vicinity of an explosive blast.

Veterans suffering a milder form of TBI may not be as readily detected. But symptoms can include headaches, irritability, memory problems, and depression. These symptoms are similar to but not inclusive of the symptoms for veterans from post-traumatic stress disorder. Experts believe that many returning soldiers from Iraq may have suffered multiple, mild brain injuries or concussions that may have gone—that may have gone undiagnosed and stress the need for a thorough screening, including a military history to properly detect these more subtle brain injuries.

We are concerned that DoD and VA lack a coordinated system-wide approach for identification, management, and surveillance of personnel who sustain mild-to-moderate TBI. We urge both agencies to jointly develop a standardized protocol to screen, diagnose, and treat these veterans and soldiers.

As mentioned earlier, there was a July 2006 Inspector General report that cited a number of problems and called for additional assistance to immediate family members of brain injured veterans, including the need for additional caregivers and improved case management.

We are pleased that Congress recently passed a caregiver assistance pilot program as a first step to address the needs of family members caring for severely brain injured veterans at home. We hope VA will quickly move forward on this pilot and suggest a focus group, including family caregivers, to help evaluate the program and suggest ways to better meet the needs of these disabled veterans and their families.

The VA reports that it is tailoring its programs to meet the unique needs of severely injured OIF/OEF veterans and putting a greater emphasis on understanding the problems of families.

However, we remain concerned about whether VA has the resources and sufficient specialized interdisciplinary staff necessary to provide all these services. We must remain vigilant to ensure that VA's specialized programs, particularly the Polytrauma Rehab

Centers, as it goes through the growing pains to meet the needs, that these are properly funded and are adapted to meet the unique needs of the newest generation of severely injured veterans while continuing at the same time to address the previous generations of combat disabled veterans.

In the Independent Budget, our organizations have made a number of recommendations to Congress and the VA based on the issues discussed today in my testimony, particularly for TBI. I call your attention to these recommendations and ask that you take them into consideration as you make your decisions on funding for VA in the fiscal year 2008.

Mr. Chairman, this concludes my testimony. I would be happy to answer any questions that you may have. Thank you.

[The prepared statement of Mr. Atizado appears on p. 55.]

Mr. MICHAUD. Thank you very much.

Mr. Zampieri.

STATEMENT OF THOMAS ZAMPIERI, PH.D.

Mr. ZAMPIERI. Mr. Chairman and members of the Committee, I appreciate the opportunity to present our testimony in front of you today from the Blinded Veterans Association.

For 62 years, we have been an advocate for blinded veterans and their families. Rather than read through the whole thing, I thought what I will do is try to highlight. From our perspective, we are concerned about a couple of aspects of the "seamless transition." Some of the other members of the panel have touched on that.

And that is that there are two concerns. I think once individuals who have severe injuries end up going through from the DoD medical treatment facilities to the VA Polytrauma Centers and secondary centers, it is where they leave those and go back to wherever they are from that the problems start. And that is when you start to hear from the family members, especially it is so hard to get the continued services that they want.

And, you know, the other problem that we are concerned with is mentioned also, is the individuals who were injured in Iraq and were returned to duty because their injuries didn't appear to be that severe. Then they returned back to the United States, oftentimes with their unit, and they may not be getting followup screening.

And, depending on what studies you look at, you know, the percentage of some of the units have shown anywhere from between 10 percent to 20 percent of the soldiers or Marines who have returned from Iraq have been found to have different symptoms from their injuries in Iraq or Afghanistan.

Oftentimes, you know, these can frequently manifest as visual problems. Our major interest in this, in fact, is that a lot of the—about 30 percent of the traumatic brain injured have some sort of vision-related problems. And they can range from as simple an issue as color blindness to blurred vision, double vision, convergence disorders, unable to judge distances, to the full spectrum of—I have met several who are legally blind as a result of their traumatic brain injuries. So it is a new part of the VA's ability to reach out and screen those individuals and offer them outpatient services.

We appreciate that Secretary Nicholson and Dr. Kussman in January announced a full continuum of outpatient low vision and blind rehabilitative services.

And, by the way, we appreciated your passage of the blind rehabilitative outpatient specialists bill, which will provide the VA with an additional 35 outpatient blind specialists, which we think is at a critical time right now. The other thing is that, you know, I think each of the systems try to do so much on their own. And maybe there is a time where you need to step back and look at, you know, other ways or bringing in the private sector expertise. You know, one of the things I have been involved with here in Washington, DC, for example, is there is a Presidential-appointed interagency task force and counsel on emergency preparedness.

You have the Department of Labor, Department of Education, the FCC, Federal Communications Commission, the VA is there, the Department of Defense is there, and stakeholders in organizations that are interested in emergency preparedness and stuff all—you know, feed into this and come up with the best plans. The best, you know, practices if you want to put it that way. And I think that, you know, some more attention from that aspect needs to be made. I will run out of time here.

I also want to stress that I think that, you know, from my own experience, I was a physician assistant for 25 years, there are a lot of dedicated VA medical staff and Department of Defense medical professionals out there who, I think, have suffered from the recent media blitz. I think that the dedicated individuals have done a remarkable job in the face of very complex problems. I think that sometimes in the frenzy to try to fix things, you know, people who have done a great deal, end up feeling like, you know, they failed.

And in my visits to Walter Reed, and Bethesda, and down at Brooke Army Medical Center, I have just been impressed with the dedication and commitment in visiting with the VA staff at multiple locations. You know, everyone is trying very hard. There needs to be, I think, improvements, which we all agree with, and I think more collaboration.

Tomorrow morning, in fact, I am going to go out and speak to, as she mentioned, the State Association of the Brain Injured Administrators. I am very interested in their TBI Tactical Assistance Center where they have developed best practices, family education information. Those are, you know, things that we could all benefit from and I think it needs to be a collaborative effort.

Thank you for allowing us to testify. And, hopefully, if you have questions, I would be happy to entertain those.

[The prepared statement of Mr. Zampieri appears on p. 58.]

Mr. MICHAUD. Thank you very much. And once again I would like to thank all the panels. And I appreciate, Mr. Zampieri, your final comments as far as thanking the hardworking men and women who work both at DoD and the VA. They do do a great job. However, they sometimes do it with fewer resources than what they really need to do the job.

I have a few questions. Actually, the first few are for Colonel Bagg regarding the operation of the Intrepid Center. You had mentioned that at the Center there are nine VA employees that work there. What are their responsibilities at the Center?

Colonel BAGG. We have seven VHA employees and two VBA employees. The seven employees—the VHA employees, we have one prosthetist. We have two—well, one PT and a PT assistant, an OT, and an OT assistant, a case manager who works with our case managers, and then we have the two VBA. I may be missing one person. I will probably have to take that for the record.

Mr. MICHAUD. And how many case managers are there? And are they DoD employees, VA, or a combination?

Colonel BAGG. Both.

Mr. MICHAUD. How many patients is each case manager assigned?

Colonel BAGG. Right now, I believe the last is one to twenty-three. We try to get it around one to twenty. The burn patients have about one to thirty. And they are hiring more case managers right now to try to bring that down to a level that is around one to twenty. That is what we are trying to average.

Mr. MICHAUD. Great. Thank you. Ms. George, in your written statement, you stated that there is a need for additional counselor advocates at the treatment facilities. I have a few questions regarding these counselor advocates.

My first is are all counselor advocates contract personnel, or are they counselor advocates who are directly employed by the DoD?

Ms. GEORGE. First of all, I don't believe I did state that we need more. However, all of the counselor advocates are contract employees, yes.

Mr. MICHAUD. On average, how many counselor advocates are in each facility? What is the average workload for each of the counselor advocates?

Ms. GEORGE. We look at a caseload of approximately one counselor advocate to twelve at any given time. Keep in mind that the counselor advocates connect with the severely injured specialist in the call center. So the severely injured specialist become that long-term connection for needs of the family and the servicemember.

Mr. MICHAUD. Okay. And do you believe that there need to be additional counselor advocates to handle the caseload?

Ms. GEORGE. I would probably go back to my recommendation where I say that I believe there needs to be a program. Whether it is through, you know, a contract with Ceridian, there needs to be a program where you have counselor advocates or case managers that are the individuals who link with all of the resources.

Because, as we have listened today, there are case managers everywhere and families get confused. Families need somebody who looks at the whole picture and understands the recovery continuum and is able to connect them and link them at the appropriate time with the appropriate resources.

Mr. MICHAUD. Great. For the VSOs, there is a Seamless Transition Office in the VHA. I do not believe there is a comparable office in the DoD. Do your organizations recommend that they have a similar one in DoD?

Mr. BLAKE. Sir, I would say the obvious answer to that is yes. Now, keeping in mind we don't generally deal in the Department of Defense's issue areas, but it only makes sense. I mean, if we have identified what the problem is here and you have one side that is doing its level best to make this happen, and you don't have

any kind of counterpart on the DoD's side, I mean where is the sense in that?

Mr. MICHAUD. I agree, and sometimes the obvious doesn't always happen. You heard me talk about the President's Task Force, which a lot of time and effort was spent on the issue of Seamless Transition. The report came out in 2003.

In that report, they made several recommendations on how to have a seamless transition between DoD and the VA. Are you familiar with the Presidential Task Force report? And how do you feel about the progress made on the recommendations?

Mr. ATIZADO. Thank you for that question, Chairman. I believe that as part of the Independent Budget, we do cover that issue with regards to seamless transition. And I think even the most rudimentary recommendations, which include the electronic medical record that can be both by directional as well as computable for the purposes of trending certain injuries and disabilities in the population as opposed to just receiving a text-based information that can be utilized for longitudinal purposes with regards to healthcare, that is still in process.

I believe they are doing a second cycle of what is called the Federal health information exchange, which is actually well underway.

I believe also that there is some discussion on both sides, both agencies, between VA and DoD, with regards to coming up with a single inpatient health record. I think that is on the VA's side. It is actually leading that, I believe, because of the robustness of the VistA, the CPRS system that they have now.

Other than that, we still—they are looking—we are still looking at the electronic version of the discharge papers, which would allow the faster transition, at least with regards to receiving benefits when a soldier is injured and requires these VA benefits to subsist and move on as a transition in veterans status. We are still looking forward to that.

Mr. MICHAUD. Great. Thank you. Mr. Miller.

Mr. MILLER. Mr. Chairman, I have some questions for the record that I will submit. And I just want to say thank you for having this hearing. Thank you to the witnesses that came and testified today. I am sure this is not the last time in the very near future that we deal with this particular issue. And, again, we thank you for your testimony.

[No questions were submitted.]

Mr. MICHAUD. Thank you very much, Mr. Miller. And once again, I want to thank the panelists for your time here this afternoon. It definitely has been enlightening. I look forward to working with you as we move forward.

And I want to thank Mr. Miller for your advocacy for veterans' issues and for all that you do for veterans, not only in your home State of Florida, but nationwide. We really appreciate that.

And please recognize in the back of the room former staff persons for the Subcommittee on Health, Linda Bennett, as well as Ralph Ibson. Would you both please stand? And thank you for your service on this Committee as well.

The hearing is adjourned.

[Whereupon, at 4:02 p.m., the Subcommittee was adjourned.]

APPENDIX

Opening Statement of the Honorable Michael H. Michaud
Chairman, Subcommittee on Health

The Subcommittee on Health will come to order. I would like to thank everyone for coming today.

I would like to welcome the Ranking Member, Congressman Jeff Miller of Florida.

We have a lot of hard work to do in the 110th Congress to ensure that veterans receive the best healthcare available in a timely fashion.

We must ensure that healthcare and services that meet the needs of our returning servicemembers are available, and accessible, while never forgetting the healthcare needs of our veterans from previous conflicts.

The wounded from the wars in Afghanistan and Iraq are returning with multiple injuries due to the use of Improvised Explosive Devices, or IEDs. This often results in servicemembers and veterans needing polytrauma care, and has caused an increase in veterans with traumatic brain injury, or TBI.

Today, this Subcommittee hearing will provide us the opportunity to explore, in more detail, the VA's Polytrauma System of Care, the interaction between the VA and the Department of Defense, and the barriers that exist—barriers that prevent not only a smooth transfer phase between the agencies, but also impede the continuing care of our veterans. Our focus is on the TBI patient.

We hope that we come away this afternoon with an idea of what these barriers may be, and the steps that we can take, working together with VA and DoD, to eliminate them and help fix the system where it needs to be fixed.

In 2005, VA designated Polytrauma Centers at four sites around the country to facilitate the coordination of care and specialized services these grievously wounded servicemembers would need.

The polytrauma centers have grown to number 21, one in each veterans integrated services network.

With that growth come problems with records transfers, patient referrals, logistical and coordination of care issues.

There is a real need for the VA and DoD to work together, but we are faced with two distinct agencies with two distinct missions. This has resulted in coordination and treatment issues that have proven to be very difficult to address over the last 2 years.

As many of you know, TBI is considered by many to be the signature injury of the war. Among veterans and servicemembers from OEF/OIF treated at Walter Reed for injuries of any type, approximately 65 percent have TBI as a primary or co-morbid diagnosis.

Survivors of TBI experience physical, cognitive, emotional, and community integration issues. Because of their injury, their capacity and initiative to seek appropriate care on their own is diminished. Milder cases of TBI may often produce symptoms that mirror PTSD.

Frequently, family members are the caregivers for these wounded servicemembers and veterans, as well as their advocates. Their inability to sort through the many issues that come with a TBI and transitioning from one agency to another, as well as knowing where to turn to seek care, can often be frustrating.

Opening Statement of the Honorable Jeff Miller
Ranking Republican Member, Subcommittee on Health

Thank you, Mr. Chairman.

More soldiers of Operation Enduring Freedom and Operation Iraqi Freedom are surviving battle injuries than in any previous wars. They are coming home in part because of better vehicle and body armor and because of the intense and rapid medical care being provided on the front lines.

When they come home, because a majority of these battle injuries are blast-related, the nature and extent of their injuries can be quite severe and complex. They may be physical and mental and require a wide range of medical treatments and rehabilitation.

Congress recognized that the frequency and unique nature of these new emerging polytrauma/blast injuries requires an interdisciplinary program to handle the medical, psychological, rehabilitation, and prosthetic needs of the injured servicemember. Public Law 108–422 required VA to establish an appropriate number of centers for research, education, and clinical activities to improve and coordinate rehabilitative services for veterans suffering from complex multi-trauma from combat injuries and to coordinate these services with the Department of Defense. This law resulted in what is now known as VA's Polytrauma System of Care.

Critical to these wounded soldiers getting the care they need is the ability of the Department of Veterans Affairs and the Department of Defense to work together. And, I can hardly put into words the level of frustration I feel when I read media reports about obstacles individual patients have encountered because of the bureaucracy and gaps that still challenge the two departments to make the healthcare transfer seamless.

These injured servicemembers and their families are relying on the ability of the VA to provide a full continuum of first class care and support for their complete recovery—from inpatient services at the Polytrauma Rehabilitation Centers, to outpatient rehabilitation to long-term care services in their home communities.

Last week, Secretary Nicholson directed a number of changes to improve the way VA provides care to our newest combat veterans. This includes: screening all OEF/OIF combat patients for Traumatic Brain Injury (TBI) and PTSD; providing each Polytrauma patient with an advocate to assist them and their family; mandatory training for all VA healthcare personnel to recognize and care for patients with TBI; and establishing an outside panel of clinical experts to review the VA Polytrauma System of Care.

These actions are commendable and necessary. However, despite past Congressional directive, there are still significant collaborative actions that DoD and VA have failed to implement including: real-time, fully interoperable electronic medical records; a single separation physical; and the systematic sharing of reliable identifying medical data for VA to know when seriously injured servicemembers are medically stabilized, when they may be undergoing evaluation for a medical discharge and when they are discharged from the military.

I want to thank all of the witnesses for appearing at this hearing today. Your testimony is important and in the end will lead to more consistent, comprehensive and compassionate care for our Nation's veterans. It is our job to see that we get it right and we do not fail those who have sacrificed so much for our country.

Statement of Hon. John Kline, a Representative in Congress from the State of Minnesota

Thank you, Mr. Chairman and Ranking Member Miller, for giving me the opportunity to join the Subcommittee on Health to discuss this vitally important issue.

Today's hearing is an important one, especially since just Tuesday we celebrated Brain Injury Awareness Day on Capitol Hill. Traumatic Brain Injury has sadly been called "the signature injury of the Global War on Terror"—an injury that doesn't always present itself immediately but which can be physically and mentally debilitating for those who suffer from it. Just as our military has adapted to fight an evolving counterinsurgency in Iraq and Afghanistan, so too, must we in Congress and in the VA medical system adapt to treat this new medical threat.

As last year's Defense Authorization bill went into conference, a constituent from Minnesota alerted me to the decrease in funding for the Defense and Veterans Brain Injury Center from the previous year's spending level. Through the Armed Services Committee and the Military Personnel Subcommittee, I campaigned to add an additional $12 million in funding authority for the Defense and Veterans Brain Injury Center through the Defense Authorization bill. It was an easy sell. Everyone I spoke with—from then Armed Service Committee Chairman Duncan Hunter on down—saw the immediate need for increased TBI funding. Authorization for the additional funding was quickly added in conference. I was disappointed to see this funding decreased in the recently passed Continuing Resolution but am confident that we will restore increased funding this year.

The Defense and Veterans Brain Injury Center has proven to be an innovative joint program worthy of continued Congressional support.

The Minneapolis Veterans Medical Center, just outside of my district in Minnesota, is home to one of only four of our Nation's Polytrauma Rehabilitation Centers. This center provides rehabilitation care for veterans returning from combat with severe injuries that can include traumatic brain injuries, amputations, wounds, blindness or hearing disorders, complex orthopedic injuries, and mental health concerns. The high quality of care being given at this center is a shining example of what can be accomplished through innovative collaborations between DoD and the VA.

Mr. Chairman, as a veteran who has been through the veterans' healthcare system, I am aware that we are making progress with specialty care and services for our veterans. We must ensure that the VA system is properly equipped and its staff is well trained to provide our returning servicemembers with the best care possible.

I look forward to hearing from the witnesses today and learning more about efforts to fight this increasingly pervasive injury.

Statement of Barbara Sigford, M.D., Ph.D.
National Program Director, Physical Medicine and Rehabilitation
Veterans Health Administration, U.S. Department of Veterans Affairs

Good afternoon, Mr. Chairman and Members of the Committee.

I am Dr. Barbara Sigford and I serve as VA's National Program Director for Physical Medicine and Rehabilitation. Joining me this morning is Dr. Lucille Beck, VA's Chief Consultant for Rehabilitation Services.

Thank you for this opportunity to talk about the Veterans Health Administration's (VHA) seamless transition process from the perspective of the Polytrauma System of Care. Mr. Chairman, recent reports of difficulties faced by servicemembers and veterans in receiving the care they need and deserve have been deeply troubling. We at the VA are working closely with DoD to do everything we can to address and resolve problems in the delivery of care.

Polytrauma System of Care

The mission of the Polytrauma System of Care is to provide the highest quality of medical, rehabilitation, and support services for veterans and active duty servicemembers injured in the service to our country. This is a system of care consisting of four regional Polytrauma Rehabilitation Centers (PRC), which provide acute intensive medical and rehabilitation care for complex and severe polytraumatic injuries; 21 Polytrauma Rehabilitation Network Sites (PNS), which manage post-acute sequelae of polytrauma; and 76 Polytrauma Support Clinic Teams (PSCT) located at local medical centers throughout the 21 Networks, which serve patients with stable polytrauma sequelae. This system of care has been designed to balance the needs of our combat injured for highly specialized care with their needs for local access to lifelong rehabilitation care.

The four PRCs are located in Minneapolis, MN; Palo Alto, CA; Richmond, VA; and Tampa, FL. They have built on the experience of the Traumatic Brain Injury (TBI) Lead Centers that had functioned at these locations for 15 years. The PRCs serve as hubs for acute medical and rehabilitation care, research, and education related to polytrauma and TBI. They provide overall exemplary care for veterans with multiple injuries including brain injuries. Due to the increasing needs for transitional and community re-entry services, each PRC is currently developing a transitional community re-entry program that will be operational in July, 2007. Palo Alto already has such a program in place.

The PNSs, which are located one in each of VHA's 21 Veterans Integrated Service Networks (VISN), provide key components of specialty rehabilitation care that address the ongoing specialty needs of individuals with polytrauma, including, but not limited to inpatient and outpatient rehabilitation, day programs, and transitional rehabilitation. PNSs are responsible for coordinating access to VA and non-VA services across the VISN to meet the needs of patients and families with polytrauma.

Due to their wider geographical distribution, PSCTs play an important role in improving access to local rehabilitation services for veterans and active duty servicemembers closer to their home communities. These teams are responsible for managing patients with stable treatment plans, providing regular follow-up visits and responding to new problems as they emerge. They provide consult with their affiliated PNS or PRC when more specialized services are required.

Facilities in the Polytrauma System of Care are linked through a Telehealth Network that provides state-of-the-art multipoint videoconferencing capabilities. The Polytrauma Telehealth Network (PTN) ensures that polytrauma and TBI expertise

are available throughout the system of care and that care is provided at a location and time that is most accessible to the patient. Clinical activities performed using the PTN include remote consultations, evaluations, treatment and education for providers and families.

Case management is a critical function in the Polytrauma System of Care, designed to ensure lifelong coordination of services for patients with polytrauma and TBI. Every patient seen in one of the polytrauma programs is assigned a case manager who maintains scheduled contacts with veterans and their families to coordinate services and to address emerging needs. As an individual moves from one level of care to another, the case manager at the referring facility is responsible for a "warm hand off" of care to the case manager at the receiving facility closer to the veteran's home. The assigned case manager functions as the Point of Contact for emerging medical, psychosocial, or rehabilitation problems, and provides patient and family advocacy.

Transition from DoD to VA

Severely injured veterans and servicemembers and their families make transitions unknown in the civilian sector. They must make transitions across space, time and systems. The Polytrauma System of care has developed consistent and comprehensive procedures tor ensure seamless transition of the combat injured from the Military Treatment Facilities (MTFs) to the PRCs. Several processes have been put in place to make it possible to transition patients from DoD to VA care at the appropriate time and under optimal conditions of safety and convenience for the patients their families. These processes address three key elements: continuity of medical care, psychosocial support for patients and families, and logistical supports such as transportation and housing.

Transition of Medical Care

The PRCs receive advanced notice of potential admissions to their sites through standardized mechanisms. After notification, the PRC team initiates a pre-transfer review and follows the clinical progress until the patient is ready for transfer. PRC clinicians are able to complete pre-transfer review of the MTF electronic medical record via remote access capability. Up to date information about medications, laboratory studies, results of imaging studies and daily progress notes are available. They are also able to access additional clinical information through the web-based Joint Patient Tracking Application (JPTA) where information from the field notes from Balad, Iraq and follow up at Landstuhl, Germany are available and indispensable in determining the severity of the TBI. In addition to record review, clinician-to-clinician communication occurs to allow additional transfer of information and resolution of any outstanding questions. VA has stationed a Certified Rehabilitation Registered Nurse (CRRN) at Walter Reed Army Medical Center to constantly monitor the clinical status of patients awaiting transfer to a PRC. She is available to the PRC staff for up-to-date information. Also, VA social workers are stationed at 10 MTFs to assist with necessary transmission of clinical information. PRCs also have scheduled video teleconferences (VTC) with the MTFs to discuss the referral with the transferring team and to meet the patient and family members "face to face" whenever feasible.

Psychosocial Support for Transition

Families of injured servicemembers are stressed and require particular assistance in making the transition from the acute medical, life and death, setting of an MTF to a rehabilitation setting. This support encompasses psychological support, education about rehabilitation and the next setting of care, and information about benefits and military processes and procedures. VA social workers are located at 10 MTFs, including our most frequent referral sources, Walter Reed Army Medical Center and National Naval Medical Center. These individuals provide necessary psychosocial support to families during the transition process. They advise the families and "talk them through" the process. In addition, the CRRN provides education to the family on TBI, the rehabilitation process, and the PRCs. The Admission Case Manager from the PRC is in personal contact with the family prior to transfer to provide additional support and further information about the expected care plan. VA also has Benefit liaisons located at the commonly referring MTFs to provide an early briefing on the full array of VA services and benefits to the patients and families.

Upon admission to the PRC, the senior leadership of the facility personally meets and greats the family and servicemember to ensure that they feel welcome and that their needs are being met. Additionally, a uniformed active duty servicemember is located at each PRC. The Army Liaison Officers support military personnel and their families from all Service branches by addressing a broad array of issues, such

as travel, non-medical attendant orders which pay for family members to stay at the bedside, housing, military pay, and movement of household goods. They are also able to advise on Medical Boards and assist with necessary paperwork.

Two of the four PRCs (Minneapolis and Palo Alto) have Fisher Houses to lodge visiting family members. The Tampa VA Fisher House is scheduled for completion in April 2007, and ground-breaking for the Richmond Fisher House is planned for this spring.

Logistical Supports for the Transition Process

The third element in a smooth transition is attention to logistical supports. Through the coordination of the PPRC social workers and the Voluntary Services Department, the individual needs of the family are assessed and attended to. Supports provided include transportation, housing, access to meals, and when needed specialized equipment such as car seats, cribs, and so forth. Even child care can be arranged. In addition, each PRC has added special activities for the families to make their stay more relaxing.

Over arching all these efforts, is the addition of a new OIF/OEF Program Manager to oversee coordination of the care and services provided to all OIF/OEF veterans seen at the facility, and to assure that severely injured/ill OIF/OEF veterans are case managed by a social worker or nurse case manager. This individual will work closely with the existing clinicians and PRC nurse and social work case managers, adding an additional layer of security and coordination.

Transition from the Polytrauma Rehabilitation Center to the Community

The transition from the PRC to the home community is also of critical importance. The needs at time of transition remain the same: medical care, psychosocial support, and logistical. Records for medical care are readily available through remote access across the VA system. In addition, the transferring practitioners are readily available for personal contact with the receiving provider to ensure full and complete communication. Follow up appointments are made prior to discharge. For psychosocial support, the proactive case management system provides for ongoing support and problem solving in the home community while continually assessing for new and emerging problems. Finally, in terms of logistical support, each PRC team carefully assesses the expected needs at discharge for transportation, equipment, home modifications, and other such needs and makes arrangements for assessed needs.

Conclusion

Finally, I would like to again recognize that the VA is committed to providing the highest quality of services to the men and women who have served our county. It is important to note that last week the President created an Interagency Task Force on Returning Global War on Terror Heroes (Heroes Task Force), chaired by the Secretary of Veterans Affairs, to respond to the immediate needs of returning Global War on Terror servicemembers. The Heroes Task Force will work to identify and resolve any gaps in service for servicemembers. As Secretary Nicholson said, no task is more important to VA than ensuring our heroes receive the best possible care and services. The VHA's work to provide a seamless transition process for high quality medical, rehabilitation, and support services for veterans and active duty servicemembers injured in the service of our Nation is helping to ensure that our heroes do receive the best possible care.

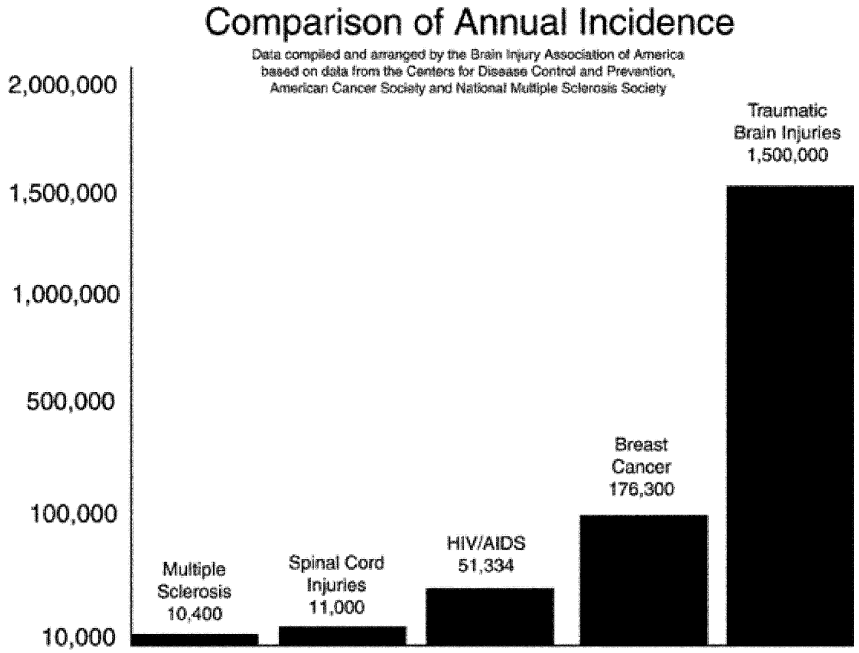
Mr. Chairman, this concludes my statement. At this time I would be pleased to answer any questions that you may have.

Statement of Tina M. Trudel, Ph.D.
President and Chief Operating Officer, Lakeview Healthcare System, Inc. and Principal Investigator, Defense and Veterans Brain Injury Center at Virginia NeuroCare

Representative Michaud, members and staffers of the Congressional Subcommittee on Health of the Committee on Veterans Affairs, thank you for allowing me the opportunity to participate in this briefing to discuss the care of veterans with brain injury. My name is Dr. Tina Trudel. I presently serve as President and Chief Operating Officer of Lakeview Healthcare Systems, a national provider of brain injury services from hospital to home. I also serve as Principal Investigator of the Defense and Veterans Brain Injury Center at Virginia Neurocare, a civilian brain injury rehabilitation site. I have been an advocate, researcher, professor and clinician in the field of brain injury rehabilitation for the past 20 years. This experience has heightened my awareness of the disconnection between our investment and

advances in emergency management and acute care of brain trauma, versus the lack of resources available for post-acute treatment, community integrated rehabilitation and long term supports. Be it in the civilian or military community, there is a longstanding gap in meeting the long term needs of the growing population of brain injury survivors. It appears we have yet to accept that saving lives has consequences.

As others in the media have noted, brain injury is perhaps our greatest public health problem. It cuts across the age span, from infant to elderly, and affects our military both during war and peace time. Those with traumatic brain injury (TBI) are adversely impacted by the lack of funding and underdeveloped infrastructure in comparison to other diagnostic and disability groups. Not very long ago, individuals with brain injury often died, and until the National Head Injury Foundation (now Brain Injury Association of America) was founded by in the 1980's, there was no organized voice of advocacy and acknowledgement. While this recent era spawned improved survival and the brain injury movement, our national and state health and human services structures were already well-established. The funding train had left the station, and people with brain injuries were still waiting at the ticket counter.



Brain injury has become a leading public health problem for civilians and the military. In the United States civilian population, 1.4 million individuals sustain traumatic brain injury (TBI) annually resulting in 235,000 hospital admissions and 50,000 deaths.[1] Additionally, 80,000 survive with residual long-term impairments. The Centers for Disease Control and Prevention estimate that long-term disability as a result of brain injuries (necessitating assistance with activities of daily living) affects 5.3 million Americans, with thousands of new individuals affected every year.[2] This population continues to grow and age, creating greater challenges that must be met by an already burdened health and human services system. Economically, the total impact of direct and indirect medical and other costs in 1995 dollars

[1] Langlois, J.A., Rutland-Brown, W., and Thomas, K.E. (2004). *Traumatic brain injury in the United States: emergency department visits, hospitalizations, and deaths.* Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.

[2] Thurman, D., et al., (1999). Traumatic brain injury in the United States: a public health perspective. *Journal of Head Trauma Rehabilitation*, *14(6)*, 602–615.

is reported to exceed $56 billion.[3] Such costs do not include lost earning potential, family burden of care, special education, vocational retraining and a host of related issues as now are being recognized within the military. While blast injury and combat related TBI are presently in focus, it is important to remember that military service runs a risk of TBI even in peace time, with thousands of military personnel injured annually due to motor vehicle crashes, falls, training mishaps and other causes.

With regard to Operation Iraqi Freedom, the Office of the Surgeon General of the Army notes that 64% of wounded in action injuries have occurred as a result of blast from improvised explosive devices (IED), rocket propelled grenades, land mines and mortar/artillery shells (Defense and Veterans Brain Injury Center (DVBIC): Providing care for soldiers with traumatic brain injury. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., 2006 http://www.hjf.org/research/featureDVBIC.html). Given the improvements in body armor, protective helmets and the resultant reductions in penetrating head trauma, blast closed head injuries have become the signature injury of these military operations.

Many individuals who sustain TBI in military and civilian settings are treated and return to active duty, productive work, social roles, family responsibilities and their pre-injury lifestyle. However, some TBI survivors live with residual disability, have unmet care needs, and/or are initially unsuccessful in re-entering home, vocational and community life. Those TBI survivors at risk for unsatisfactory outcomes or with continued rehabilitation needs, are candidates for community integrated rehabilitation (CIR), a broad term encompassing various approaches and contexts for post-acute treatment (through its relationship with Virginia NeuroCare, Lakeview operates the Defense and Veterans Brain Injury Center [DVBIC] CIR site in Charlottesville, VA, discussed in some detail below).

While this introduction may sound ominous, there are many bright lights of individual and programmatic success that demonstrate both the power of the human spirit, and the value of effective treatment, as elucidated by a growing body of peer-reviewed scientific research.[4,5,6,7,8,9] A 2005 Cochrane review of multi-disciplinary rehabilitation for acquired brain injury in adults of working age examining all relevant studies meeting methodological criteria published since 1966 stated the following:[6]

- For individuals with moderate to severe brain injury, there is 'strong evidence' of benefit from formal intervention.
- For individuals with moderate to severe brain injury who are already in rehabilitation, there is 'strong evidence' that more intensive programs are associated with earlier functional gains.

Reporting findings generally consistent with the later Cochrane review, Douglas Gentleman noted in a 2001 article that, "Clinical and political responses to the worldwide epidemic of traumatic brain injury need to recognize that the quality of outcome depends on both phases of treatment: acute care and rehabilitation."[7] Additionally, current research further demonstrates the relationships among provision of rehabilitation therapies, increased functioning, improved test scores and even changes in brain activity on fMRI, as well as the improved rate of recovery and functional independence from more intensive therapies.[8,9]

COMMUNITY INTEGRATED REHABILITATION

Community integrated rehabilitation (CIR) is also referred to as post-acute brain injury rehabilitation and generally includes a number of approaches that allow for individuals with TBI to benefit from further rehabilitation after medical stability is established and initial acute (in-hospital) rehabilitation is completed. The most com-

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[3] Thurman D. (2001). The epidemiology and economics of head trauma. In: In Miller L, Hayes R, eds. *Head Trauma Therapeutics: Basic, Preclinical and Clinical Aspects.* New York (NY): Wiley and Sons.

[4] Gray, D.S. (2000). Slow-to-recover severe traumatic brain injury: A review of outcome and rehabilitation effectiveness. *Brain Injury*, *14(11)*, 1003–1014.

[5] Turner-Stokes, L. (2004). The evidence for the cost-effectiveness of rehabilitation following acquired brain injury. *Clinical Medicine*, *4(1)*, 10–12.

[6] Turner-Stokes, L., Disler, P., Nair, A. & Wade, D. (2005). Multi-disciplinary rehabilitation for acquired brain injury in adults of working age. *The Cochrane Database of Systematic Reviews*, 3.

[7] Gentleman, D. (2001). Rehabilitation after traumatic brain injury. *Trauma*, *3*, 193–204.

[8] Laatsch, L., Little, D. & Thulborn, K. (2004). Changes in fMRI following cognitive rehabilitation in severe traumatic brain injury: A case study. *Rehabilitation Psychology*, *49(3)*, 262–267.

[9] Shiel, A., et al. (2001). The effects of increased rehabilitation therapy after brain injury: Results of a prospective controlled trial. *Clinical Rehabilitation*, *15*, 501–514.

mon delineation of CIR programs is highlighted in Table 1. CIR programs are notably lacking in the VA system.

Neurobehavioral CIR programs have historically focused on treatment of mood, behavior and executive function, while ensuring supervision and safety in a residential, non-hospital setting. Such programs focus on psychosocial outcomes with emphasis on application of behavioral principles and development of functional skills. Neurobehavioral CIR programs typically have inter—or transdisciplinary treatment teams, utilize direct support personnel as therapeutic extenders, and are often led by neuropsychologists or behavior analysts.

Residential CIR programs were initially developed to meet the needs of individuals who required extended comprehensive TBI rehabilitation, 24-hour supervision, or did not have access to adequate outpatient/day services. The home-like environment and staff support served to facilitate development of skills needed to negotiate everyday life easing generalization across community environments.

Comprehensive holistic day treatment CIR programs provide a milieu-oriented, multimodal approach, often with a neuropsychological focus. Interventions target awareness, cognitive functions, social skills and vocational preparation through individual, group and family involved interventions delivered through an interdisciplinary or transdisciplinary team in clinic and community settings. These programs are among the most researched in the entire field of CIR, and while treatment guidelines are often site specific, such resources are invaluable, allowing discourse, analysis and dissemination of techniques.

Home-based CIR involves a highly variable degree of services and supports for the individual with TBI able to reside in a home environment. Typically, such individuals do not require 24-hour supports or supervision. Home-based CIR may include the spectrum of outpatient services commonly accessed through individual treatment providers or clinics, or minimal professional supports. There is usually no identified 'treatment team', although collaboration across a number of health and social service systems may be evident. Behavioral approaches using self-monitoring and cueing may be employed, as well as models wherein family members or in-home paraprofessionals are engaged as therapeutic change agents. Additionally, Home-based CIR involves participant education and the growing use of telephonic, web-based, and technological aides. Home-based programs may be supported by or serve as a transition from, other CIR treatment settings.

TABLE 1. COMMUNITY INTEGRATED REHABILITATION MODELS

Model	Participant Characteristics	Description
Neurobehavioral Program	Significant behavioral challenges Require 24-hour supervision	Residential setting Intensive behavioral treatment
Residential Community Program	Cannot participate as outpatients Require 24-hour supervision or available support	Residential setting with community focus Integrated comprehensive treatment
Comprehensive Holistic Treatment	Need for intensive services Benefit from improved awareness, practice and compensation	Day program model Integrated, multimodal rehabilitation
Home-based Program	Able to reside at home Able to self-direct care	Education and advisement Telephonic and web-based support and services Home-based therapeutic activity Availability of outpatient supplemental services Highly variable

Trudel, Nidiffer & Barth, in press.

Support for the effectiveness of community integrated rehabilitation (CIR) post-TBI has gradually been established, with limitations in research due to low level

[10] Coetzer, R. & Rush, R. (2005). Post-acute rehabilitation following TBI: Are both early and later improved outcomes possible? *International Journal of Rehabilitation Research*, *28*, 361–363.

[11] High, W. et al. (2006). Early versus later admission to post acute rehabilitation: Impact on functional outcome after TBI. *Archives of Physical Medicine and Rehabilitation*, *87*, 334–342.

funding and the challenges inherent to studying a diverse, individualized treatment approach. Findings include:[10,11,12,13,14,15,16,17]

- CIR increases societal participation, community and home skills, independence, productivity and improved functional outcome on activity measures.
- CIR related improvement is demonstrated in samples of participants who range from months to years post-injury.
- CIR appears to produce gains that are maintained over time.
- CIR improves self and family ratings on a variety of measures and on tests of neuropsychological functions.
- Comprehensive holistic/day treatment CIR has the strongest research foundation for effectiveness, including randomized control trials.
- CIR demonstrates some benefit across the continuum, but appears most to provide most benefit for those with moderate and severe TBI.
- Individuals with severe TBI demonstrate greater functional improvement from a residential program model versus home-based rehabilitation.
- CIR reduces neurobehavioral problems, and therefore risk for institutionalization, criminal justice contact and danger to self or others.

LAKEVIEW'S NEUROBEHAVIORAL AND CIR SYSTEM

Lakeview's treatment sites (14 programs across 5 states) serve individuals from hospital to home. The primary focus for post-acute TBI care includes our residential and community integrated programs. These specialized neurobehavioral and CIR programs serve those individuals who require treatment, supervision and support related to their significant cognitive and/or behavioral challenges. Physical disability issues are also addressed. The emphases of the program include cognitive remediation, functional skill acquisition, self-care, positive approaches to behavioral self-management, informed pharmacology, individualized treatment plan development and implementation, community integration and family education/support. The programs predominantly focus on the care of adults with neurobehavioral diagnoses (typically brain injury related) who have not succeeded as outpatients or with in-home supports.

The Lakeview programs are founded in a person-centered, inclusionary model, encouraging the active participation of participants and their families in all aspects of treatment development, implementation and discharge planning. Program interventions are designed to facilitate re-integration through enhancement of life skills, compensatory strategies, self-esteem and self-control throughout the therapeutic milieu. The program is supported by the management and clinical expertise of Lakeview's national and regional resources. The NeuroBehavioral Program serves individuals with significant behavioral challenges in need of greater supervision, support and treatment with a focus on safety and functional skill development. The Community Integrated Rehabilitation Program serves those individuals, who while still in need of 24 hour support and supervision, pose less risk to self or others and typically have less intense active treatment needs. It is anticipated that program participants will be a blend of individuals receiving brief treatment interventions and those in need of longer term strategies and supports to insure quality of life in the least restrictive environment.

All treatment provided at Lakeview is initiated based on clinical recommendations following an assessment period, with agreement from the program participant, guardian and funder. Treatment meets the standards of each respective licensed profession, with goals and objectives established by the program participant in concert with the clinical team, through an individualized service plan that is transdisciplinary and person-centered. Competent, supervised providers (including extenders, such as life coaches, aides and other direct support staff), in accordance with the highest ethical principles including informed consent regarding the procedures, risks, potential benefits and possible side effects of all treatments, deliver

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[12] Malec, J. (2001). Impact of comprehensive day treatment on societal participation for persons with ABI. *Archives of Physical Medicine and Rehabilitation*, *82*, 885–895.

[13] Powell, J. et al. (2002). Community-based rehabilitation after severe TBI: A randomized control trial. *Journal of Neurology, Neurosurgery and Psychiatry*, *72*, 193–202.

[14] Sander, et al. (2001). Long-term maintenance of gains obtained in post-acute rehabilitation by persons with TBI. *Journal of Head Trauma Rehabilitation*, *16*, 356–373.

[15] Tiersky et al. (2005). A trial of neuropsychological rehabilitation in mild-spectrum TBI. *Archives of Physical Medicine and Rehabilitation*, *86*, 1565–1574.

[16] Willer, B. et al. (1999). Residential and home-based post acute rehabilitation of individuals with TBI: A case control study. *Archives of Physical Medicine and Rehabilitation*, *80*, 399–406.

[17] Wood, R. et al. (1999). Clinical and cost effectiveness of post-acute neurobehavioral rehabilitation. *Brain Injury*, *13*, 69–88.

services across various environments and activities. Discharge planning begins at the time of admission in order to target treatment and maximize likelihood of successful skill generalization. The participant, family and treatment team, including external parties, discuss treatment goals, possible discharge placements, and length of stay considerations. Lakeview's policy is to provide a comprehensive discharge manual to the individual served at time of discharge. Ongoing discharge planning is coordinated by the Case Manager. It is recognized that some individuals will be in need of longer term resources, including life care plans and arrangements for community-based supported living with family, other agencies or through the program.

THE DVBIC CIR PROGRAM AT VIRGINIA NEUROCARE

As previously noted, numerous research studies support the general benefit of CIR following brain injury, especially for those with more severe injuries. Questions remain as to the nature, scope, timing, intensity and duration of CIR in relation to cost and outcome, as well as the application of new technology and adaptive devices to the CIR process. Progress in developing an evidence base for CIR has been hampered by the diversity of approaches and lack of systematic, detailed descriptions of actual treatment activities. This lack of defined treatment limits options for replication, randomized control trials, case series or multi-center studies. The task of standardization of treatment for such an individualized treatment approach as brain injury rehabilitation may initially seem onerous. However, similar processes have successfully lead to extensive research and dissemination of effective treatment in an equally complex and individualized arena, cognitive behavior therapy (CBT).

The valuable clinical research characteristics identified early in DVBIC's history (homogeneity, available records, infrastructure, multi-site, outcomes measurement, tracking) provide an optimal foundation for CIR research through Virginia NeuroCare, a DVBIC core civilian partner program with a long history of CIR focus and expertise, operated through resources provided by Lakeview, a national leader in brain injury rehabilitation. The program's dual focus includes providing optimal treatment of service men and women with TBI, while also advancing brain injury rehabilitation through treatment research and applied technology in community integrated settings. Research and applied technology developed through DVBIC program such as VANC can be rapidly disseminated and replicated in other community settings, as well as to improve care in the civilian population. The DVBIC program at Virginia NeuroCare, through its relationship with Lakeview, is presently engaged in a research program on the Development and Implementation of Brain Injury Community Integrated Rehabilitation (CIR) Treatment Manual for Military Personnel.

The DVBIC at Virginia NeuroCare's Neurobehavioral CIR Clinical Research Project is presently developing, implementing and analyzing educational and treatment interventions with program participants from the military who have suffered mild, moderate, and severe TBI primarily from combat IED blast forces and motor vehicle accidents. The CBT treatment manual approach is being applied to brain injury rehabilitation. CBT manualized treatment has been implemented to facilitate research and therapy technique dissemination for many behavioral and medical conditions including: (1) anxiety and mood disorders, anger management, domestic violence, substance abuse to treatment and vocational training; (2) medically complicated problems such as erectile dysfunction, obesity, eating disorders, diabetes management, chronic fatigue and chronic pain; and (3) CBT treatment manuals have even been targeted to specific treatment populations including prisoners, low income and minority groups and persons with developmental disabilities. Thus, the treatment manual model holds significant potential to advance clinical research in brain injury rehabilitation, as the approach has both the structure and flexibility to address the comprehensive nature of brain injury CIR. The treatment manual model also provides for ready dissemination, replication and application of successful clinical practices to improve outcomes across broad systems.

The military program participants we serve are typically several months post injury and have made substantial recovery, yet still experience mild to moderate neurobehavioral deficits typically associated with frontal and temporal lobe dysfunction and executive dyscontrol. These soldiers are still in the active stages of recovery and no longer require acute medical intervention, but they may present balance problems, ataxia, coordination impairment, impaired activities of daily living functions, memory difficulties, attentional problems, fatigue, problematic initiation and motivation, irritability, frustration, depression, sleep disturbance, poor judgment, impulsiveness, anosognosia, organizational problems, speech difficulties, poor anger

control and socialization skills, general cognitive dysfunction, and family or work stress.

We are formalizing a 12-week pilot day program to address most of these issues through education, functional therapeutic interventions, applied technology, cognitive-behavioral treatment procedures, group therapy and discussions, and individual treatment. The program is divided into 12 independent educational and group interaction modules followed by individual and group therapy sessions and functional implementation using compensatory strategies and devices. Each of the 12 modules will be based on a detailed manual in order to facilitate replication, research, multi-center work, treatment component analyses and eventual dissemination as indicated across the DVBIC, military and veteran's system and civilian rehabilitation community at-large. Initial module development has been based on a review of the scientific literature, clinical judgment and expertise, and program participant feedback and outcomes. These educational and group sessions modules include:

- Introduction: Exploring the Problems and Initial Evaluations
- Wellness: Stress, Fatigue, Pain Management, and Relaxation
- Wellness: Coordination, Flexibility, Exercise, Nutrition, and Sleep
- Focusing Attention
- Time Management
- Memory: How to Compensate
- Maximizing Memory in Functional Environments
- Organizing Daily Life and Daily Living Skills
- Problem Solving, Awareness, Judgment, Safety, and Impulsivity
- Social Interaction: Cognitive and Emotional Changes (depression, anxiety, irritability, and anger management)
- Social Interaction: Assertiveness/Picking Up The Pieces
- Review and Synthesis

The manualized CIR treatment modules are practiced and enhanced within the context of real life volunteerism, clubhouse membership, supported work experiences, transportation skill development, community navigation, and laundry, shopping, budgeting, banking and meal preparation within the broad context of community re-entry. The program focus includes supplementation with adaptive technology, as well as formal evaluation of the acceptability of technological aides by the user, as the quality of the rehabilitation technology—user interface is a key predictor for success. The definitions and descriptions of this enriched environment, therapeutic milieu and staff training expectations will also be articulated in the relevant module treatment manual. All program content will be structured, documented and developed into a manual format to facilitate clinical research and staff training.

Pre and post program assessments using behavioral and functional measures, as well as levels of vocational success and independent living skills are being used. Additionally active duty military members are tracked for rates of return to active duty and medical board decisions through discharge planning processes. Post discharge follow-up data including residential and occupational outcomes, and participant feedback, will also be solicited and analyzed in order to further refine the model, treatment manuals, and staff training tools. By tracking effective approaches to treating servicemen and women who have experienced brain injuries in the course of their duties, we hope the DVBIC program at Virginia NeuroCare will be the leader in delineating effective, efficient strategies that can be utilized in other CIR programs, both military and civilian.

ASSISTIVE TECHNOLOGY IN TBI REHABILITATION

CIR environments also provide the best opportunity to implement technological aides in therapy environments. Low tech cognitive supports such as memory journal, dry erase boards and checklists have long been used in TBI rehabilitation. Presently there are a plethora of new technological devices and applications. A primary focus for assistive technology intervention with individuals post-TBI is to ensure the match of technology and user, and involvement of skilled clinicians is paramount. Approaches include both person oriented and environmentally oriented applications. Current tools are best for memory storage, task execution or scheduling and sequencing. There has been some success with customized PDAs and memory compensation, voice organizers and audible reminders, mobile phone and pager cueing systems, datalink watches and adapted task-oriented programs for scheduling, bill

paying and similar functions. Telephonic interventions, videoconferencing for individual and family intervention, web-based resources for treatment and training and self-help modules have also been implemented with some success.[18,19,20,21]

Presently the Defense and Veterans Brain Injury Center (DVBIC) at Virginia Neurocare is part of two grants under review: (1) driver evaluation and rehabilitation utilizing an advanced driving simulation module; and (2) adaptation of a web-based educational and self-help module for the assessment and treatment of sleep disorders (common post-TBI). Additionally, through the DVBIC contract, we are advancing portable and wireless devices to support participation in home and community activities, including GPS, specifically through the VANC Pilot Project on the Efficacy of Using Personal Global Positioning System (GPS) Technology and Personal Data Assistants (PDAs)/Mobile Phones.

As service men and women with TBI progress through the recovery process, they frequently experience some level of confusion and disorientation with regard to time, place, and direction. Even when this confusion lifts, following directions in navigating the community can be difficult and often requires supervision and maximum use of staff resources, particularly when trying to track multiple individuals who must practice and progress through the successful negotiation of many community based tasks. In worst case scenarios, those who do not develop community navigation skills are at risk of social isolation, unemployment and the need for long term supervision and supports, often placing excessive burden on care systems or family members. We will be using available Global Positioning System wrist watch styled devices and/or PDA/mobile phone integrated GPS to track patients who are beginning to be independent in community walking privileges. Use of the GPS frees patients from the need for in-person supervision by using the internet to pinpoint where the patient is in the community. Patients are given the opportunity for increased practice and functional independence. The technology utilized and skills developed have the potential to dramatically decrease the burden of care, economic cost and facilitate the greater development of the patient's potential in home, work and community roles. It is hoped that this technology will speed progress in community integrated rehabilitation, reduce rehabilitation length of stay and facilitate safe transition into the home community. This pilot study will evaluate the efficacy of this technology-based system for tracking and training these patients, as well as provide a mechanism for in vivo coaching of persons who become disoriented. As with other technological aides used within the program, various GPS systems will be evaluated for their adaptive technology-user interface. This case series of GPS users will provide the foundation for descriptive articles to advance the field and promote additional research and development.

NEROBEHAVIORAL AND CIR CHALLENGES WITHIN THE VA SYSTEM

Neurobehavioral treatment and CIR after TBI are a particular challenge within the VA system. Individuals needing extended care following moderate and especially severe TBI require a therapeutic approach that allows for gradual, extended treatment and the possibility of long term supports. Additionally, this treatment is not provided in a medical model, but instead targets cognitive functions, psychosocial elements, life skills and social/vocational roles. Neurobehavioral and CIR programs rely minimally on physicians and heavily on allied health, behavioral health, direct support staff extenders and life coaches. These programs are typically support staff intensive and require extensive personnel training at all levels. Private neurobehavioral programs and CIR are available across the country in an inconsistent manner, as presently such services are not usually funded through mechanisms of Tricare, Medicare or typical Medicaid, although many states have instituted Medicaid waiver programs to address these needs within the civilian population. Rather than reinventing the wheel to access the civilian system, the VA would be wise to consider care coordination through facilitation of existing systems such as the Brain Injury Association of America and its national and state information and referral resources and the National Association of State Head Injury Ad-

[18] Gartland, D. (2004). Considerations in the selection and use of technology with people who have cognitive deficits following acquired brain injury. *Neuropsychological Rehabilitation*, *14*, 61–75.

[19] Kapur, N., Glisky, E. & Wilson, B. (2004). Technological memory aids for people with memory deficits. *Neuropsychological Rehabilitation*, *14*, 41–60.

[20] Kirsch et al. (2004). Web-based assistive technology interventions for cognitive impairments after traumatic brain injury. *Rehabilitation Psychology*, 49, 200–212.

[21] Rizzo, et al. (2004). Analysis of assets for virtual reality applications in neuropsychology. *Neuropsychological Rehabilitation*, *14*, 207–239.

ministrators, both non-profit organizations with strong networks and the foundation knowledge of brain injury services across the country.

A problem faced by all neurobehavioral and CIR programs involves the national shortage of key providers such as occupational therapists, physical therapists, speech-language pathologists, applied behavior analysts and neuropsychologists familiar with brain injury rehabilitation, especially in the post-acute phase and community environments. These allied health provider shortages are increasing as supply/demand is pressured due to an aging population, increased injury and chronic illness survival rates, a growing disabled population in the United States, and special education utilization for youth with developmental disabilities. Further, professions are limiting the number of graduates considering entering the field by increasing academic requirements to enter the field (speech-language pathology and applied behavior analysis remain at the master's level; rehabilitation psychology and neuropsychology remain at the doctoral level with post-doctoral training; occupational therapy is increasing from bachelor's to master's level; and physical therapy is increasing from master's level to doctoral level in many regions). The private and public sector TBI rehabilitation providers are increasing salary rates, providing sign-on and retention bonuses and are competing with lucrative private practice opportunities in many states. The VA system is in a difficult position to recruit and retain in this competitive environment with existing qualified labor shortages and rising demand.

Another issue that impacts the VA is that of the population concentration of veterans needing neurobehavioral or CIR services in a particular area. Given population needs, the VA would need to recruit, retain, train and implement effective teams as a regional endeavor, as this is not pragmatic to do locally. Additionally it takes time, leadership and expertise to develop an effective team in order to meet the complex needs of individuals with more severe TBI and neurobehavioral impairments, as well as to provide CIR. Optimal services are as close to home, community and family as possible for engagement, training and discharge planning. Thus, it has been and remains pragmatic in many instances and regions, to contract with local civilian resources, and a number of private sector organizations that provide neurobehavioral, CIR and supported living services to veterans. Issues of concern with civilian resources include inconsistencies in service quality, lack of familiarity with military issues, risk of overpricing if reimbursement is not standardized/managed and also the lack of any resources in some regions. There is significant opportunity of blending resources to include regional VA based services in more populous regions, private contractor services where available and to encourage consultation with experienced civilian providers to facilitate and expedite VA development to ensure a continuum of neurobehavioral and CIR services.

Key elements of effective neurobehavioral treatment and CIR vary in terms of 'fit' in military and VA healthcare environments. Elements of treatment that are more readily amenable to adaptation in VA and military settings include:

- development and implementation of schedules
- establishment of routines
- breaking down more difficult activities into component tasks for teaching and training
- some environmental manipulations to foster success
- introduction of compensatory devices and assistive technology

Elements of effective neurobehavioral treatment and CIR that are difficult to adapt and implement in military and VA healthcare settings include:

- life coach and functional skill development models
- environmental enrichment models
- community exposure for repeated practice (individuals with TBI often have difficulty generalizing technology learned in institutional/medical settings)
- frequent distributed brief sessions rather than longer therapy appointments
- flexibility to work with natural cycles of alertness, arousal and fatigue
- sleep monitoring and behavioral data collection (requires technician/aide staffing levels)
- individualized learning strategies support by direct care staff and focused on errorless learning approaches and chaining procedures
- teaching of mental rehearsal, self-talk and self-monitoring strategies in small group, then real-life scenarios
- application of compensatory devices and assistive technology in real-life settings
- long term supported living within the community

Last, the scope and complexity of TBI in the military and need for a centralized resource was recognized when the DVBIC was established over 15 years ago. En-

hancement of DVBIC's role as the primary coordinator and facilitator of research, clinical and education development across the military Department of Defense and VA systems is critical. Without unified data management and coordinated resource facilitation across all branches of the military and VA sites, opportunities for research advances in TBI rehabilitation, system improvement, development/dissemination of best practices and optimal service delivery to our men and women in uniform are lost, along with opportunities for translating these advances to civilians with TBI.

DISCUSSION

Post-acute care for individuals with traumatic brain injury has lagged behind virtually all other treatment and support services in both civilian and military realms due to the low funding resources, later/lack of identification of this group of trauma survivors, and apparent difficulty in securing and sustaining a focus on this complex, growing problem. The current increased national attention provides an opportunity to foster collaborative efforts across private, public and military systems to improve brain injury services for all Americans, especially our veterans. Pragmatic issues and effective, efficient use of resources supports the need for a well-managed blend of VA and civilian sector services in order to maximize successful return to home, family, employment and community life for our veterans with brain injury.

Statement of Colonel Mark Bagg, Chief, Department of Orthopaedics and Rehabilitation, Brooke Army Medical Center, Fort Sam Houston, TX, and Director, Center for the Intrepid, Department of the Army, U.S. Department of Defense

"The Center for the Intrepid was donated by over 600,000 Americans. Their generosity expresses the profound appreciation America has for its gallant servicemen and women who defend freedom. This Center is dedicated to our severely wounded military heroes whose selfless sacrifices for our Nation entitle them to the best rehabilitative care."

Mr. Chairman, Mr. Miller, and distinguished members of the Subcommittee, I am Colonel Mark Bagg, the chief of the Department of Orthopaedics and Rehabilitation at Brooke Army Medical Center (BAMC) at Fort Sam Houston, Texas. In my role at BAMC, I am also responsible for the day-to-day operations of the new Center for the Intrepid (CFI), arguably the most advanced outpatient rehabilitation facility in the United States today.

Thank you for inviting me to testify before you today to explain the services available at the CFI and our vision for providing outpatient rehabilitative care for our combat casualties and America's Veterans. Over the past four years, with Congress' strong support, we have revolutionized amputee care for more than 560 military amputees. The CFI allows us to continue that revolutionary change and extend our lessons learned to America's veterans who suffer from non-limb loss injuries and severe burn injuries.

BACKGROUND

In the spring of 2005, the board of directors of the Intrepid Fallen Heroes Fund, a private, not-for-profit charitable foundation, made it known they were interested in building a physical rehabilitation center for the wounded warriors returning from Operation Iraqi Freedom and Operation Enduring Freedom. A formal proffer for the facility was accepted by the Secretary of the Army on 30 June 2005. The facility was named the "Center for the Intrepid" (CFI) and during an extensive fundraising campaign, funds to build and partially equip the facility were donated by over 600,000 Americans.

Ground was broken for a four story, 65,000 square foot patient rehabilitation facility as well as two new Fisher Houses on 22 September 2005. These homes, funded by the Fisher Foundation, were built on the new footprint and each provides 21 handicap accessible suites. The addition of the two new homes brought the total number of homes at BAMC to four, and the total number of rooms available to 57. The CFI and Fisher House complex is located on a 4.5 acre site adjacent to BAMC.

These generous gifts were formally accepted and dedicated during a ribbon cutting ceremony which took place 29 January 2007. Staff quickly relocated operations from their previous locations embedded within BAMC and patients began to receive their care in the facility on 15 February 2007.

MISSION

The mission of the CFI is to provide the highest quality of comprehensive outpatient rehabilitation for eligible patients in a state-of-the-world facility. Utilizing a multidisciplinary approach, servicemembers who sustain severe traumatic injuries with resultant amputation or loss of limb function, to include burn injury and limb salvage procedures, will be afforded an opportunity to maximize their functional improvement and perform at the highest level possible whether they remain in the military or choose to reenter civilian life. The staff at the CFI carries out this patient care mission while conducting leading edge research in the fields of Orthopaedics, prosthetics and physical/occupational rehabilitation, providing Department of Defense and Department of Veterans Affairs professionals' opportunities for continuing education on rehabilitation modalities, and offering training programs and graduate medical education for the full spectrum of rehabilitation professionals.

PROGRAMS

Amputee Patient Care Program. The Amputee Patient Care Program at the CFI offers a full spectrum of amputee care ranging from initial outpatient care through final prosthetic adjustment. Patients are encouraged to progress from basic activities of daily living (ADL) through advanced level sport and leisure activities with the goal of maximizing potential either in the military or in civilian life.

Limb Reconstruction/Limb Salvage Program. The goal of the limb reconstruction/limb salvage program is to assist those servicemembers who have resultant functional limb loss after undergoing procedures to save them. This category of patient will benefit from the advanced therapy and functional activities.

Advanced Burn Rehabilitation. The CFI offers additional advanced rehabilitative and functional training for servicemembers sustaining burn injury. After completing a normal course of therapy following burn injury, servicemembers may be referred to the CFI for advanced conditioning and functional activities not available at other locations.

SERVICES PROVIDED

Capitalizing on this generation's use of technology and virtual reality, the facilities at the CFI are state-of-the-world. Patients are challenged by state-of-the-art physical therapy and occupational therapy, rigorous sports equipment, and virtual reality systems. They will benefit from individualized case management, access to behavioral medicine services, and in-house prosthetic fabrication. Out-patient services at the CFI include Behavioral Medicine, Case Management, Physical Therapy, Occupational Therapy, Physical Medicine and Orthopaedics, Prosthetics, and Community Reintegration programming. Advanced therapeutic activities available, as appropriate for specific patients, include a motion analysis lab, Computer Assisted Rehab Environment/Virtual Reality system, Firearms Training Simulator, Vehicle Simulator, Climbing Wall, Pool, Flowrider®, indoor track, and outdoor sport court.

MEDICAL DIRECTION

The medical care provided in the CFI is under the direction of the chairman of the Department of Orthopaedics and Rehabilitation at BAMC. Physiatrists work closely with Orthopaedic Surgeons, Burn Surgeons, and other physicians to coordinate all care.

BEHAVIORAL MEDICINE

The ultimate goal for the CFI Behavioral Medicine Service is to enable patients to maximize their potential for emotional, mental, spiritual, and physical recovery. Behavioral Medicine provides comprehensive psychiatric support services to amputees and their families. This is accomplished using individual therapy, support group meetings, medication management, family support groups, and cognitive assessment. The behavioral medicine staff is available for the facilitation of all behavioral health needs.

CASE MANAGEMENT

A full-time case manager is assigned to each patient in the CFI. These professionals work closely with the patients, their families, and the entire staff of the Center for the Intrepid to coordinate the development of a customized, multidisciplinary team plan of care and to monitor the plan of care and report any problems. They

also seek solutions to improve the delivery of care and patient outcomes, identify and assist with all needs of the patient and the family, and function as the initial point of contact for multiple referrals utilized to augment care at BAMC. Case managers also guide wounded warriors through the medical evaluation board (MEB) process and help ensure timely completion of MEBs.

MILITARY PERFORMANCE LAB

The Military Performance Lab (MPL) seeks to analyze human motion, with particular emphasis on amputee gait (walking). The information collected in the MPL is ultimately used to help physicians, physical therapists, and prosthetists adjust their treatment plans and improve patient function. The MPL is comprised of two functional areas, the Gait and Motion Analysis lab and the Computer Assisted Rehabilitation Environment or CAREN.

Physical Therapists and biomedical engineers in the Gait and Motion Analysis Lab use 26 infrared cameras to track the position of reflective markers placed on a patient's body. Joint angles are calculated from the motion analysis. Ground reaction forces in multiple directions are measured by force plates in the floor, parallel bars, and treadmill. These forces, when combined with the calculated joint angles, allow the analysis of the torque that muscles or prosthetic components are producing. Electromyography (EMG) is used to assess the electrical activity that is given off during muscular contraction and can detect both the timing and intensity of muscular contractions. All of this information is used to assess patient progress. It also serves to validate new treatment protocols and prosthetic components.

The CAREN is a 3–D rehabilitation simulator and is the first of its kind in the world. The CAREN consists of a 21 foot dome with a 300 degree screen upon which a variety of "virtual realities" may be displayed. A movable platform in the center of the dome has a treadmill and force plates identical to those in the gait lab. The visual display and motion capture systems in the CAREN allow the patient to be immersed into the virtual reality scene. The capabilities of the CAREN will be central to the research mission of the center as investigators study vestibular disturbances, and balance dysfunction, and responses to varying levels of stress in patients with Post Traumatic Stress Disorder.

OCCUPATIONAL THERAPY

Occupational Therapyfocuses on restoring health and function following injury or illness. Treatment activities are designed so that patients can successfully perform occupational tasks and ADLs like bathing, dressing, shopping, cooking, writing, performing household chores and everything needed to function on a day-to-day basis. Therapists and technicians provide evaluation and treatment for conditions including amputation, fracture, nerve injury, and soft tissue injury. Utilizing activities to regain range of motion, increase muscle strength, and decrease pain, Occupational Therapists help patients perform functional tasks to reach their maximum potential and independence.

One of the ways the Occupational Therapy staff encourages independence is through the use of the ADL Apartment. In this space, the patients are faced with a real-world living environment where therapists evaluate their physical and/or mental ability to safely perform specific tasks. The apartment has a computer workstation equipped with state of the art voice recognition software, compact keyboards, a height adjustable desk top, a fully equipped kitchen and bathroom, and a comfortable living room.

In addition to the traditional occupational therapy modalities available in most occupational therapy clinics, two simulation systems are available to patients at the CFI. The first is the Firearms Training Simulator. This state-of-the-art system allows Soldiers to simulate firing different weapons in a host of virtual settings. Using Bluetooth technology weapons, patients practice different firing techniques and may experience everything from basic marksmanship scenarios through very complex scenes requiring identification of friend or foe. For those servicemembers who desire to remain on active duty, this realistic training allows them to re-qualify with the weapon systems common to all branches of the military. The second simulation system is the driving simulator. Although actual driver's testing of amputees is performed by the VA, this simulator allows patients the opportunity to develop new driving skills and to practice prior to formal testing.

The Occupational Therapy staff also coordinates a community re-integration program for the patients. This program includes a wide variety of experiences outside the clinic setting. Activities such as horseback riding, paint-ball, archery, kayaking, and golf allow the patients to be challenged and have fun at the same time.

PHYSICAL THERAPY

Physical Therapists provide evaluation, diagnosis, treatment, and rehabilitation for patients who have sustained trauma and/or illness. For the amputee and burn patient, the Physical Therapy team utilizes multiple interventions focusing on patients' abilities and interests, not their disabilities. In order to accomplish "total rehabilitation," the Physical Therapy team provides the full spectrum of physical therapy modalities including amputation awareness, residual limb care, wheelchair mobility and crutch training. They also perform strengthening activities, pre-prosthetic training, balance, proprioception, endurance activities, and gait training on a variety of surfaces.

The Physical Therapy staff also coordinates an adaptive sports program including a multi-phased running program, track and field, volleyball, swimming, scuba diving, kayaking, and basketball. Through the volunteer support of a variety of charitable organizations, patients in the advanced stages of rehabilitation are offered the opportunity to learn and enjoy snow skiing, water skiing, fencing, archery, shooting, and golf.

The Physical Therapy staff utilizes several pieces of specialized equipment. On the third floor of the CFI, there is a tread-wall and a 21 foot climbing tower with autobelay to promote strengthening, agility, and aerobic conditioning. In the natatorium there is a six lane pool for pre-running activities, kayaking, water basketball, volleyball, and general swimming. Adjacent to the pool is an indoor surfing activity called the Flowrider ®. This unique indoor wave machine is used to improve balance, coordination, strength, motivation, and confidence.

PROSTHETICS

The Prosthetists and technicians at the CFI utilize a team approach to provide state-of-the-art on-site fabrication of artificial limbs. Standard production methods are augmented by computer assisted technology for design, milling, and production of prosthetic devices wireless technology for remote adjustment of upper and lower extremity prostheses, design and fabrication of unique specialty limbs for sports and other activities, high-tech materials in combinations of acrylic resins, carbon fiber composites and titanium.

STAFFING

The staffing for the center was selected to provide building provides the full spectrum of amputee rehabilitation as well as the advanced outpatient rehabilitation for patients suffering residual functional loss from burn injury or limb salvage procedures. The CFI is an outpatient facility under the command and control of BAMC and specifically the Department of Orthopaedics and Rehabilitation. The CFI is staffed by 49 personnel including active duty Army medical staff, Department of the Army civilians, contract providers, and nine full time Department of Veterans Affairs employees. A recently signed MOA between the Department of Veterans Affairs and Department of the Army integrated seven full time Veterans Health Administration employees and two full time Veterans Benefits Administration employees into the staff of the CFI. Together these professionals work to maximize the patients' rehabilitative potential and to facilitate reintegration whether that is back to active duty or civilian life.

SCOPE OF CARE

The first priority of care at the CFI is for combat casualties who sustain actual or functional limb loss as a result of traumatic amputation, limb salvage procedures, or burn injury. As capacity permits and as the circumstances of hostilities change, referral procedures for veteran outpatients from Department of Veterans Affairs medical centers across the country will be implemented. In concept at the current time, these referral guidelines will provide benefits to veterans who have sustained amputation and have not yet maximized their potential for rehabilitation.

The CFI represents a tremendous advance in the quality of facilities available for military and Department of Veterans Affairs patients and providers. Much of the cutting edge technology available at the CFI is integrated into the transitional Military Amputee Training Center currently being built at Walter Reed Army Medical Center.

In closing, let me again express my appreciation to the Congress, the Intrepid Fallen Heroes Fund, and the more than 600,000 American citizens who made the Center for the Intrepid possible. The Congress' strong support of military and veterans' healthcare allows us to continue a world-class amputee care program at Wal-

ter Reed Army Medical Center and BAMC. The generosity of the Intrepid Fallen Heroes fund allows us to continue to build on our successes in an incredible physical setting. If you have not yet had a chance to visit the CFI and BAMC I encourage and invite you to do so.

Mr. Chairman, thank you for inviting me here today. I look forward to your questions.

Statement of Karyn George, MS, CRC, Service Delivery Manager Military One Source/Severely Injured Services

Good afternoon, Mr. Chairman and members of the Committee. My name is Karyn George and I am honored to be here. Before I begin, I need to clearly state that my testimony is based on my personal views and does not represent the views of the Department of Defense or the Administration. I am a contract employee of the Department of Defense and therefore I am a private citizen. I appear before you in that capacity today. My statements and opinions have not been cleared by the Department of Defense or the Federal Government. I do not speak on behalf of the federal government, the Department of Defense, Military OneSource, any of the Military Services, or the Military Severely Injured Center.

Thank-you for the opportunity to present testimony on the care of wounded servicemembers, in particular wounded servicemembers who have sustained brain injuries, as they transition between Department of Defense (DoD) and Department of Veterans Affairs (VA) medical care. I will be testifying today from several perspectives. I am currently employed by Ceridian Corporation as a Service Delivery Manager for Military One Source/Severely Injured Services, a virtual extension of installation services provided by DoD Military Community & Family Policy, 24 hours a day, 7 days a week, at no cost to the servicemember or family member. My professional and educational background includes a Masters Degree in Rehabilitation Counseling, and over 20 years of experience providing case management and administrative oversight of programs designed to treat brain injuries and orthopedic impairments. I also served as a director responsible for a 22 bed inpatient brain injury facility, and as a consultant to start an outpatient brain injury program in Northern Virginia. Thus, I'm bringing you a varied perspective of one who has cared for those with mild to severe brain trauma and other related injuries.

What I have to say today centers around the following four themes:

- My experience with the Military Severely Injured and Military OneSource
- My experience with those who have sustained brain injuries
- Challenges presented along the continuum of care
- My views on the best solutions to care for our wounded and their families

As a Service Delivery Manager, I provide oversight and supervision for the Severely Injured Specialists in the Military OneSource Arlington, Virginia Call Center, and for on-site Counselor Advocates placed at several Military Treatment Facilities (MTFs) and at the VA Medical Center (VAMC) at Palo Alto, CA. The Counselor Advocates (CAs) are charged with providing face to face advocacy, outreach, and support to wounded servicemembers and their families, while the Severely Injured Specialists provide telephonic advocacy, support, short term problem resolution, and long term monitoring of the needs of wounded servicemembers and their families. Prior to assuming this management position, I, myself, was a Counselor Advocate at Walter Reed Army Medical Center.

MOS/SI Services

In the fall of 2004, then Secretary of Defense Donald Rumsfeld stated: "I think we ought to put together a team to see that the Services take care of their troops after they're wounded, and when they return home and are discharged." Secretary Rumsfeld's statement provided the genesis of what would become the Military Severely Injured Center (MSIC), which was developed as a specialty service under the Military OneSource contract. Deputy Secretary of Defense Paul Wolfowitz further directed that OSD Personnel & Readiness provide support and augmentation of the Service branch severely injured programs to ensure seamless care as long as it takes. Special emphasis was placed on support of families and on serving as a "safety net." Counselor Advocate qualifications are carefully considered. We (Ceridian) hire masters degree trained individuals in a social service field of study such as vocational rehabilitation, social work, or nursing, experience with case management and disability pathways, and experience and/or exposure to military culture. The first three Counselor Advocates were hired in March 2005 and in April 2005, they

were placed at Walter Reed Army Medical Center. The first Military OneSource Severely Injured Specialists were also hired in March 2005 and placed in the Arlington call center. Training was developed collaboratively with DoD Quality of Life personnel. Training included military treatment facility protocols, an overview of existing Service branch injured programs, all military and other government resources such as VA, DoL, DoD, community resources, non-governmental organizations, case management and the continuum of care, and tools/technology needed to be successful in their roles providing services to the wounded and their families.

As the Counselor Advocates assimilated into the treatment facilities, they assisted servicemembers and their families from injury, through recovery and reintegration, back to quality of life. We became familiar with programs, resources, and key personnel at the medical treatment facility or VAMC. We extended ourselves to community and government organizations gleaning knowledge of these resources as well as education on the needs of the wounded servicemembers and their families. I found some needs to be as small as money for groceries, to as large as assisting a family in advocating for assessment of a yet-to-be-diagnosed brain injury of a loved one, to exploration of employment and/or training options for a spouse who had never entered the job market and suddenly found herself the primary breadwinner. A pointed comment from a wounded servicemember is that the system is a hunt and peck process; if you know what to ask you will probably get the services—but many do not know what to ask or do not have the "voice" to ask the questions. MOS severely injured staff know not only what to ask, but who and when to ask, to ensure progress along the continuum of care.

The CAs were able to build bridges that today still serve to assist wounded servicemembers and their families. Counselor Advocates have worked side by side, hand in hand with military systems, government organizations, and community programs to meet the needs of the wounded and their families. Another example is assisting in securing resources for additional housing for families of the wounded while at WRAMC and Fort Campbell, Kentucky. Counselor Advocates have facilitated a Heroes' welcome and community support for wounded servicemembers reintegrating into communities in at least four states working with the DoD Heroes to Hometowns program and its American Legion partner.

I'd now like to focus on Traumatic Brain Injury. Not all injuries bleed, and mild to moderate brain injuries are considered the "walking wounded". While all injuries need special attention, the diagnosis and treatment of TBI is complex and requires creative solutions. Traumatic brain injury is unlike any other injury, illness, or disease. Everyone's brain is just a little different than the next person's brain. Therefore, two individuals with comparable insults to the brain can produce very different long term sequelae, or consequences. With advancements in battlefield medicine, ***severe brain injuries*** progress along the recovery continuum from treatment in theatre, to Landstuhl, and on home to the United States in a timely, seamless fashion. Once medically stable and able to participate in rehabilitative services, those wounded servicemembers with severe brain injuries most often progress to one of the four VA Polytrauma centers. Acute, inpatient rehabilitative care for brain injuries at the Polytrauma centers is provided by a multi-disciplinary team. Social workers are able to connect the servicemembers and families with the VA system and long term benefits since these wounded will not be able to return to active duty. When long term skilled care is necessary, the servicemember either returns home with family members who are able to care for them, or, if they do not have family or an appropriate support system, they are placed in a VA long term care facility in a which was not designed for this young population.

It should be noted that not all brain injuries sustained in theatre are severe, and other more obvious injuries often necessitate evacuation from theatre. These warriors receive inpatient treatment at a MTF where ***mild to moderate brain injury*** may not be identified or diagnosed. Once medically stable, the servicemember transitions to outpatient status assigned to a Medical Hold or Holdover unit. Initial symptoms may be minor or relatively non-existent, but may evolve over time and begin to be more apparent. Headache, memory and concentration difficulty, amnesia, sleep disturbance, reduced frustration tolerance and impulsivity, periods of confusion or mental dullness, mood swings, loss of self-confidence, fatigue and weakness, auditory and visual deficits, and slow reactions are common characteristics following mild to moderate head injury. Servicemembers with this level of brain injury are compromised in their ability to navigate their environments and the systems needed to make forward progress along the recovery continuum. The servicemember is just not him/herself. Their ability to participate in traditional therapies for orthopedic and other injuries is also compromised. Diagnosis of brain injury is the first challenge. Usually, there are no abnormalities on routine neurological examination. Those closest to the servicemember with mild to moderate brain injury are often the

first ones to notice that something is not right. There are many instances where families relate their concerns and frustrations have been discounted by social workers, case managers, physicians, Service branch representatives, and Command. Signs and symptoms of mild to moderate brain injury may be confused with those of post traumatic stress disorder. Until the servicemember has the correct diagnosis, treatment options may not be appropriate or even offered. Once a diagnosis has been made, the next step is to engage clinically appropriate care for the servicemember. Social skills are a critical indicator of success for any brain-injury survivor reintegrating into their lives and their community. Brain injury alters social skills—the ability to comprehend subtleties, to control emotions whether it is anger or sadness, or possess awareness of what is right and what may not be. These skills need to be worked on in real-life environments—home, places of employment, church, and recreational settings—all with the appropriate people. Only then can survivors of brain injury achieve quality of life. The consequence of not recognizing mild to moderate brain injury, treating it, and supporting these servicemembers and their families 100% during recovery is that families will encounter difficulty transitioning to quality of life. Families are at risk for domestic failure, failure in employment environments, and failure in social and emotional endeavors. Without treatment options and 100% support, many of these service men and women will end up in psychiatric units, homeless, or involved in criminal activity resulting in incarceration.

Challenges

I think the challenge we face is the leadership, acquisition, and coordination of all of the resources needed to help the wounded. It's not that there aren't any existing resources—each service branch has a severely injured program. The Army has the Army Wounded Warrior Program, (AW2); the Marines, the Marine For Life Injured Support Program (M4L–IS); the Navy Safe Harbor Program; and the Air Force Palace HART Program. The VA established the Seamless Transition Program. DoD stood up the Military Severely Injured Center and the Heroes to Hometown program. The Department of Labor began the ReaLifelines Program and Operation Warfighter. Countless non-governmental organizations rallied with support of money, services, and goods. What ensued was discord. There is no clear cut or single definition of Severely Injured; the Army requires a wounded servicemember to have a 30% military rating (PEB) in a single category before they receive services from the program, and it is not unusual for the MEB/PEB process to take 18 months to 2 years to complete. The other Service programs are less stringent in their criteria. MOS/SI services strive to assist those within and on the fringes of the service definitions. I believe that not all wounded have received the same level of care coordination after returning from theatre. Communication between programs, NGOs, MTF resources, and VA systems is not robust, fully defined, easily understood or consistent. At present, the wounded and their families aren't getting the very best our country can give them.

If I may provide an analogy: an orchestra is a family of musical instruments each with its own distinctive sound and role. Total sound must be in harmony. The musicians are experts in playing their instruments but it is the conductor who sets the tempo, executes clear preparations and beats, listens and shapes the sound of the ensemble from the initial note to the conclusion. Similarly, the recovery continuum begins at injury and stretches to attainment of quality of life (an accessible home, vocational opportunities, and meaningful relationships), and an effective recovery demands coordination. The process of meeting the needs of the wounded requires a conductor who orchestrates the personnel, resources, and services at the optimal moment to advance the wounded and their families toward reintegration and quality of life. I recall, for example, a Marine from Chicago who was involved in a blast injury resulting in visual impairment. The CA referred this Marine to the Defense and Veteran Brain Injury Center (DVBIC) where he was diagnosed with a TBI. Initially not recommended for outpatient rehabilitation, he began to have problems at work. The Counselor Advocate was able to recognize the need for a second evaluation which resulted in approval for outpatient treatment at a community rehab program. After completion of the MEB/PEB process, the Marine will return home to live with his parents where he will require additional support until he is able to live on his own. Connected by the CA, the family is also receiving funds from the Semper Fi Fund to finish their basement to accommodate their son. The CA is now addressing vocational options with VA Voc rehab and has secured adaptive equipment and software through CAP to enhance the Marine's quality of life. Without the orchestrated resources (MTF, DVBIC, Sharpe Rehab, VA, CAP, Semper Fi Fund, and so forth.), and the leadership of the conductor (CA), this Marine would still be struggling.

Recommendations

What I personally suggest is the following:

1. We need a single, central focal point for wounded and their families. A program that goes across the "colors" of the various service branches—a program to provide severely injured services that will transcend all service branches including Guard and Reserve units, 24 hours a day, 7 days a week. This program must have clear direction from senior level VA and DoD as well as Army, Marine, Navy and Air Force command endorsement. The program direction must include a system of coordination and collaboration between the VA, DoD, MTF's,individual service branch programs, NGOs, and DoL which will support a seamless and equitable delivery of service to all wounded men and women returning from war.
2. We need to expand options for care of the brain injured men and women returning from war. Existing inpatient care units are not meeting the needs of all traumatic brain injury cases. Out-patient clinics are too few, too far away, and not designed for this specialty population. We need to establish collaborative and cooperative relationships between private community based brain injury-rehabilitation programs, DoD and the VA that will allow service men and women with TBI to receive treatment as close to home as possible, in a setting that is conducive to attainment of skills, and with staff that have a specialty in brain injury rehabilitation. DoD has begun this collaboration with the Defense and Veterans Brain Injury Center. They have established a working relationship with Virginia Neuro Care and Lakeview Brain Injury Programs. We need to expand this collaborative approach to include more programs across the country. This network of providers can then complement existing acute rehabilitation services offered by DoD and the VA system, and expand to offer community re-entry programs.
3. Most importantly, these wounded warriors and their families need a qualified Advocate. The Advocate must possess the skill sets to help the families think straight, navigate through the systems, and transition successfully from the Department of Defense care to VA medical care and civilian communities.

Our wounded heroes have shown courage, determination and fortitude to protect our Nation and its allies. Now it is our turn to show courage, determination and fortitude in marshalling our very best resources, systems and abilities to bring them home to a better quality of life.

Statement of Carl Blake, National Legislative Director
Paralyzed Veterans of America

Mr. Chairman and members of the Subcommittee, on behalf of Paralyzed Veterans of America (PVA), I would like to thank you for the opportunity to testify today on an issue that we consider the signature health crisis of the Global War on Terror. Many Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans face difficult challenges ahead as they learn to deal with traumatic brain injuries that they have incurred during their combat service.

The Independent Budget devotes significant attention to the issue of mental healthcare and specifically traumatic brain injury (TBI) in the FY 2008 edition. In accordance with the policy information included in this year's *Independent Budget*, most of my written statement will reflect those points. However, I would like to focus on a few key issues that relate to care being provided to servicemembers with traumatic brain injury at the Department of Veterans Affairs polytrauma centers.

Severe TBI results from blast injuries, particularly those caused by improvised explosive devices (IED), which severely shake or compress the brain within the skull. This often leads to significant and sometimes permanent damage to the brain. Many servicemen and women also experience traumatic brain injuries associated with a lack of oxygen to the brain as they are being treated for other serious injuries. Likewise, servicemembers who are in the vicinity of an IED blast or involved in a minor motor vehicle accident can suffer from a milder form of TBI that is not always immediately detected and can produce symptoms that mimic PTSD or other mental health disorders.

Unofficial statistics also suggest that many OEF/OIF veterans have suffered mild brain injuries that have gone undiagnosed. In many cases, symptoms have manifested themselves after the veterans have returned home. The Department of Defense (DoD) admits that it lacks a system-wide approach for proper identification, management, and surveillance for individuals who sustain mild to moderate TBI.

It is essential that VA and DoD coordinate to better address mild TBI and develop a standardized follow-up protocol utilizing appropriate clinical assessment techniques to recognize neurological and behavioral consequences of TBI as recommended by the Armed Forces Epidemiological Board.

PVA is particularly concerned about veterans who have experienced a TBI but whose symptoms have been masked by other conditions. We have heard anecdotally that this is a particular problem for veterans who have incurred a spinal cord injury in the upper cervical spine. Veterans who have incurred this level of injury as a result of a blast incident often have experienced a traumatic brain injury as well. However, their symptoms may be diagnosed as the result of their significant impairment at the cervical spinal level. Unfortunately, they may not get the critical treatment needed at the earliest stage to address the TBI. We recognize that this is a difficult challenge facing physicians, nurses, and rehabilitation specialists as they must decide what condition must be treated first, even while not necessarily realizing that other conditions exist. Furthermore, it is not uncommon for DoD healthcare facilities to miss these masked conditions as well because they do not have the specialized expertise to recognize multiple severe conditions.

PVA believes more research must be conducted to evaluate the symptoms and treatment methods of veterans who have experienced TBI. This is essential to allow VA to deal with both the medical and mental health aspects of TBI, including research into the long term consequences of mild TBI in OEF/OIF veterans. Furthermore, TBI symptoms and treatments can be better assessed for previous generations of veterans who have experienced similar injuries.

Ultimately, it is important to point out that the care being provided to those severely injured service men and women who have incurred a traumatic brain injury at the VA is nothing short of extraordinary. As explained in the Administration's budget submission for FY 2008, in 2006, VA's Research and Development department established a Polytrauma and Blast-Related Injury Quality Enhancement Research Initiative (QUERI) that coordinates with the four polytrauma centers providing advanced medical care to veterans with complex disabilities, including traumatic brain injury. The QUERI links VA researchers directly to the four centers located in Richmond, VA; Tampa, FL; Minneapolis, MN; and Palo Alto, CA. These centers are designated as level one trauma centers. These lead centers provide a full spectrum of TBI care for patients suffering moderate to severe brain injuries.

PVA is pleased that VA is also taking steps to establish level two polytrauma centers in each of its remaining Veterans Integrated Service Networks (VISNs) for follow-up care of polytrauma and TBI patients referred from the four lead centers or from military treatment facilities. PVA believes that the hub-and-spoke model used in the VA's spinal cord injury service serves as an excellent model for how this network of polytrauma centers can be used. Second level treatment centers (spokes) refer spinal cord injured veterans directly to one of the 21 spinal cord injury centers (hubs) when a broader range of specialized care is needed. These new level two centers will better assist VA to raise awareness of TBI issues. These increased access points for TBI veterans will also allow VA to develop a system-wide screening tool for clinicians to use to assess TBI patients.

To help facilitate access to these specialized services, VA assigns a case manager to each OEF/OIF veteran seeking treatment at one of its medical facilities. The case manager is responsible for coordination of all VA services and benefits. Additionally, VA has created liaison and social work positions at DoD facilities to assist injured servicemembers. However, these case managers continue to report problems related to transfer of medical records from referring military facilities; difficulty in securing long-term placements of TBI patients with extreme behavioral problems; difficulty in obtaining appropriate services for veterans living in geographically remote areas; limited ability to follow patients after discharge to remote areas; poor access to transportation and other resources; and inconsistency in long-term case management. The Office of the Inspector General (OIG) stated in its July 2006 report *Health Status of and Services for Operation Enduring Freedom/Operation Iraqi Freedom Veterans after Traumatic Brain Injury Rehabilitation* that while many of the patients they assessed had achieved a substantial degree of recovery, *". . . approximately half remained considerably impaired."*

Unfortunately, the ability of VA to provide this critical care has been called into question, particularly in recent weeks. PVA recognizes that the VA's ability to provide the highest quality TBI care is still in its development stages; however, it continues to meet these veterans' needs while going through this process. We believe many of the problems highlighted in recent newspaper articles regarding the TBI programs at the four polytrauma centers is a result of congressional inaction. The VA is not being prepared for success by a Congress that is not fulfilling its responsi-

bility to properly fund it in a timely manner. The VA is learning to do more and more with less and less every year, and the TBI program is no exception.

We are especially concerned about whether the VA has the capacity and the staff necessary to provide intensive rehabilitation services, treat the long term emotional and behavioral problems that are often associated with TBI, and to support families and caregivers of these seriously brain injured veterans. As stated in the FY 2008 *Independent Budget*:

> During a September 2006 House Veterans' Affairs Subcommittee on Health hearing, a statement was provided for the record that indicated the 20-year healthcare costs for TBI could exceed $14 billion. As noted in the OIG report, "these problems exact a huge toll on patients, family members, and healthcare providers." There are several challenges we face in ensuring these veterans and their families get the specialized care and support services they need. Clinicians indicate that in the case of mild TBI, the [veteran's] denial of problems that can accompany damage to certain areas of the brain often leads to difficulties receiving services. Likewise, with more severe injuries, the extreme family burden can lead to family disintegration and loss of this major resource for patients.
>
> To ensure a smoother transition for veterans with TBI and their caregivers, VA should evaluate ways to provide additional assistance to immediate family members of brain-injured veterans, including additional resources and improved case management, and continuous follow up. The goal of achieving optimal function of each individual TBI patient requires improved coordination and inter-agency cooperation between DoD and VA. Veterans should be afforded the best rehabilitation services available and the opportunity to achieve maximum functioning so they can re-enter society or, at minimum, achieve stability of function in an appropriate setting.

Finally, the broader VA is unlike most, if not all, other healthcare systems in America. While the quality of care may be outstanding during early stage treatment at some private facilities, those same facilities generally provide care in the short term. On the other hand, the VA is the only real healthcare system in America capable of providing complex sustaining care over the life of the seriously disabled veteran. Private treatment options often give no consideration whatsoever to the long-term care needs of the veteran. Meanwhile, the VA has developed its long-term care program across the broad spectrum of services for many years.

Mr. Chairman and members of the Subcommittee, the task of providing this critical care to this segment of the OEF/OIF veterans population is a daunting one. Without coordinated efforts by DoD and VA and the backing of Congress through the appropriations process, the VA will struggle to adequately handle all of the expectations placed on it. Veterans with TBI, as well as their families, should not have to worry about whether the care they need will be there when they need it.

I would like to thank you for the opportunity to testify today. I would be happy to answer any questions that you might have.

Statement of Adrian M. Atizado
Assistant National Legislative Director, Disabled American Veterans

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear today at the request of the Subcommittee to offer testimony on behalf of the Disabled American Veterans (DAV) regarding the transition between the Department of Veterans Affairs (VA) and the Department of Defense (DoD) of patients suffering from traumatic brain injury (TBI) and Polytrauma Center Care.

Mr. Chairman, it has been said that TBI is the signature injury of the Iraq war. Blast injuries that shake or compress the brain within the closed skull often cause devastating and permanent damage to brain tissue. Recently I had the opportunity to view a VA-produced DVD about the impact of TBI on a young veteran who served in Iraq. The film is a poignant illustration of the extreme physical and emotional challenges faced by one brain-injured veteran and his family. Like many other severely disabled veterans, that veteran will need a lifetime of care for his injuries. In our opinion, his ongoing rehabilitation and personal struggle to recover is the best justification imaginable for continuation of a strong and viable VA healthcare system. We urge Congress to remain vigilant to ensure that VA programs are sufficiently funded and are *adapted* to meet the unique needs of Operations Iraqi and Enduring Freedom (OIF/OEF) combat service personnel and veterans, while concurrently addressing the needs of older veterans with severe physical disabilities as well as PTSD and other combat-related mental health challenges.

Traumatic Brain Injury

Veterans with severe TBI and polytrauma will require extensive rehabilitation and lifelong personal and clinical support, including neurological, medical and psychiatric services, and physical, psycho-social, occupational, and vocational therapies. In an attempt to raise awareness of TBI issues, VA requires mandatory training of all healthcare professionals via a web-based independent study course. However, VA has not yet begun screening all its patients for TBI who are veterans of the Global War on Terror. We note the Secretary's press announcement of February 27, 2007, indicates VA has launched a new nationwide TBI initiative which includes a TBI course that is mandatory for all healthcare professionals, establishing a panel of outside experts to review VA's complete polytrauma system of care, including its TBI program, and beginning this spring VA will initiate a program at all 155 VA medical centers to screen all patients who served in the combat theaters of Iraq or Afghanistan for TBI. VA also announced on March 6 that it plans to hire 100 new patient advocates to help severely injured veterans and their families navigate VA's systems for healthcare and financial benefits. The veterans service organization (VSO) community has not been briefed on what changes VA has made in its approach to this problem, but we are encouraged that the Secretary seems to be cognizant that the *Independent Budget* VSOs (IBVSOs) made a series of recommendations on this topic in our most recent *Independent Budget* document, and that he is acting early to get VA moving ahead.

The VA's Office of the Inspector General (OIG) issued a revealing report in July 2006, titled: "Health Status of and Services for Operation Enduring Freedom/Operation Iraqi Freedom Veterans after Traumatic Brain Injury Rehabilitation." The report assessed healthcare and other services provided for VA patients with moderate-to-severe TBI and then examined their status approximately 1 year following discharge from inpatient rehabilitation. The OIG found that improvement and better coordination of care were needed so veterans could make a smoother transition between DoD and VA healthcare services. The report called for additional assistance to immediate family members of brain-injured veterans, including improved case management and additional caregiver support services.

The importance of caregiver support and assistance is noted in the July 2006 OIG report which states, "Unlike with other types of injury, brain injury often causes emotional difficulties and behavioral problems which can be long lasting. These problems exact a huge toll on patients, family members, and healthcare providers." Family care is clearly a critically important factor in patient recovery and ability to live at home, and that the lack of family support contributes to low functioning of TBI patients. With more severe injuries, the extreme family burden can lead to family disintegration and loss of this major resource of continuing care for veterans. Without question there are many challenges we face in ensuring these veterans and their families get the specialized care and support services they need.

Congress passed a caregiver assistance pilot program in section 214 of Public Law 109–461, but it is likely that VA is only in the early implementation phase of this program. It is a small program, limited to $5 million per year over a 2-year period, but the potential in-home assistance provided through that program could be of great help to relieve many families caring for severely injured veterans from Iraq and Afghanistan. In light of the current situation wherein VA is authorized to provide family and caregiver support in very limited situations, we hope the Subcommittee will urge VA to quickly move forward on this pilot program and that Congress will provide oversight and properly assess and adjust or extend the program as needed. A focus group, which includes family caregivers, should be established to evaluate the effectiveness of the pilot program, and to gather input regarding gaps in services and how the program can better meet the needs of these veterans' families and direct caregivers.

We are pleased that VA has designated TBI as one of its special emphasis programs and is committed to working with DoD to provide comprehensive acute and long-term rehabilitative care for veterans with brain injuries. VA reports that it is tailoring its programs to meet the unique needs of severely injured OEF/OIF veterans by assigning case managers to each TBI and polytrauma patient and putting a greater emphasis on understanding the problems of families during the initial care and long-term rehabilitation of these patients. VA also plans to utilize video conferencing that will allow top specialists to take an active role in the treatment of patients living in remote areas. However, we remain concerned about the level of support families and caregivers of these seriously brain-injured veterans receive as well as the caseload of clinical and social work case managers, particularly when effective case management ensures quality medical care and efficient use of healthcare resources.

Mild Traumatic Brain Injury

Military service personnel who sustain catastrophic physical injuries and suffer severe TBI are easily recognized. However, VA experts note that TBI can also be caused without any apparent physical injuries when a veteran is in the vicinity of improvised explosive device (IED) detonation where explosives jar the brain. Veterans suffering a milder form of TBI may not be detected immediately but symptoms can range from headaches to irritability and from sleep disorders to memory problems and depression. It is believed that many OEF/OIF soldiers and marines have suffered mild brain injuries or concussions that have gone undiagnosed, and that symptoms may only be detected when these veterans return home.

Our concern about emerging literature that strongly suggests that even "mild" TBI patients may have long-term mental and other health consequences is heightened by problems identified in the aforementioned OIG report. According to VA's mental health experts mild TBI can produce behavioral manifestations that mimic PTSD or other mental health symptoms and the veteran's denial of problems that can accompany damage to certain areas of the brain, often leads to difficulties receiving services. The DoD has revealed that it still lacks a system-wide approach for identification, management, and surveillance of individuals who sustain mild-to-moderate TBI, in particular those with the mild version. Therefore, theIBVSOs believe VA should coordinate with DoD to better address mild TBI and concussive injuries and develop a standardized protocol utilizing appropriately formed clinical assessment techniques to recognize neurological and behavioral consequences of TBI, as recommended by the Armed Forces Epidemiological Board.

Also, the influx of OEF/OIF servicemembers returning with brain injury and trauma has increased opportunities for research into the evaluation and treatment of such injuries in newer veterans; however, we suggest that any studies undertaken by VA and DoD include older veterans of past military conflicts who may have suffered similar injuries that thus far have gone undetected, undiagnosed, and untreated. Their experiences could be of enormous value to researchers interested in the progression of these injuries on a long term basis. Likewise, such knowledge of historic experience could help both DoD and VA better understand what is needed to improve screening, diagnosis and treatment of mild TBI in the newest generation of combat veterans.

Polytrauma Centers and Access to Care

For well over a decade the VA has used multiple approaches to provide specialty care to veterans and active duty members having sustained a traumatic brain injury. Established in February 1992, the Defense and Veterans Head Injury Program (DVHIP) was restructured in 2002 as the Defense and Veterans Brain Injury Center (DVBIC). This program helps to ensure that all military servicemembers and veterans with traumatic brain injury receive TBI-specific evaluation, treatment, and follow-up through ten sites, which includes VA's TBI lead centers.

Currently VA has four designated TBI facilities collocated with its polytrauma centers: in Minneapolis, Minnesota; Palo Alto, California; Richmond, Virginia; and Tampa, Florida. These TBI lead centers provide a full spectrum of TBI care for patients suffering from moderate to severe brain injuries. VA has established 18 "polytrauma network sites"and is also establishing polytrauma support clinic teams in each of its Veterans Integrated Service Networks (VISNs) for follow-up care of polytrauma and TBI patients referred from the four lead centers or directly from military treatment facilities.

We are encouraged by VA's response to the growing demand of TBI care with the increasing number of TBI initiatives; however, resources required to operate an effective VA polytrauma network are subject to the needs of other programs and services at the local level. Accordingly, we remain concerned about system capacity in terms of space, resources and particularly staffing, and whether VA has fully addressed these factors to provide intensive rehabilitation services, treat the long-term emotional and behavioral problems that are often associated with TBI, and to support families and caregivers of these seriously brain injured veterans. It is imperative that in addition to its intensive inpatient brain injury rehabilitation program, VA must ensure proper establishment of an equally rigorous and complementary outpatient brain injury program.

To facilitate access to services, VA assigns a case manager to each OEF/OIF veteran seeking treatment at one of its medical facilities. The case manager is responsible for coordinating all VA services and benefits. Additionally, VA has hired liaison/social workers at DoD facilities to assist injured servicemembers. In interviewing case managers, the OIG found several problems that warrant attention. Case managers reported continued problems related to transfer of medical records from referring military facilities; difficulty in securing long-term placements of TBI

patients with extreme behavioral problems; difficulty in obtaining appropriate services for veterans living in geographically remote areas; limited ability to follow patients after discharge to remote areas; poor access to transportation and other resources; and inconsistency in long-term case management. The report found that while many of the patients assessed had achieved a substantial degree of recovery, *". . . approximately half remained considerably impaired."* The report concluded that improved coordination of care is necessary between agencies, and that families need additional support in the care of TBI patients.

The IBVSOs are concerned about increasing number of media accounts and reports from veteran patients with TBI and their family members who claim that access to VA care for TBI is not up to par or non-existent—requiring them to seek rehabilitation services in the private sector. We encourage VA and Congress to address these types of complaints to ensure severely wounded TBI veterans are receiving the best rehabilitative care available. Numerous studies show that any delay in providing comprehensive rehabilitation is a distinct predictor of long-term outcomes for veterans suffering from TBI. The need for early rehabilitative intervention is well justified and can avoid further deterioration of these veterans in future years.

The DoD and VA share a unique obligation to meet the healthcare and rehabilitative needs of veterans who are suffering from readjustment difficulties as a result of combat service, and those who have been wounded as a result of a TBI. Therefore, the DoD, VA, and Congress must remain vigilant to ensure that federal programs are sufficiently funded and *adapted* to meet the unique needs of the newest generation of combat service personnel and veterans, while continuing to address the needs of older veterans. We hope the Secretary's recent announcement of a new VA focus on TBI will lead VA in a more coordinated direction with respect to these particular challenges. Further, in *The Independent Budget* for Fiscal Year 2008, our organizations have made a number of specific recommendations to Congress and VA based on the issues discussed today in my testimony. We invite you to consider them as you develop your legislative and oversight plans for the 110th Congress.

Mr. Chairman, this concludes my statement. I will be happy to address any questions this Committee may have.

Statement of Thomas Zampieri, Ph.D.
Director of Government Relations, Blinded Veterans Association

Introduction

Mr. Chairman and members of the House Veterans Affairs Subcommittee on Health, on behalf of the Blinded Veterans Association (BVA), thank you for this opportunity to present BVA's legislative concerns on the topic "Poly Trauma Center Care and the TBI Patient: How Seamless is the Transition Between VA and DoD and Are Needs Being Met?" BVA is the only Congressionally chartered Veterans Service Organization exclusively dedicated to serving the needs of our Nation's blinded veterans and their families. This past year BVA has developed increasing concern over improving VHA's ability to provide the full continuum of both inpatient and outpatient rehabilitative service programs and to increase resources to be commensurate with the growing numbers of wounded and injured entering the VA healthcare and benefits system from Department of Defense (DoD) care. The issue of Traumatic Brain Injury (TBI) is of paramount concern to BVA. We appreciated this hearing as a step in working together on improving the system.

Types and Causes of TBI

Last year, articles appeared and DoD reported that more than 11,852 returning wounded had been exposed to blast injuries, the most common being from IEDs. This is an astounding number when one considers that as of March 8, 2007, there was a reported 23,417 traumatic combat injuries. TBI has become the "signature injury" of Operation Iraq Freedom (OIF) and Operation Enduring Freedom (OEF) operations.

As BVA reported in our previous testimony on September 20, 2006, blast-related injury is now the most common cause of trauma in Iraq. One study found that 88 percent of the military troops treated at an Echelon II medical unit in Iraq were from IED blasts. Of those, 47 percent suffered TBI injuries. Data from the screening of 7,909 Marines with the 1st Marine Division showed that 10 percent of them suffered from TBI-related injuries 10 months after returning from Iraq. At Fort Irwin, 1,490 soldiers were screened last May with almost 12 percent of them having suffered concussions resulting in mild to moderate TBI injuries.

One statistic frequently overlooked and reported by the Iraq Coalition Casualty Count website is that of the men and women wounded, only 7,005 have required Aeromedical evacuation. A reported 6,835 non-hostile injured required Aeromedical transportation. As in the history of many previous conflicts and wars in our history, more servicemembers (18,704) have been evacuated by air from Iraq due to medical diseases. The reason BVA points to this data is that a large percentage of those wounded and injured in Iraq (16,412) are Returned to Duty (RTD). These troops usually complete the full tour in Iraq before redeploying back to the base of departure. Those mild to moderately TBI-injured are, therefore, at very high risk of not being screened for complications of TBI upon return. The previous data outlined in this section were only random screenings done. They were not mandated by DoD and, according to the article detailing this issue, there is actual resistance to any standardized screening programs of all servicemembers who have sustained mild to moderate TBI-type concussions.

More than 1,882 of the total moderate to severe TBI-injured tracked from January 2003 to January 2007, by the Defense and Veterans Brain Injury Center (DVBIC) have sustained moderate enough TBI to result in neurosensory complications. Epidemiological TBI studies have found that about 30 percent of the injured have associated visual disorders of diplopia, convergence disorder, photophobia, ocular-motor dysfunction, and the inability to interpret print. Some TBIs have resulted in legal blindness and other manifestations known as **Post-Trauma Vision Syndrome** (PTVS). BVA applauds the efforts of the Defense and Veterans Brain Injury Center (DVBIC), which has worked hard to develop an extensive, multidisciplinary TBI team that will test all of the wounded arriving at both Walter Reed Army Medical Center and the National Naval Medical Center where reportedly 28% of all wounded have sustained TBI. We support these efforts but also call attention to the need for additional funding and resources to continue the collaborative efforts of this ongoing program between DoD and several VA medical treatment facilities.

As most members of this Committee know, a study in early 2006 by researchers at Harvard and Columbia revealed that the cost of medical treatment for servicemembers with TBI would be at least $14 billion over the next 20 years. This is a conservative estimate. The now famous Linda Bilmes' "Long Term Costs of Providing Veterans Medical Care and Disability Benefits," published by Harvard on January 5, 2007, states the following: "The budgetary costs of providing disability compensation benefits and medical care to the veterans from Iraq and Afghanistan over the course of their lives will be $350–$700 billion, depending on the length of deployment of U.S. soldiers, the speed with which they claim disability benefits, and the growth rate of benefits and healthcare inflation."

While some argue over the exact numbers utilized for the aforementioned report, it is clear that additional wounded are being added to the counts each week. After factoring in lost wages of the TBI servicemember, family caregivers, various VBA benefits, long-term disability and healthcare costs, specialized prosthetics and adaptive equipment, various other state and other federal support programs involved in providing services, BVA argues vehemently that these figures are probably an accurate starting point for cost estimates for the wounded—medical complications and mental health problems—from OIF and OEF operations.

BVA emphasizes once again to this Committee that, in addition to the above concerns, data compiled between March 2003 and April 2005 found that **16 percent of all causalities evacuated** from Iraq had direct eye injuries. Walter Reed Army Medical Center has surgically treated approximately 700 soldiers with either blindness or moderate-to-severe significant visual injuries. The National Naval Medical Center has a list of more than 450 eye injuries that have required surgery. VA reports that although 42 of these servicemembers have attended one of the ten VA Blind Rehabilitation Centers, 88 are enrolled in local VA Blind VIST Services. Others are in the process of being referred. It should be obvious to members of this Committee that a new generation of visually impaired, low-vision, or legally blinded veterans with PTVS and complex neurological injuries will require a lifetime of specialized services. TBI veterans (and their family members) injured in blasts will require individualized rehabilitation programs that could utilize the expertise from the wide variety of currently available federal, state, and community resources.

Risks and Complications of Undiagnosed TBI

The lack of effective screening programs, coupled with inaccurate diagnosis and treatment of TBI and its associated PTVS conditions, may impair veterans' ability to perform basic activities of daily living. If early detection and treatment are not initiated, further consequences include increased unemployment, failure to succeed in educational programs pursuits, greater dependence on government assistance programs, depression and other psychosocial complications, and homelessness. The

effects of TBI on the veteran may be extended to family members. It is well known that TBI causes intense stresses in family and interpersonal relationships. All policy plans should incorporate strong family support programs

Neurological Impact of Post-Traumatic Vision Syndrome

Perception plays a significant role in the way in which one approaches life. Perception aids in providing information about the properties of one's environment. It also allows one to act in relation to those properties. In other words, perceptions allow individuals to experience their environment and live within it. They perceive the composition of their environment by a filtered process that occurs through a complex neurological visual system. Although all senses play a significant role, the visual system is one of the most important.

With various degrees of visual loss, the visually impaired are no longer able to clearly adjust and see their environment, resulting in increased risk of injuries, loss of functional ability, and employment. Impairments range from losses in the visual field and visual acuity to loss of color vision and the ability to recognize faces. There are numerous ways in which one can acquire visual deficits. One leading cause is injury to the brain. Damaging various parts of the brain can lead to specific visual deficits. Although some cases have reported spontaneous recovery, complete recovery is unlikely unless there is early intervention. Current complex neuron-visual research is being conducted in an attempt to improve the likelihood of recovery when there is long-term follow up with specialized adaptive devices and prescriptive equipment.

The brain is the most intricate organ in the human body. One of the greatest complexities of the brain involves the visual pathways within its structure. Due to the interconnections between the brain and the visual system, damage to the brain can bring about various cerebral/visual disorders. The visual cortex has its own specialized organization, causing the likelihood of specific visual disorders if it is damaged. The occipitotemporal area is connected to the "what" pathway. Thus, injury to this ventral pathway leading to the temporal area of the brain is assumed to affect the processing of shape and color. This can make the perception and identification of objects difficult. The occipitoparietal area (posterior portion of the head), is relative to the "where" or "action" pathway. Injury to this dorsal pathway leading to the parietal lobe will increase the likelihood of difficulties in position (depth perception) and/or spatial relationships. In cases of injury, one will find it hard to determine an object's location due to impaired visual navigation. In addition, it is highly unlikely that a person with TBI will have only one visual deficit. There is usually a combination of deficits due to the complexity of organization between the visual pathway and the brain. The most common cerebral/visual disorder following brain injury involves visual field loss. The loss of peripheral vision can be sufficiently severe as to result in legal blindness, requiring specific visual field testing to correctly diagnose the loss and to prescribe the devices to adapt to it.

Current and Future Programs for Comprehensive Services

BVA recommends an immediate and timely implementation of the full continuum of outpatient services for all visually impaired veterans through the following programs: Blind Rehabilitation Outpatient Specialists (BROS), Visual Impairment Center To Optimize Remaining Sight (VICTORS, which is a specialized low-vision optometry program), and the Visual Impairment Services Outpatient Rehabilitation Program (VISOR). Implementing Secretary Nicholson's directive of January 2007 could assist in the early screening for neurological complications affecting the vision of servicemembers and veterans with a high risk or history of TBI.

Visual Impairment Services Outpatient Rehabilitation (VISOR)

VISOR is a highly successful outpatient 9-day rehabilitation program. It offers screening, skills training, orientation and mobility, and low-vision therapy. The approach combines the features of a residential program with those of outpatient service delivery. A VIST Coordinator with credentials in the low-vision field manages the program staff, which consists of a certified BROS trained in Orientation and Mobility. Rehabilitation Teachers and Low-Vision Therapists are also essential components of the teams. VHA has approved central funding for three years to establish a VISOR program in each network. We therefore request that Congress provide the funding to ensure delivery of this service. Because new programs often face internal fierce budget competition and planned program sections are often cut or delayed, we ask for $16.5 million for 3 years to ensure that VISOR can be fully implemented.

Visual Impairment Center to Optimize Remaining Sight (VICTORS)

Another important model of service delivery that does not fall under VA Blind Rehabilitation Service is VICTORS, an innovative program operated by VA Optometry

Service. VICTORS has been successful for more than 15 years. This special low-vision program is designed to provide low-vision services to veterans, who, although not legally blind, suffer from some degree of visual impairment. Veterans must generally have a visual acuity of 20 over 70 or less to be considered for this service.

VICTORS typically involves a short (5-day) outpatient program in which the veteran undergoes a comprehensive, low-vision evaluation. VICTORS can be established in any VA Medical Center outpatient eye clinic area. The low-vision optometrists found in VICTORS programs are have the specialized skills necessary for assessing, diagnosing, treating, and managing the cases servicemembers with TBI or other aforementioned low-vision injuries. The Palo Alto VA Poly Trauma Center and Eye Clinic has already initiated the screening of TBI veterans, reporting that 20 percent of all admissions had some form of PTVS that required adaptive devices and technology.

VHA plans at least eight new VICTORS programs during FY 2007–2008. All should be fully implemented by the end of that timeframe. BVA strongly supports current VHA plans to increase the number of part-time, Low-Vision Optometrists and Low-Vision Ophthalmologists in the new VISOR and VICTORS programs. VISOR and VICTORS are high-quality, cost—effective outpatient programs that screen, diagnosis, treat, the expanding TBI population. The programs also conduct effective follow-up after treatment. We reiterate our appreciation that new services are being funded from existing accounts within VHA over the next 3 years but would urge Congress to appropriate the necessary $16.5 million each year to support the full implementation of these most vital services for blind and visually impaired veterans.

Vision Rehabilitation Needs at VA/DoD Facilities

To better meet the current Traumatic Brain Injury/Low Vision rehabilitation demands, increased access to specialty care at both DoD and VHA Poly Trauma medical facilities is a must. Such access requires a team of vision rehabilitation providers that includes TBI/Low-Vision Rehabilitation Trained Optometrists, Neuro-Ophthalmologists, Low-Vision Therapists, and Blind Rehabilitation Outpatient Specialists located at each DoD TBI and VHA Polytrauma Rehabilitation Network site. These highly specialized eye care providers will require education, training, and consultation from TBI vision rehabilitation experts in universities with the appropriate experience so that they can appropriately diagnose, treat, and provide high-quality vision rehabilitation services.

Electronic Health Records

BVA is very concerned about the growing backlog caused by the lack of substantial progress in the exchange of healthcare records. We believe that DoD and VA must speed up the development of electronic medical records that are interoperable and bi-directional, allowing for a two-way electronic exchange of health information and occupational/environmental exposure data. Our military personnel are still in theaters of operation and the numbers of wounded grow each week, but the continued delays in getting complete medical, surgical, and diagnostic records to VHA and VBA are inexcusable. The joint electronic medical records should include an easily transferable electronic DD214 forwarded from DoD to VA. This would allow VA to expedite the claims process and give the servicemember faster access to healthcare and other critical benefits. The Armed Services Committees and VA Committees should set clear benchmarks for full implementation. They should then budget accordingly.

State Programs and Additional Federal Programs

Current estimates reveal that at least 5.3 million Americans require long-term or lifelong assistance in performing activities of daily living as a result of TBI. Each year 50,000 Americans die, 235,000 are hospitalized, and 1.1 million visit emergency rooms from such injuries. The estimated total cost, both direct and indirect, of such injuries is in the neighborhood of $56.3 billion. The problems that confront us today, therefore, are not new to other state and federal agencies that have tried to deal with them in the past.

Individuals who have suffered TBI, along with their families, are often faced with the challenge of improper diagnosis, an inability to access support or rehabilitation services, institutional segregation, unemployment, and the daunting task of navigating complicated multiple layers of county, state, and federal agency services. TBI patients and their families face even greater challenges in rural regions of the country where specialized services are sorely lacking. Returning servicemembers are not immune to these challenges as DoD reports that 20 percent of the wounded are from communities with a population less than 20,000.

Recognizing the large number of individuals and families struggling to access appropriate and community-based services, Congress authorized the Federal TBI Program in the TBI Act 1996 (PL 104–166). The TBI Act 1996 launched an effort to conduct expanded studies and to establish innovative programs for TBI. It gave the Health Resources and Services Administration (HRSA) authority to establish a grant program for states to assist HRSA in addressing the needs of individuals with TBI and their families. It also delegated responsibilities in the areas of research, prevention, and surveillance to the National Institutes of Health and the Centers for Disease Control and Prevention.

Title XIII of the Children's Health Act of 2000 (P.L. 106–310) reauthorized the programs of the TBI Act 1996. The TBI Act reauthorization also recognized the importance of Protection and Advocacy (P&A) services for individuals with TBI and their families by authorizing HRSA to make grants to state P&A systems. The HRSA Maternal and Child Health Bureau administers the federal TBI Program. From an original appropriation of $8,910,000, the final FY 2006 allocation for the TBI Program was $8,467,448. This year, as well as in recent previous years, key Members of Congress supportive of this meager funding have had to fight for even small appropriations. In view of the statistics presented in this testimony, we fully support the requested $15 million recommended for HRSA TBI State Grants Program, and Center for Disease Control and Prevention (CDC) TBI Surveillance, Registries, Prevention and National Education/Public Awareness $9 million in FY 2008 and ask for your support.

Traumatic Brain Injury Technical Assistance Center (TAC)

The Federal TBI Program supports a TBI TAC at the National Association of State Head Injury Administrators. The TBI TAC was established to help states in the planning and development of effective programs that improve access to health and other services for individuals with TBI and their families. TBI TAC staff specialists provide states with individualized technical assistance. Additionally, the TBI TAC develops and disseminates a variety of specialized documents and initiatives for the federal TBI Program. For example, TBI TAC has developed a set of benchmarks that can be used by grantees to assess their progress in meeting program goals and objectives. The TBI TAC is also developing outcome measures that the program will be able to use to better assess the impact of TBI state and Protection and Advocacy grants on people-centered services and sustainable systems change.

Collaboration

BVA believes that the federal TBI TAC program should become a partner with DoD and VA leadership in the coordination of existing programs, thus bringing about a more multidisciplinary approach. The program already provides for the collaboration and communication between various governmental, professional, and private organizations representing leaders and policymakers concerned with TBI-related issues. On February 12, 2007, VA Secretary Nicholson announced that VA would begin partnering with the National Association of State Directors of Veterans Affairs (NASDVA) to improve communication and coordination of services. It would seem that this new effort in Seamless Transition should incorporate the Federal TBI TAC program experience. Doing so would greatly benefit veterans and all Americans with TBI as they receive people-centered services and best practices learned from a variety of ongoing research activities.

Oversight

The oversight priority should be to ensure that VHA has the ability to provide the full scope of preventative and acute rehabilitation care services. The expansion of these TBI specialized services provided by VHA are critical now to meet the demands from OIF and OEF injuries, to maximize independence, and to prevent costly misdiagnosis. These critical Low Vision and Blind outpatient programs must be fully funded as outlined since they can provide urgently needed screening, treatment, and follow-up services. Mr. Chairman, the fact that the milder to moderate TBI injury cases are not being screened at many DoD bases is not acceptable. Members of this Committee should work with other members of Congress to correct this deficiency. Under the model we propose, the objective is to develop TBI patient and family-centered measurements of individual functional abilities and then determine how those abilities can be maximized through various rehabilitative, vocational, educational, and employment services among DoD and VA. Resources are infused into federal, state, and local programs to ensure that such programs provide accessible treatment, rehabilitation, and continued follow-up services.

Conclusions

Mr. Chairman, thank you for this opportunity to submit our testimony for the record. BVA is extremely concerned that TBI-injured veterans and family members from OIF, OEF, and previous wars are not able to access the full continuum of services discussed here today. The future strength of our Nation depends on the willingness of young men and women to serve in our military, and that willingness depends in part on the willingness of our government to meet its full obligation to them as veterans. Waiting will only increase the problems and expenses associated with this growing policy problem. This complex healthcare issue has probably been one that long ago should have received more emphasis and attention. Only when the recent media spotlight forced it to the top of the agenda did it seem to rise to the radar screen for most Americans. More research, screening, treatment, and family support must occur. Improvements in rehabilitative outpatient services and increased public awareness of such available services are a must.

Recommendations

1. Authorize the $300 million in additional funding for the development of designated TBI/VA Poly Trauma Centers to provide veterans with comprehensive specialized inpatient and outpatient rehabilitative services; ensure accreditation of these specialized programs; provide educational funding for staffing; expand vocational and educational programs for veterans with TBI; support caregiver programs with family support counseling; improve case management; and develop best practices.
2. Support an increase of $19.5 million for the Defense and Veterans Brain Injury Center in the Defense authorization for FY 2008. BVA believes that Congress should ensure high quality ongoing screening of those at risk of TBI by their previous exposure history. DoD and VA primary clinical medical staff should be educated on the identification, history, diagnosis, and appropriate consultation management of the TBI servicemember.
3. The federal TBI TAC Program should partner with DoD and VA. The program already partners with other federal representatives in the coordination of existing regulations, funding, and services to best meet the needs of our veterans and their family members. Such partnerships provide for effective collaboration and communication among various governmental, professional, and private organizations representing leaders and policymakers concerned with TBI-related issues.
4. Congress must mandate with specified time benchmarks a single, bi-directional, electronic healthcare record system for a truly efficient Seamless Transition. DoD and VA must implement a mandatory single separation physical examination, including a copy of DD 214, as a prerequisite to prompt completion of the military separation process. They should suggest a pilot joint DoD/VA medical and benefits transition service in which the severely injured and their families would have both DoD and VA benefits teams at these major medical treatment facilities.
5. To better meet the current Traumatic Brain Injury/Low Vision rehabilitation demands, access to this specialty care needs to be improved. This requires a team of vision rehabilitation providers that includes TBI–Low Vision rehabilitation-trained optometrists, Low Vision Therapists, and BROS at each Lead TBI and VHA Polytrauma Rehabilitation Network Site. These eye care providers will require education and training from TBI-vision rehabilitation experts. Because VA has reduced clinical continuing education funding for many non-physician occupations, BVA urges increased budgeting and oversight on this type of care by the Committee members.
6. Develop an accurate TBI registry of individuals with mild, moderate, and all severe head injuries; increase the ability to provide excellent vision rehabilitation care to optimize outcomes for patients with TBI; and incorporate clinical research to document findings, analyze data, and publish results so that TBI/Low Vision rehabilitation of OIF/OEF veterans may continually improve.

Statement of Debra Braunling-McMorrow, Vice President Acquired Brain Injury Diversification, MENTOR Network

Chairman Michaud, Ranking Member Miller and members of the Subcommittee, my name is Dr. Debra Braunling-McMorrow. I am a licensed clinical psychologist and am the Vice President of Acquired Brain Injury Service Diversification for The MENTOR Network. Thank you for the opportunity to provide testimony today.

The MENTOR Network is proud to be the largest, most diversified, and experienced provider of after hospital rehabilitation and support services for individuals with Traumatic Brain Injuries (TBI) in the United States. We currently offer specialized Neurorehabilitation, Neurobehavioral, and long-term Supported Living services in 13 states, including Illinois, Florida, Tennessee and Massachusetts.

Many of our TBI services are an outgrowth of the Center for Comprehensive Services (CCS), a partner of The MENTOR Network. CCS, based in Carbondale, Illinois, is a nationally recognized, post-acute brain injury rehabilitation program that was founded in 1977. It is widely recognized as the first of its kind in the United States and is noted for its innovative services and ability to help participants achieve life-altering outcomes and remarkable levels of recovery.

As you know, Traumatic Brain Injury is the signature injury of the war in Iraq, primarily due to the number of blast injuries that have occurred from improvised explosive devices. Estimates suggest that as many as 10 percent of servicemen and women who serve in the conflict will be diagnosed with a brain injury. That's 150,000 Americans who will be coping with the aftermath of a brain injury.

We can expect, based on our experience treating civilians, that of those servicemen and women who suffer a brain injury, approximately 80 percent will suffer a mild brain injury and anywhere from five to 20 percent will be diagnosed with severe brain trauma that results in long-term disabilities. It should be noted, however, that the proportion of severely injured may be higher than average given the increased risk factors for active duty servicemembers.

In addition to facing the challenges of caring for an influx of injured service men and women, military hospitals and Veterans Administration facilities are also coping with the challenges of transforming hospitals and rehabilitation centers designed primarily as orthopedic centers of excellence into neurotrauma units to meet the unique needs of those injured in this war.

The military has established four polytrauma units across the country that specialize in the care of soldiers with brain injuries. These centers, along with the 21 satellite polytrauma units, are highly regarded in the brain injury community and do a remarkable job during the acute phase of care.

However, long term recovery requires both excellent hospital care and continued access to a range of treatment models after discharge. Access to community-based residential, outpatient, or in-home support is critical to ensuring that these individuals achieve the highest level of recovery possible.

Programs that focus on maximizing quality of life and encouraging the development and the practice of life skills will help servicemembers and their families adjust to the realities of living with a brain injury. Providing these services in their home communities also ensures that those going through rehabilitation and their loved ones have family support to make the journey easier.

After caring for thousands of individuals we know first hand the remarkable difference access to rehabilitative therapies can make in the quality of life for Americans with brain injuries. The difference in recovery level for individuals who have access to these services versus the recovery level for individuals who don't is startling. Individuals who have consistent access to comprehensive rehabilitative services after their initial hospitalization are less likely to be placed in a long-term care facility or be permanently disabled. They have a better chance of returning to their families and leading fulfilling lives.

Not only is providing these services the right thing to do for our returning heroes, it makes sense from an economic perspective as well. Our nation's long-term care facilities are already straining from the demands of an aging population. Providing rehabilitative services that allow our servicemen and women to return to their homes will reduce the pressure on an already overburdened system and reduce the number of individuals who require significant ongoing financial assistance.

As a nation we have an obligation to these men and women to do everything we can to help them recover.

The MENTOR Network and other private providers like it stand ready to join with the VA to serve our returning servicemen and women in their home communities. Together we can ensure that these returning soldiers receive the comprehensive care they deserve.

Thank you.

Statement of Kimo S. Hollingsworth, National Legislative Director American Veterans (AMVETS)

Chairman Michaud, Ranking Member Miller, and members of the Subcommittee:

Thank you for the opportunity for American Veterans (AMVETS) to share its views on Traumatic Brain Injury.

Mr. Chairman, the term polytrauma has been utilized for years in the private medical sector. Since 2001, the term has become common among U.S. military doctors in describing the seriously injured soldiers returning from Operation Iraqi Freedom (Iraq) and Operation Enduring Freedom (Afghanistan). The fact that this Subcommittee is holding a hearing on the existence of polytrauma injuries is a tribute to improved protection for our servicepersonnel and also on the advancements in medicine. In previous wars, personnel with multiple injuries did not have the prospects of surviving these types of injuries.

On today's battlefield, polytrauma often results from blast injuries sustained by improvised explosive devices, or by other exploding devices such as a rocket-propelled grenade or landmines. In many of these incidents the injuries are readily apparent because the injuries are directly related to exploding fragments or debris. Often overlooked are injuries that result to the brain from high-pressure waves or other non-evasive blows to the head. It has been reported that approximately 60 percent of injured servicepersonnel will have some degree of TBI. There VA currently utilizes four clinics that specialize in polytrauma—Minneapolis, Minnesota, Palo Alto, California, Richmond, Virginia and Tampa, Florida.

According to the VA, animal models of blast injury have demonstrated damaged brain tissue and consequent cognitive deficits. The limited data available suggests that brain injuries are a common occurrence from blast injuries and often go undiagnosed and untreated as attention is focused on more "visible" injuries. A significant number of casualties sustain emotional shock and may also develop Post Traumatic Stress Disorder (PTSD). Individuals may sustain multiple injuries from the various types of explosions and the explosions will produce unique patterns of injury seldom seen outside combat.

The overarching problem for the Department of Defense (DoD) and the VA is identifying symptoms due to TBI or PTSD because the symptomology can be similar. TBI is the result of a severe or moderate force to the head where physical portions of the brain are damaged and functioning is impaired. PTSD is a psychological condition that affects those who have experienced a traumatizing or life-threatening event such as combat, natural disasters, serious accidents, or violent personal assaults. Overall, TBI has its own unique medical origin that should be addressed through a multidisciplinary approach that recognizes TBI as physical injury to the brain.

VA is one of the world's foremost-recognized authorities on PTSD and the DoD has made great strides in this area over the last several years. VA's focal point of excellence in PTSD has resulted in a comprehensive PTSD screening and treatment program. VA now operates a network of more than 190 specialized Post Traumatic Stress Disorder (PTSD) outpatient treatment programs throughout the country. Vet Centers are seeing a rapid increase in their enrollment.

However, AMVETS is extremely concerned about the lack of awareness and screening among healthcare professionals for Traumatic Brain Injury (TBI). It has been reported that about 10 percent of all service personnel, and up to 20 percent of frontline personnel, suffer concussions during combat tours. Studies show that multiple concussions can lead to permanent brain damage. And, as previously discussed, PTSD and TBI clinically present many of the same symptoms—fatigue, headaches, memory loss, poor attention/concentration, sleep disturbances, dizziness/loss of balance, irritability-emotional disturbances, feelings of depression, and so forth. The problem for medical personnel is trying to differentiae between PTSD and TBI.

According to the August 2006 Analysis of VA Health Care Utilization Among U.S. Southwest Asian War Veterans: Operation Iraqi Freedom/Operation Enduring Freedom, 184,524 veterans have sought care from a VA Medical Center since the start of OEF in October 2001 through May 2006. The August 2006 analysis reports 29,041 of the enrolled OIF/OEF veterans who visiting VA Medical Centers or Clinics had a probable diagnosis of PTSD. During this time, 1,304 OIF/OEF veterans were identified as having been evaluated or treated for a condition possibly related to TBI.

Overall, VA's approach to PTSD is to promote early recognition of this condition for those who meet formal criteria for diagnosis and those with partial symptoms. The goal is to make treatments available early to prevent a lasting medical condition. The same must be done for TBI. While VA is actively making progress in this area, there are unique challenges. Fro example, there is no medical specific diagnostic code for TBI. Because of the nature of polytrauma injuries, patients are given more than one medical diagnostic code. AMVETS would recommend that the VA consider adopting or assigning a new medical code for TBI, similar to that of PTSD. AMVEST is also asking Congress to increase funding for PTSD and TBI, with an

emphasis on funding for VA to develop improved screening technique, specifically for TBI.

Mr. Chairman, VA has a long history of providing excellent specialty care. However, further work and research are required in order to improve the nature of its treatments. Overall, AMVETS believes that the medical community needs a better understanding of the effects of stress and trauma on the brain and how complications arise from these conditions. While VA is pursuing a more detailed and thorough identification process for mild cases of TBI, there is still more to be done. The advancements in protective armor, and science and medicine have created new and unique medical circumstances that will carry additional moral, legal, financial and other types of responsibilities. Simply put, the very nature of polytrauma care is extremely slow, complicated and expensive. AMVETS trusts that Congress will continue to uphold its obligations to "care for those that have borne the battle."

This concludes my testimony. Thank you.

Statement of the Honorable Corrine Brown, a Representative in Congress from the State of Florida

Thank you, Mr. Chairman for calling this timely hearing on Traumatic Brain Injury. TBI is being called the signature injury of Operation Enduring Freedom/ Operation Iraqi Freedom.

I was pleased to have my friend Bill Pascrell speak at my Veterans Braintrust last year. Rep. Pascrell is the chair of the Congressional Brain Injury Task Force.

He spoke of the struggle of many people to get the care in a timely manner. This is no small concern when dealing with TBI.

TBI can result when the head suddenly and violently hits an object, or when an object pierces the skull and enters brain tissue

Nothing is more sudden and violent than war. The advances in medicine and the ability to get the wounded care have made injuries, mortal injuries just 10 years ago, survivable.

It is our job to make sure these soldiers have the best care available as soon as possible. This gives the soldier the best chance at as full a recovery as possible. It is not enough to make the injury survivable, but give that veteran a positive quality of life.

The VA has some of the best resources for recovering from TBI, including in my home state of Florida at the Tampa Polytrauma Rehabilitation Center, inside the James A Haley Veterans Hospital, and I hope DoD is taking full advantage of these and other centers around the country.

I look forward to hearing your testimony today and learning what more can be done to help our young men and women recovering from these horrible injuries.

Statement of John and Cindy Gagnier, Valparaiso Indiana (Parents of Veteran with TBI)

We would like to thank the Committee and the Veteran's Administration for their time, efforts and concerns for all active duty soldiers and veterans.

This testimony is submitted on behalf of your disabled veteran, our son, Kristian J. Gagnier who suffered a traumatic brain injury. A history dating back to January 2002 is necessary to show many breakdowns in a system not understanding or sympathetic toward traumatic brain injury and the soldier or their family.

The TBI was sustained on January 19, 2002, from a fall of about 12 feet over a balcony onto cement. The postoperative diagnosis was: depressed right frontotemporal skull fracture with underlying acute extradural hematoma. The surgery report indicates his skull fragments were pieced/glued back together and he was unconscious for 48 hours or more.

Other than the early follow up examinations for removal of the staples holding together his skull and other miscellaneous injuries sustained he received no information about the potential symptoms of a TBI to watch for and returned to light duty in about 30 days. Even at that time his complaints about frequent migraine headaches, nausea and dizziness, to name a few, after his TBI elicited only medications like Advil and pain medications. He denied taking pain medications because it made him feel wrong and not able to do his job that he wanted to get back to.

On July 17, 2002, 6 months after the injury, apparently since he had tried so hard to return to his duties, he was deployed to Germany. Only a year after his TBI he was on his way to Iraq and was still working within his MOS as an Apache Heli-

copter Mechanic/crew chief. September 2003, while still in Iraq, he was relieved from his duties working on aircraft. We now know the effects of his TBI were becoming too much for him to handle but he remained in Balad, aka: mortarville, for the duration of his tour. Continued mortar blasts, heat, dehydration and the hyper vigilance required while in Iraq exacerbated his TBI.

- Our son should never have been deployed to a war after his TBI. Per the Army's own Regulation (AR) 40–501, 2–26 (e)(2) states "applicants with a history of severe head injury are unfit for a period of at least 5 years" and one section indicates even possibly up to 10 years. *How could this have been overlooked?* This is an area that needs to be addressed with the frontline command along with the medical staff that oversees soldiers on how to properly identify TBI and concussion injuries. The proof of burden should not be placed upon the soldier or their family.

On January 22, 2004, Kristian was reassigned back to Germany with his troop and continued to deteriorate. There were many issues with command and the medical community. For the sake of brevity we will try to highlight only primary issues during 2004 that caused severe additional problems and further deterioration of our son's health due to his TBI.

Kristian was first misdiagnosed and placed on a medication that only exacerbated his TBI. A diagnosis concerning his Traumatic Brain Injury was still far off. His sleep disorder along with other issues due to his TBI caused him to receive multiple counseling statements resulting in an Article 15, UCMJ on July 16, 2004, and another on December 14, 2004. This resulted in loss of rank, fines, extra duty and restriction on both occasions. In fact he was confined to quarters during Christmas of 2004 and he did not even think he could go to the chow hall to eat so he sustained himself by using the vending machines in his barracks. Who was even checking on him? This shows another aspect of a TBI injured soldier concerning judgment. In a report back to Congressman Visclosky and Senator Bayh dated May and June of 2005 respectively it stated Kristian was never denied leave or confined in any fashion. We have since obtained documentation that contradicts these statements. Our daughter even had to find someone to replace Kristian in the wedding party for her July wedding since leave was denied.

Due to the treatment Kristian received from command, the lack of treatment for his undiagnosed TBI and improper medications, he continued a spiral downward. At this point, as parents, we regret that were still unaware that he actually had a TBI. However, it prompted us to seriously start researching his injury and PTSD.

- We are grateful that our Secretary is having the medical system seriously reviewed. As you can see from this soldiers experience the issues surrounding TBI need to be addressed at the time of the TBI and not take a wait and see stand or pretend it never happened. Like most soldiers our son just wanted to get back to his duties. This should not be permissible for the traumatic brain injured servicemember.

In January 2005, our son was finally allowed 30 days leave to come home. We picked him up at the airport in Chicago and were in total disbelief at his physical appearance. He was skin and bones with sunken eyes and grayish pallor. It was blatantly clear that he needed medical attention and we were committed to obtaining it. After our friend from church, a Gulf War Vet, saw Kristian he told us we needed to immediately bring him to the ER at the VA in Indianapolis. On January 17, 2005, we arrived at the VA and the first recommendation was to discontinue a particular medication. In fact we were asked, "Who prescribed that medication with his type of brain injury"? He also advised it would be a very long process for Kristian. This doctor immediately identified a traumatic brain injury victim.

On February 4, 2005, our son had to be admitted to St. Anthony Memorial Health Center to be stabilized. He was discharged from there after 12 days with a diagnosis consistent with a TBI. Additional consult by Dr. Daniel Schultz also confirmed diagnosis consistent with a TBI.

Additional testing on February 25, 2005, by Stan Lelek also indicated the need for medical testing and treatment for TBI.

Fort Knox and command in Germany were unable to coordinate a blood test that was needed and the VA clinic in Merrillville that they sent us to advised they could not do the blood test since it was non-emergent. They advised to call Naval Hospital Great Lakes in Illinois. On March 2, 2005, Kristian was seen by N. Anderson M.D. Head, Division of Neurology. He states in his report the following, "He (Kristian) will need a medical board as he cannot function adequately in his position in his present condition. Need to get neuropsychological testing." He also states, "severe head injury resulting in an epidural hemorrhage requiring evacuation with multiple

persistent difficulties consistent with a brain injury that are significantly interfering with his duties and, at times, ADL's."

Dr. Anderson also advised us not to allow Kristian to get on a plane back to Germany.

Even after all this Kristian was still forced to go back to Germany. The explanation on this was given in an email on March 7, 2005, and is as follows. John—unfortunately the guidance from both the medical and legal authorities within the U.S. Army in Europe is that Kristian must return to Europe for completion of all required medical treatment.

- Another aspect that should be addressed is the communication between the branches of service. Why would the Army strike down Dr. Anderson's decisions, the Head of Neurology? Our only response when we asked that question was, "He is not Army." Communication and respect of other professionals between branches of the Armed Services, including the VA, need to be bridged to better serve our soldiers and veterans.

On March 8, 2005, Kristian boarded his flight back to Germany. I was told he would given a few days off due to international flight, however the next morning he was given more counseling statements. I addressed this and the apparent intentional misinformation I was given by command. At this point everyone was well aware of Kristian's medical condition but no consideration was given to it. People put their careers first and played God with our son's life.

A situation occurred that forced Kristian to be brought for emergent care at Landstuhl Medical Center in Germany. Dr. Shaw Skully told Cindy that Kristian would be sent to WRAMC and be under the care of the DVBIC and Deborah Warden. This ended up not being the case. Upon arrival at WRAMC he was admitted to the Psychiatric Unit.

Individuals with frontal lobe brain injuries often present a psychiatric impairment, but indeed their issue is an organic brain injury and not a chemical imbalance. It does not mean someone with an organic brain injury cannot have a psychiatric component due to his or her injury and life issues that need to be addressed after their injury. Cindy contacted caseworker Kelly Gourdin and sent the surgical reports and it was only then that the DVBIC gave Kristian some attention.

- The DVBIC along with other programs specifically set up to work with traumatic brain injuries need to become involved immediately with the soldier. A TBI/concussion assessment should be done as part of the admission process.

The issues that have been brought to light recently by the media are many of the same issues we have encountered and we will just list some of them below. However, the most critical for us was Kristian's safety and his executive functioning impairment due to his frontal lobe injury. We had to care for our son at WRAMC and get him through medical issues and board processes during his 16-month stay. We missed holidays together, we had extended time away from our two younger children and experienced extreme financial burdens as well as dealing with the following at WRAMC.

Neurology: Ended up to be almost nonexistent even though Kristian has a TBI and cysts in his brain. After Kelly Gourdin left it just seemed to have changed.

Neurology: After a discussion with neurology, Kristian was ordered to ASAP for caffeine abuse instead of being admitted to a neuro behavioral program as recommended by Virginia Neuro.

Neurology: Changed the 6 month follow up for cysts as originally ordered to 1 year.

Denial of medical care: Dr. Bahroo ordered a sleep study due to a diagnosed sleep disorder and that department overrode the doctor and refused the study.

Caseworker: Latonia Laffitte did not take care of scheduling an MRI prior to Kristian leaving WRAMC. It should have been done May 2006 but we ended up taking care of the MRI locally in September after he was discharged.

Med Hold: The wounded were caring for the wounded and certainly they received an undeserved burden that impeded their recoveries.

Peblo: I was told that by the counselor that it doesn't matter what the board decides because you will end up going to the VA anyway. If all you get is severance pay take it and leave.

Peblo: I was told by the counselor that he could not understand why the corrections to the NARSUM were taking so long. When I asked Dr. Bahroo he advised he never received any requests. Note: Dr. Bahroo was the only doctor I dealt with that took care of issues in a timely matter, returned phone calls/emails and came out of his office to talk even on short notice.

Peblo: I hand delivered Kristian's NARSUM on December 6, 2005 to Michael Thornton's office. It was lost and a 3-month follow examination was needed for an addendum to the NARSUM.

Etc, etc, etc, etc.

Where in the world is the DVBIC in all of this.

Kristian's prolonged board resulted in extensive traveling to WRAMC. After wandering down Georgia Ave in the middle of the night the point that Kristian was not safe to be alone may have finally been acknowledged by med hold. It was then permitted for Kristian to have convalescent leave approximately 4 times in row. This meant come home for 4 weeks and back to WRAMC for 2 weeks each time.

Thank God for Marie Wood and the Yellow Ribbon fund that provided a place for Kristian and I to stay while back at Walter Reed.

The seamless Transproc was another nonexistent function for us. A sergeant stepped up and finally took control to walk us through this process that he advised would take 2 days. However, something happened with him the 2nd day and he did not show up so again I was left to figure that process out.

Cindy was contacted by Debra Crone and told that she was to speak to a Katie Dinneger who was to help with Kristian's care for the VA. Cindy spoke to Katie one time and then found out she went out on maternity leave without even contacting us. Cindy took it upon herself to find out what care was out there in the VA for Kristian. She contacted Gretchen Stevens, head of the VA Brain Injury programs. After a few conversations with her Gretchen contacted Amanda Sobel at Hines VA for follow care within the VA. With Amanda Sobel's help we were able to take care of the VA enrolment.

We had at least 3 different recommendations all advising the same, that Kristian needed a Neuro-behavioral residential program and Lakeview in New Hampshire would be a good fit for him. In fact Karyn George of Military One Source had advocated for Kristian to go there back in July 2005 as well as Virginia Neuro. In March Cindy contacted the RIC of Chicago to ask for their recommendations on these programs and they also recommended Lakeview.

We took it upon ourselves again, because we had to, and enrolled Kristian in Tri-Care. We advocated for Tri-Care to approve Lakeview. After 9 weeks he was denied healthcare at Lakeview by Tri-Care and to this day we have not even heard back about our appeal. During this time we were continuing a relationship with Amanda Sobel at the Hines VA and she was aware of Kristian's situation.

- We have found out there is no coverage for TBI residential rehab. This needs to be addressed for our wounded warriors.

The Polytrauma Unit wanted to see and evaluate Kristian for his healthcare needs so appointments were made. Due to the nature of Kristian's brain injury the long ride to this facility makes it nearly impossible to have valid testing/assessments. We were told to just drive up when he is having a good day.

After a few months of back and forth and deciding what could be done Hines, VA stepped up to the plate and approved some time for him at Lakeview New Hampshire. For this we are truly grateful. Kristian has been able to have the assessments done and a program designed for his care. The professionals at Lakeview have been outstanding, caring and genuine in their desire to help Kristian. They have respected both Kristian's needs and ours. His program there has been individualized specifically for him.

- We would like to see brain injured servicemembers transitioned into the care they need immediately following discharge, even if it means outsourcing the care to private facilities. Each patient needs to be treated individually because each TBI is a little different. We would also like to see, within the transitional authority, an office dedicated to TBI, properly staffed with case managers and managed by Karyn George. She has over 20 years in the TBI field and was one of most effective and helpful advocates we worked with. She really knows her stuff.
- We also would like to see a special residential facility for our TBI servicemembers that will care for them mind, body and spirit. We are very thankful for the facility at Brooke for our amputees. We would like to also see a similar facility geared to our TBI soldiers.

The mologne house and Walter Reed is no place for our TBI outpatients to recover.

We believe if we care for them now we will have better outcomes and not pay as great a price later on in ruined families, burdens on communities and other public institutions.

A very wise man recently stated, "History would be his judge." History will be our judge in how we take care of our wounded. Please let us write a good story. Cindy and I have fallen in love with our soldiers and it is not hard to do. They'll just tell you, "I was just doing my job." Well, we sent Kristian into Iraq with a brain injury while others are coming out of theatre with brain injuries. We ask to everyone concerned to do their best to plan and provide the best possible healthcare for our all our wounded.

We have been asked to tell you how we are doing. We are forever changed struggling through all this. We have not had vacations, hours spent dealing with this turns into days and weeks it seems. I have lost 3 employees because of my situation and at this time trying to rebuild my business with 3 new employees so we are needless to say, stretched further today than ever. This really is another story and this is submitted to you in hopes that soldiers and their families do not experience the horrendous injustices and traumas we have had to endure. Our focus has had to be taking care of our son.

Respectfully Submitted,

John and Cindy Gagnier
Valparaiso, IN

POST-HEARING QUESTIONS AND RESPONSES FOR THE RECORD

Committee on Veterans' Affairs
Subcommittee on Health
Washington, DC
April 10, 2007

Barbara Sigford, MD
National Program Director
Physical Medicine and Rehabilitation
Department of Veterans Affairs
810 Vermont Avenue, NW
Washington, DC 20420

Dear Dr. Sigford,

In reference to our Subcommittee on Health hearing on "Polytrauma Center Care and the TBI Patient: How Seamless is the Transition Between VA & DoD and Are Needs Being Met?" held on March 15, 2007, I would appreciate it if you could answer the enclosed hearing questions by the close of business on May 30, 2007.

In an effort to reduce printing costs, the Committee on Veterans' Affairs, in cooperation with the Joint Committee on Printing, is implementing some formatting changes for materials for all full and Subcommittee hearings. Therefore, we would appreciate it if you would provide your answers consecutively and single-spaced. In addition, please restate the question in its entirety before the answer.

If you have any questions, please call Cathy Wiblemo on 202–225–9154.

Sincerely,

Michael H. Michaud
Chairman

Questions from Hon. Michael H. Michaud, Chairman, Subcommittee on Health, to Barbara Sigford, M.D., Ph.D., National Program Director, Physical Medicine and Rehabilitation, Veterans Health Administration, U.S. Department of Veterans Affairs

Polytrauma Center Care and the TBI Patient: How Seamless is the Transition Between VA and DoD and Are Needs Being Met?

Question 1: ***Growth of the Polytrauma System of Care.*** We applaud VA for their continued efforts to provide care as close as possible to where the veteran lives. In your testimony, you indicated that there are 76 Polytrauma Support Clinic Teams (PSCTs) located throughout the 21 Networks, which serve patients with stable polytrauma sequelae.

Question 1 (a): Please provide us with the interdisciplinary make-up of the teams.

Response: The polytrauma support clinic teams (PSCT) include specialists in physiatry, rehabilitation nursing, psychology, speech-language pathology, occupational therapy, physical therapy, neurology, and social work.

Question 1 (b): Did those medical centers where the teams will be located receive any additional FTE to fill the teams? Did they receive any additional funding to put teams together and ensure that they are functional?

Response: Each PSCT received supplemental funding in fiscal year (FY) 2007 to support staffing efforts already underway in establishing the teams. The Department of Veterans Affairs (VA) surveyed facilities to determine existing rehabilitation staffing, recommended a staffing model and designated team sites. VA is currently assessing the need to provide additional funding and staffing for PSCTs in FY 2008.

Question 2: ***Ensuring Proper Care for All Veterans.*** There has been a lot of attention focused on the new generation of veterans and the polytrauma patient. We have heard anecdotal stories that veterans from previous conflicts may have been turned away from polytrauma centers because caring for them would make the facilities numbers look bad compared to the other center.

Question 2(a): Is this type of "cherry picking" happening out there?

Response: No. Such allegations made about the polytrauma center at Palo Alto were found to be unsubstantiated by the Department of Veterans Affairs (VA) Office of the Medical Inspector for all referral consultations for 2005 through 2007. Polytrauma centers adhere to admission criteria specified in the Veterans Health Administration (VHA) Polytrauma Rehabilitation Procedures Handbook 1172.1. Two conditions exist for not admitting a patient to a polytrauma center: (1) if the patient requires a ventilator or (2) if the patient requires one to one staffing for medical or behavioral reasons. The admissions nurse manager, in consultation with the polytrauma rehabilitation center (PRC) medical director, reviews all requests for referral to the PRC. If a treatment facility other than the PRC is determined to be more appropriate, the PRC will recommend the most appropriate care setting and assist the referral source with locating that treatment site.

Question 2(b): What are the performance measures for the Polytrauma Centers?

Response: The VA functional status and outcomes database (FSOD) is used to assess outcomes of active duty and veterans receiving rehabilitation services. This includes the functional independence measure (FIM) which is the most widely accepted functional assessment measure in rehabilitation. The FSOD allows comparison of rehabilitation outcomes at the facility, network, and national level, for different impairment groups (e.g., traumatic brain injury, traumatic amputation). This database is also used to compare VA rehabilitation outcomes with those from the private sector.

Two national performance measures that VA monitors for the polytrauma rehabilitation centers (PRC) include: (1) the number of hospitalized patients with brain injuries and amputations receiving initial functional assessment for rehabilitation services, and (2) the number who gain admittance to a formal comprehensive hospitalized patient rehabilitation program.

Last, each PRC provides quarterly reports of such measures as status of staffing, number of admissions and discharges, efficiency in responding to consults, and other reporting requirements. Reports are reviewed by VA Physical Medicine and Rehabilitation National Program Office to identify concerns and ensure compliance.

Question 2(c): What are the consequences of a facility not meeting the standards?

Response: The Physical Medicine and Rehabilitation National Program Office reviews reports from each center, and provides corrective guidance if deficiencies are noted. If problems persist, the Physical Medicine and Rehabilitation National Program Office raises the issue to the office of VA Deputy Under Secretary for Health for Operations and Management to address.

In addition the centers are required to maintain Commission on Accreditation of Rehabilitation Facilities (CARF) Accreditations. A center that does not maintain compliance with CARF standards, would lose accreditation status. To our knowledge VA has never had a facility lose CARF accreditation. Facilities have requested extensions on the survey date for up to 6 months if they were not ready for review. In those instances the Physical Medicine and Rehabilitation National Program Office and the Deputy Under Secretary for Health for Operations and Management would work together with the facility to ensure compliance.

Question 2(d): Is there associated funding with the performance measures?

Response: Funding is not directly associated with performance measures; however funds are not disbursed to facilities if they have not hired and maintained the required staff.

Question 3: ***Long-term Care and the Traumatic Brain Injury (TBI) Patient.*** One of the concerns that has been expressed is whether VA has the capacity and the staff necessary to provide intensive long-term emotional and behavioral services to the TBI patient

Question 3(a): What types of long-term programs does VA currently have in place to treat TBI patients, including outpatient and community integrated rehabilitation models and neurobehavioral programs?

Response: VA has treated 436 Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) servicemembers and veterans with moderate to severe polytrauma/traumatic brain injury (TBI), About 10 percent of these veterans will require long term institutional care. Approximately 25 percent of veterans with moderate to severe polytrauma/TBI are expected to require some level of non-institutional support services after discharge from inpatient rehabilitation.

Residential transitional rehabilitation programs at each polytrauma rehabilitation center are designed to help veterans successfully integrate back into the community. This structured transitional rehabilitation program focuses on restoring home, community, leisure, psychosocial and vocational skills. The VA also provides various non-institutional care services, including: (1) home-based primary care, (2) adult day healthcare, (3) respite care/purchased skilled home healthcare, (4) homemaker/home health aid, and (5) care coordination/home telehealth.

VA recognized that additional community residential care services are also required to meet the needs of some younger veterans; e.g., assisted living, community-based day programs for young adults, and independent living skills programs. VA currently does not offer these programs, and has requested a change in legislative authority to purchase these services through the private sector in veterans' home communities.

Question 3(b): What VA programs are there that have the capability of taking care of the TBI patient with significant behavioral challenges that require 24 hour supervision?

Response: The four VA polytrauma rehabilitation centers provide appropriate level of care for patients who exhibit behavioral challenges in the acute stages of recovery from TBI. VA currently does not have programs for TBI patients with chronic behavioral problems that require 24 hour supervision. The needs of such patients are evaluated on an individual basis, and referrals are made to community resources whenever indicated.

Question 3(c): What programs are available for the patients who cannot participate as outpatients?

Response: VA collaborates with professional organizations such as the American Medical Rehabilitation Providers Association and American Academy of Physical Medicine and Rehabilitation to identify private sector providers and facilities that can provide long term care support as needed at the local or regional level.

Question 4: ***Shortage of Health Care Professionals.*** An issue that is faced by all neurobehavioral and community integrated rehabilitation programs involves the national shortage of key providers such as occupational therapists, physical therapists, speech-language pathologists and other allied professionals. What steps is VA undertaking to recruit and retain key providers in this area?

Response: VHA uses a variety of financial recruitment incentives to recruit and retain individuals in mission critical healthcare occupations. Most of these incentives assist in recruitment of highly qualified candidates and include service obligation periods of various types and duration. VHA uses all of the following recruitment and retention incentives:

- Title 5—student loan repayment program (SLRP)
- Title 38—education debt reduction program (EDRP)
- Recruitment incentives
- Relocation incentives
- Group and individual retention incentives
- Employee scholarships to obtain both initial and advanced healthcare degrees
- Special salary rates
- Superior qualifications appointments

The VA's Health Professionals Education Assistance program (HPEAP) is used as a component of VA's recruitment and retention program for healthcare professionals. It consists of the education debt reduction program (EDRP) and the employee incentive scholarship program (EISP). Since it's inception in 1999 approximately 7DoD VA employees have received EISP scholarship awards for academic education programs related to title 38 and hybrid 38 occupations. This includes registered nurses, pharmacists, and physicians. Focus group market research has shown that the staff education programs offered by VA are considered one of the major factors in individuals selecting VA as their choice of employer. Scholarship recipients include 2DoD nurses pursuing masters degrees in advanced practice. Of the 450 nurse practitioner participants approximately 60 have focused on mental health specialty. Scholarships have been provided for advanced degrees in physical therapy, occupational therapy and pharmacy. All of these professions will provide support to the current and emerging needs of OEF/OIF veterans as well as veterans of other eras.

Additionally, review of program outcomes demonstrates the programs impact on employee retention. For example, turnover of nurse scholarship participants is only

7.5 percent compared to a non-scholarship nurse turnover of greater than 10 percent. Less than 1 percent of nurses completing their service obligation (which ranges from 1 to 3 years after completion of degree) leave the VA.

Education debt reduction program (EDRP) provides resources for reimbursement of education loans/debt to title 38 and hybrid 38 employees recently hired by VA. Recently hired is defined by statute as within 6 months of permanent appointment to VHA. Again, employees new to the VA frequently cite this education benefit as a powerful attractor for recruitment.

As of August 9, 2007, there were 5,658 employees participating in EDRP, with reimbursements paid out over a 5 year period. The average amount authorized per student for all years since the programs inception is $17,368. The average award amount per employee has increased over the years from $13,791 in FY 2002 to $27,125 in FY 2007.

While employees from 33 occupations have participated in the program, 77 percent are from three occupations (registered nurse, pharmacist and physician). The remaining awards—1074—are distributed among 30 allied health occupations. Those occupations with more than 50 award recipients per occupation are:

- Licensed practical/vocational nurse—285
- Physical therapist—231
- Physician assistant—204
- Occupational therapist—105
- Medical technologist—97
- Diagnostic radiologic technologist—80
- Certified registered nurse anesthetist—54

VHA's Healthcare Retention and Recruitment Office's (HRRO) mission includes national recruitment outreach initiatives designed to enhance and supplement local, facility based recruiting. The multi-tiered recruitment marketing strategy includes national advertising, national branding, print and online advertising campaigns, and recruitment exhibiting at national professional association meetings and conferences. VHA has a recruitment website where positions are posted at *www.vacareers.va.gov* and is supplemented by posting jobs on online recruitment websites such as the HealtheCareers and CareerBuilder. This past year in conjunction with the Office of Patient Care Services, HRRO initiated recruitment activities to support VA's mental health enhancement initiative. This national recruitment campaign was designed to attract qualified psychiatrists, psychologists, psychiatric nurses, and social workers. A series of recruitment material were developed under a unified national theme—*Some battles begin after the war*. The materials developed for recruitment efforts include a mental healthcare professionals recruitment brochure, various ads that are being used in a national print and online advertising campaign, local classified ads to advertise vacancies for facilities needing support; email blasts which are being sent to medical schools, working professionals and professional associations. Mental health recruitment initiative advertising is being placed as follows this fall in the following Journals:

Occupational Therapy

American Journal of Occupational Therapy
OT Advance

Physical Therapy

PT Magazine PT Advance

Pathology

American Journal of Clinical Pathology

Mental Health Professionals

Behavior Therapy
Journal of Interpersonal Violence
Journal of Psychosocial Nursing and Mental Health Services
Journal of the American Psychiatric Nurses Association
Archives of Psychiatric Nursing
NASW (National Association of Social Workers) News
APS Observer
Clinical Geropsychology Newsletter
Psychologists in Long Term Care
Professional Psychology: Research and Practice
PsycCareers.com—Free online listing with monitor print ads
Monitor on Psychology
Psychiatric News

Psychiatric Times
Psychiatric Services
American Journal of Psychiatry

Also, as VA employees are our number one source or new hires, an employee referral program has been implemented to recruit qualified applicants by word of mouth. Employees referring candidates who are hired receive a cash incentive for that referral.

Question 5: ***Presidents Task Force to Improve Health Care Delivery for Our Nation's Veterans.*** In 2001, the President's Task Force to Improve Health Care Delivery for Our Nation's Veterans was appointed. Their mission was to identify ways to improve benefits and services for the beneficiaries of those two agencies through better coordination of the activities of the two Departments. In 2003, they issued their final report. The report contained several recommendations regarding collaborative efforts and technology. There have been recent reports an the delay in healthcare being delivered to returning soldiers and veterans due to the lack of coordination and bi-directional data that is available. Please expound on the efforts of the Department of Veterans Affairs to further develop and see to completion the following recommendations of the PTF:

Question 5(a): Recommendation 3.1 VA and DoD should develop and deploy by fiscal year 2005 electronic medical records that are interoperable, bi-directional, and standards-based.

Response: VA and the Department of Defense (DoD) are presently sharing almost all of the electronic health data that are available and clinically pertinent to the care of our beneficiaries from both Departments. This includes the one way and bi-directional exchange of viewable electronic health data and the bi-directional exchange of computable standards-based allergy and pharmacy data that supports automatic drug-drug and drug-allergy interaction checking.

VA receives electronic data through successful one-way and bi-directional data exchange initiatives between existing legacy VA and DoD systems. Data exchanges support the care of separated and retired servicemembers who seek treatment and benefits from VA and the care of shared patients who use both VA and DoD health systems to receive care.

Since beginning transfer of electronic health records to VA, DoD has transferred data on approximately 3.9 million unique separated servicemembers to VA clinicians and claims staff treating patients and adjudicating disability claims. Of these individuals, VA has provided care or benefits to more than 2.2 million veterans. Data include outpatient pharmacy (government and retail), laboratory results, radiology reports, consults, admission, disposition and transfer data, and ambulatory coding data.

In 2006, DoD began transferring pre-and post-deployment health assessment data and post deployment health reassessment data on separated members and demobilized National Guard and Reserve members. Leveraging some of the technical capability to transfer records one-way, VA and DoD began the bi-directional sharing of electronic health records on shared patients. Data shared bi-directionally include outpatient pharmacy and allergy data, laboratory results and radiology reports. This capability is now available at all VA sites of care and is currently installed at 35 DoD host locations. These 35 locations consist of 15 DoD medical centers, 28 DoD hospitals and over 230 DoD outpatient clinics and include Walter Reed Army Medical Center, Bethesda national Naval Center, Brooke Army Medical Center and Landstuhl Regional Medical Center. VA is working closely with DoD to expand this capability and by June 2008, VA will have access to data from all DoD locations. VA is working with DoD to increase the types of data shared bi-directionally. Additional work scheduled for the remainder of FY 2007 and 2008 will add data such as progress notes, problem lists and history data to the set of information that is shared bi-directionally between DoD and VA facilities.

VA and DoD have accomplished the ground-breaking ability to share bi-directional computable allergy and pharmacy data between next-generation systems and data repositories. This capability permits VA and DoD systems to conduct automatic drugdrug and drug-allergy interaction check to improve patient safety of those active dual consumers of VA and DoD healthcare who might receive prescriptions and other treatment from both VA and DoD facilities. At present, we have implemented this capability at seven locations and are working on enterprise implementation schedules.

Our earlier efforts focused on the sharing of outpatient data, VA and DoD have made significant progress toward the sharing of inpatient data. Most recently, we began sharing significant amounts of the available DoD electronic inpatient data on

our most critically wounded warriors. Previously, data were only available to VA from DoD in paper format. Successful pilot projects demonstrated the capability to share available electronic narrative documents, such as discharge summaries and emergency department notes. This capability is now being used at 13 locations including all of DoD's major medical facilities. We have successfully achieved the capability to support the transfer of medical digital images and electronically scanned inpatient health records between DoD and VA from key military treatment facilities, Walter Reed, Bethesda, and Brooke Army Medical Center and all four Level 1 VA polytrauma centers located in Tampa, Richmond, Palo Alto and Minneapolis.

In addition to our joint work to share scanned documents and digital radiology images, VA and DoD have undertaken a groundbreaking challenge to collaborate on a common inpatient electronic health record. On January 24, 2007, the Secretaries of VA and DoD agreed to study the feasibility of conducting a joint acquisition for a new common inpatient electronic health record system. During the initial phase of this work, expected to last between 6 and 12 months, VA and DoD are working to identify the requirements that will define the common VA/DoD inpatient electronic health record. The Departments are working to conduct the joint study and report findings as expeditiously as possible. At the conclusion of the study, we will begin work to develop the common solution.

Question 5(b): Recommendation 3.2 The Administration should direct HHS to declare the two Departments to be a single healthcare system for purposes of implementing HIPAA regulations.

Response: As a rule, there are no Health Insurance Portability and Accountability Act (HIPAA) constraints on sharing electronic data between VA and DoD. In general, the HIPAA Privacy Final Rule prohibits covered entities—healthcare providers that conduct certain transactions electronically, health plans, and healthcare clearinghouses m from disclosing protected health information unless a specific permitted disclosure is applicable. One special exemption pertains to DoD's sharing data with VA. This permitted disclosure, 45 CFR 164.512(k) (1) (ii), allows DoD to "disclose to VA the protected health information on an individual who is a member of the Armed Forces upon separation or discharge of the individual from military service for the purpose of a determination by VA of the individual's eligibility for or entitlement to benefits under laws administered by the Secretary of Veterans Affairs," The VA and DoD HIPAA, privacy and General Counsel staffs worked diligently to resolve any differences in interpretation of these authorities. In June 2005, DoD and VA implemented a data-sharing memorandum of understanding (MOU) that outlines these agreed-upon authorities.

Question 5(c): Recommendation 4.6 The interagency leadership Committee should identify those functional areas where the Departments have similar information requirements so that they can work together to reengineer business processes and information technology in order to enhance interoperability and efficiency.

Response: VA and DoD have a robust interagency leadership structure in the DoD/VA Joint Executive Council (JEC), cochaired by VA's Deputy Secretary and Do D's Under Secretary for Personnel and Readiness. The DoD/VA Health Executive Council (HEC), cochaired by VA's Under Secretary of Health and DoD's Assistant Secretary of Defense, Health Affairs, reports to the JEC and provides executive level direct oversight of all interagency health data sharing initiatives. The Information Management and Technology (IMIIT) work group of the HEC provides day to day collaboration and management of existing and planned data interoperability initiatives. This work includes the identification and approval of information requirements and reengineered business processes that support interoperability and data exchange. In order to accelerate data exchange and to provide additional support to our most seriously wounded and ill servicemembers and veterans, DoD and VA have formed a Senior Oversight Committee (SOC) that reports to the JEC. Pursuant to the leadership of SOC and the JEC, VA and DoD are on target to share all essential and available electronic health data by October 2008.

Committee on Veterans' Affairs
Subcommittee on Health
Washington, DC
April 10, 2007

Colonel Mark Bagg, Director
Center for the Intrepid
Brooke Army Medical Center
3851 Roger Brooke Road
Fort Sam Houston, TX 78234–6200

Dear Col. Bagg:

In reference to our Subcommittee on Health hearing on "Polytrauma Center Care and the TBI Patient: How Seamless is the Transition Between VA and DoD and Are Needs Being Met?" held on March 15, 2007, I would appreciate it if you could answer the enclosed hearing questions by the close of business on May 30, 2007.

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If you have any questions, please call Cathy Wiblemo on 202–225–9154.

Sincerely,

Michael H. Michaud
Chairman

Questions from Hon. Michael H. Michaud, Chairman, Subcommittee on Health, to Colonel Mark Bagg, Director, Center for the Intrepid, and Chief, Orthopedics and Rehabilitation, Brooke Army Medical Center, Fort Sam Houston, TX

Question: #1

Eligibility for Care at the Intrepid Center

Question: The stated mission of the Intrepid Center is to "provide the highest quality of comprehensive outpatient rehabilitation for eligible patients in a state-of-the-world facility." Please explain the referral process that occurs when a servicemember is in need of the care that the Center provides. Who is eligible for care at the Center and who is not? Does the Center turn servicemembers away? If so, where are they referred?

Answer: All active duty amputee patients cared for at Brooke Army Medical Center are automatically referred to the Center For the Intrepid (CFI) for their outpatient care. Active duty burn and limb-salvage patients are referred when appropriate to begin their advanced rehabilitation. In addition, active duty servicemembers from other MTFs sustaining delayed amputation as a result of failed limb salvage may be referred to the CFI for advanced rehabilitation, usually on a TDY basis. Although the current focus of the CFI is to care for active duty servicemembers, all Department of Defense beneficiaries are eligible for care.

Up to this point, no active duty patients in the amputee, burn, or limb salvage categories have been denied care at the CFI.

Question: #2

Referral Procedures at the Center

Question: There are currently no referral procedures at this time for veteran outpatients from VA. In your testimony, you stated that as capacity permits and as the circumstances of hostilities change, referral procedures for veteran outpatients from VA across the country will be implemented. Do you believe they will be limited to the veterans who have sustained amputation or do you foresee an expansion of the eligibility and the scope of care?

Answer: The referral mechanism for veteran outpatients has been drafted and would allow the VA to refer its patients to the Center for the Intrepid for rehab associated with functional limb loss. It is true that the referral mechanism has not been implemented, but it should be ready to launch as soon as capacity allows.

I think maintaining the Center For the Intrepid (CFI) as a center of excellence for functional and anatomical limb loss is the right answer rather than expanding the scope of care. Nine percent of the current amputee population is a result of non-combat related training injuries, motor vehicle accidents, or other traumatic incidents. Consideration must be given to consolidating all DoD functional and anatomical limb loss care at the CFI when hostilities cease.

Question: #3

Intrepid Center as a Model of Care

Question: Do you feel that the Intrepid Center can serve as a model for other types of healthcare delivery?

Answer: Absolutely, and for two reasons. First, the model of a partnership between the civilian sector and the military for the actual construction of the Center for the Intrepid allowed for rapid completion and the inclusion of the most highly advanced technology on the market. Second, the model of multidisciplinary care employed at the Center for the Intrepid is vital to the provision of the complete spectrum of care and resources required to fully rehabilitate our Wounded Warriors. This is a great model for delivery of outpatient rehabilitative healthcare, with interdisciplinary clinical and research functions jointly housed and the layout facilitating communication among providers and patients. The model of the Center also includes the oversight of the patients by physicians who specialize in Physical Medicine and Rehabilitation, as diagnosticians and managers of patient care. Rehabilitation involving Physical Therapy, Occupational Therapy, or Speech Language Pathology is often part of a treatment regimen for many conditions seen by primary care specialists, to include Internal Medicine, Family Practice, and Pediatrics. This model could apply to those specialties as well, as long as there was ongoing oversight of the contributions of the various disciplines in the overall management of the patient's care. The most significant feature of this Center is the successful application of this multidisciplinary collaborative team.

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