OVERSIGHT HEARING ON TRAUMATIC BRAIN INJURY (TBI):
PROGRESS IN TREATING THE SIGNATURE WOUNDS OF
THE CURRENT CONFLICTS

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WEDNESDAY, MAY 5, 2010

United States Senate,
Committee on Veterans' Affairs,
Washington, D.C.

The Committee met, pursuant to notice, at 9:30 a.m., in Room SR-418, Russell Senate Office Building, Hon. Daniel K. Akaka, Chairman of the Committee, presiding.

Present: Senators Akaka, Murray, Tester, Brown of Massachusetts, Begich, Burr, and Isakson.

OPENING STATEMENT OF CHAIRMAN AKAKA

Chairman Akaka. This hearing will come to order. Aloha and welcome to all of you here today.

Today we will be discussing the progress that has been made in providing care and services to veterans with traumatic brain injury. Differences in tactics, such as the use of IEDs, and significant advances in battlefield medicine and protective equipment from prior wars have resulted in an unprecedented number of servicemembers sustaining and surviving TBIs, making this the signature physical wound of the conflicts in Iraq and Afghanistan. It is estimated that up to 360,000 servicemembers sustained a

brain injury in Iraq or Afghanistan. The Government must do all it can to treat these wounded veterans.

In 2007, in response to this trend, I convened a hearing of this Committee on diagnosing and treating TBI. That hearing led to the introduction and ultimate passage of legislation I authored to enhance TBI services in VA. Today we revisit this topic to determine how completely that law is being implemented and how effective the steps we have taken have been in making sure veterans with TBI are receiving necessary and appropriate care.

Today, we will explore the relationship between VA and outside entities in providing treatment and rehabilitation services for TBI. I have visited the Richmond, Virginia, polytrauma center, and was very impressed with what I saw, but I believe that there is a need to expand the geographic availability of care. It is a burden for family members to have to travel several hours to visit their loved ones in the hospital or to take them to rehabilitation appointments.

In addition to partnering with community and other non-VA providers, VA must do more to involve family members in providing care for their wounded veterans. We must recognize and support family members appropriately, as they are our partners in this shared mission. Legislation I authored to provide a comprehensive program of services and support to family members who wish to care for their

veterans at home, instead of placing them in an institution, is to be signed by President Obama this afternoon. This caregiver program will be another tool we can use to provide a seamless and effective continuum of care for veterans with TBI.

I am pleased to have witnesses from both VA and the Department of Defense here today. Effectively addressing the issue of TBI requires the full efforts of both Departments; neither can do it alone. I encourage both Departments to continue to break down barriers in their processes and find new ways to work more seamlessly, which ultimately results in the best outcomes for servicemembers and veterans.

One of the most critical challenges remaining is properly diagnosing mild and moderate TBI. Reliance on self-reporting, the misdiagnosing of symptoms, and sometimes the lack of an easily identifiable traumatic event are all elements that make it more difficult to get the proper care to these veterans and servicemembers. An aggressive and proactive approach to screening using the latest innovations is necessary.

I thank our witnesses for being here today, and I look forward to your testimony. Veterans suffering with TBI have demonstrated courage on the battlefield, and they continue to do so in their recovery. Together we can improve the

care and services available to them.

Thank you very much, and now I ask our Ranking Member, Senator Burr, for his statement. Senator Burr.

OPENING STATEMENT OF SENATOR BURR

Senator Burr. Aloha, Mr. Chairman.

Chairman Akaka. Aloha.

Senator Burr. Thank you for calling this hearing. I want to take a moment, if I can, to recognize several North Carolinians who are in attendance at the hearing today. They each have important stories, and one will share that story with us.

First, we have on our second panel Jonathan Barrs. Jonathan retired from the Marine Corps last year after two tours in Iraq. He experienced two improvised explosive device blasts in 1 week while serving as a turret gunner in his Humvee and was later diagnosed with a TBI in 2008. Jonathan, thanks for agreeing to share your story with these members and this panel today and, more importantly, for your service to the country.

Also joining us is Mason Poe and his wife, Kristen. Mason was in a coma for 1 month following an IED blast in Iraq. Thirty surgeries later, he is walking and has started his own small business. Both Mason and his wife have submitted testimony for the record today.

[The prepared statement of Mr. and Mrs. Poe follows:]

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Senator Burr. Next, Vincent Gizzerelli served two tours in Iraq before his separation from service last year. He took shrapnel in his leg and has a moderate to severe TBI following an IED blast in 2004. Vincent, thank you for being here.

Lastly, I want to acknowledge two individuals that are not here, Mr. Chairman, and I had hoped they would have been--Sarah and Ted Wade--for their work within the Wounded Warrior Project. Ted sustained a severe brain injury while in Iraq, and Sarah has been at his side ever since. Later today, the President will sign into law a bill that will direct the creation of a program of assistance for family caregivers. Without the bravery and support of loved ones like Sarah, many of our wounded warriors would be forced to live in nursing home settings. Sarah and Ted have submitted testimony for the record today, but they have already been an invaluable asset in helping Congress, the VA, and the Department of Defense on new ways to improve and coordinate care and the delivery to our servicemembers and veterans with TBI. Their efforts were just as critical in shaping the family caregiver legislation that the President will sign.

[The prepared statement of Mr. and Mrs. Wade follows:]

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Senator Burr. To all of you, I thank you for your service to our country. I thank you for your willingness to continue that service by working with us to improve the system of care and the benefits for all our servicemembers.

Mr. Chairman, just over 3 years ago, the Committee held a hearing on VA's ability to respond to the health care needs of returning service members: the care provided to what is known as the signature wound of the current war. TBI was the main focus. What we will learn from that hearing led to provisions enacted within the 2008 Defense Authorization Act. Specifically, the law directed or authorized actions on the following points: one, providing to each of our TBI wounded an individual plan of rehabilitation and reintegration into the community; two, using rehabilitation services outside of VA where appropriate, particularly for newly injured veterans; three, research on the diagnosis and treatment of TBI; four, providing assisted living services in veteran communities; and, finally, the provision of age-appropriate nursing care to younger veterans with severe TBI whose needs are vastly different than a typical nursing home patient.

I hope to learn from both VA and DOD the progress they have made in each of these areas.

Furthermore, I am interested to learn whether one of the key recommendations of the Dole-Shalala Commission, the

creation of Federal recovery coordinators, is helping servicemembers and their families navigate systems of care and benefits that in many cases are overwhelming. From those who work or do research on TBI issues on a day-to-day basis, I hope to learn how we might continue to improve our past efforts.

Mr. Chairman, our Nation faces extraordinary domestic challenges, but we must never forget the sacrifices our men and women and their families make in the defense of our freedom. Meeting their needs is our highest priority as a Nation. I remain committed to work with you and with this entire Committee to fulfill our obligation to them. I am confident we can do better than we have.

I thank the Chair.

Chairman Akaka. Thank you very much, Senator Burr.

Senator Tester?

OPENING STATEMENT OF SENATOR TESTER

Senator Tester. Thank you, Mr. Chairman. I want to thank you for holding this hearing today. I also want to welcome the witnesses, especially Karen Bohlinger, of Helena, Montana. Karen is the wife of Montana's lieutenant governor, but first and foremost, she is a mother of an American soldier. Her son, Jeremy, has been in a VA polytrauma network site for nearly 5 years. During that time, she has been one of the most vocal, passionate

advocates for veterans and their families that I have ever met. She is going to talk about Jeremy's story in great detail, so I am not going to steal her thunder, except to say that she has a powerful story to tell about what the VA is doing right and what the VA is doing wrong. So, Karen, I want to thank you so very, very much for being here today. You have a critically important story to tell, and we all look forward to hearing it.

Much is made of how traumatic brain injury is the signature wound of the Iraq and Afghanistan conflicts. By now, many of us know the statistics and the challenges facing the doctors and nurses in the DOD facilities and VA hospitals who have been tasked with treating hundreds of thousands of men and women. These are gut-wrenching, life-changing challenges, and it is critical that the spouses and the parents are a meaningful voice in patient care and treatment.

But all too often, I hear about folks who have a loved one that come into the DOD health system or the VA with serious TBI. The parents and the spouses of these servicemembers then have to wage a battle against the bureaucracy when someone that they care about is not getting the treatment that they deserve.

I met with a number of folks from Montana who have come through Walter Reed and Bethesda. Most of them have been

fortunate to have a spouse or a parent who has been able to drop everything and fight full time for their soldier or marine. One of the things that I have heard frequently was that the individual care from doctors and nurses was outstanding. But fighting with the bureaucracy to schedule an appointment with a doctor or to have medications changed is nothing short of a full-time job.

What happens to a soldier or a veteran when he does not have a full-time advocate? What happens when a young person from rural Montana is brought to Seattle or Minneapolis with serious TBI? Who is looking out for that young woman or man? This is the area where we need to do better.

Mr. Chairman, I know we have got a busy agenda, but I want to say one more thing. Recently, I joined Senator Murray on a letter to the Secretary of the Army asking some questions about the Army's Warrior Transition Units. I have been told that most of these questions are beyond the scope of this Committee's jurisdiction. I do believe that we should consider another round of joint hearings with our friends from the Armed Services Committee to find out about what we can do better to make sure the WTUs work better for the soldier who will eventually become a veteran and, thus, will be in our jurisdiction.

With that, thank you again, Mr. Chairman, for the hearing, and I look forward to the testimony from our

participants.

Chairman Akaka. Thank you very much, Senator Tester.

Senator Brown, your statement, please.

Senator Brown of Massachusetts. Thank you, Mr. Chairman. It is a pleasure to be here again, and being from Massachusetts and we have, Mr. Chairman, a statewide head injury program that we have implemented, we receive State funds. Obviously, it is funded by the State, and there are some Federal grants tied into it. It is an issue that we have identified and tried to work with the appropriate treatment authorities.

As you know, Mr. Chairman, I am in the Guard as a JAG. I notice regularly the transformation from a soldier who is raring to go to somebody who is not functioning quite right. Before, we never really knew why, and I think we have identified it through the research and the treatment opportunities in Massachusetts and throughout the country. And it is something that I want to thank you for holding another hearing. Being new, it is something that we have taken very seriously back home because we are trying to find out how to help, you know, what types of tools and resources do we need to provide our men and women who are serving to get better and get back to the families and be the person they once were.

So I am going to defer, and I look forward to the

testimony, and I will be bouncing back and forth to the Armed Services Committee. And, Senator Tester, I am happy to work with you on that letter and move that through the food chain. So thank you.

Chairman Akaka. Thank you very much, Senator Brown.

Now I want to welcome our witnesses. Would you please come up to the dais? First we have Dr. Lucille Beck, who is chief consultant for Rehabilitation Services at the Department of Veterans Affairs. She is accompanied by Dr. Karen Guice, the Director of the Federal Recovery Coordination Program; Dr. Joel Scholten, Associate Chief of Staff for Physical Medicine and Rehabilitation at the Washington, D.C., VA Medical Center; and Dr. Sonja Batten, Deputy Director of the Department of Defense Center of Excellence for Psychological Health and Traumatic Brain Injury.

We also have Colonel Michael Jaffee, National Director of the Defense and Veterans Brain Injury Center. Katherine Helmick, interim senior executive director for TBI at the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, is sitting there, and I thank you all for being here this morning. Your testimony will appear in the record.

Dr. Beck, will you please proceed with your statement?

STATEMENT OF LUCILLE BECK, PH.D. CHIEF CONSULTANT, OFFICE OF REHABILITATION SERVICES, OFFICE OF PATIENT CARE SERVICES, VETERANS HEALTH ADMINISTRATION, U.S. DEPARTMENT OF VETERANS AFFAIRS; ACCOMPANIED BY KAREN GUICE, M.D., DIRECTOR, FEDERAL RECOVERY COORDINATION PROGRAM; JOEL SCHOLTEN, M.D., ASSOCIATE CHIEF OF STAFF FOR PHYSICAL MEDICINE AND REHABILITATION, WASHINGTON, D.C., VA MEDICAL CENTER; AND SONJA BATTEN, PH.D., DEPUTY DIRECTOR, U.S. DEPARTMENT OF DEFENSE CENTER OF EXCELLENCE FOR PSYCHOLOGICAL HEALTH AND TRAUMATIC BRAIN INJURY

Ms. Beck. Yes, thank you. Good morning, Mr. Chairman, Ranking Member Burr, and members of the Committee. Thank you for inviting me here to update the Committee on VA's progress in implementing the wounded warrior provisions in the Veterans Traumatic Brain Injury and Health Programs Improvement Act of 2007. I would like to thank the Committee for its work, which has enabled VA to establish landmark programs and initiatives to meet the provisions of the Wounded Warrior Act.

I would also like to thank the members of the second panel for their advocacy on behalf of severely injured veterans. We appreciate these opportunities where we can listen to our stakeholders because they know the system and

they can help us improve.

Polytrauma is a new phenomenon, and, unfortunately, medicine has not yet caught up in every regard. At the outset of the current conflicts, it is fair to say we were unprepared for the complexity of injuries we were seeing because servicemembers would not have survived these types of injuries in previous conflicts. While VA had established TBI centers, traumatic brain injury centers, in 1992, it was in 2005 that we established the Polytrauma System of Care and the four Polytrauma Rehabilitation Centers. We know there were challenges during those early days in providing seamless care that could treat all of the veterans' needs. Care for complex injuries was limited to the four polytrauma centers. Some veterans with severe TBI were not regaining consciousness, and care was not optimally coordinated.

Today the Polytrauma System of Care has direct patient care available at 108 locations across the country. There are 48 polytrauma points of contact at other facilities who can refer veterans and family members to the specialists they need. Twenty Federal recovery coordinators support the transition and care of the severely injured. We worked with 1,573 facilities and providers in the private sector to provide care for more than 3,700 veterans at a cost of more than $21 million in fiscal year 2009. We have an Emerging Consciousness treatment approach that we developed after

consulting with the best clinicians across the country that sees better than 70 percent of patients recover.

VA provided more than $23 million in fiscal year 2010 to support 106 research projects related to TBI, and we are screening every OEF/OIF veteran who comes to us for care for traumatic brain injury. We have the systems in place and the resources we need to care for our veterans. In addition, we have made our programs veteran centric. We have modified the physical environment at our Polytrauma Rehabilitation Centers to be family friendly, and we have added liaisons at the major military treatment facility to improve patient transfers. We use teams of clinicians to achieve our goal of returning veterans to the maximum level of independence and functionality.

Let me provide you with an example of how this benefits veterans. A 28-year-old servicemember was injured in a blast in 2007. He sustained moderate TBI, eye injuries, burns, and fractures in his hands. Within 12 hours, he was flown to Landstuhl for surgery and stabilization, and within 72 hours, he was sent to Walter Reed.

Ten days after the injury, the Richmond Polytrauma Rehabilitation Center was on a videoconference receiving a medical update and information about the family. Eleven days after that, the family toured the Richmond PRC with a case manager from Walter Reed. Less than a week later, 4

weeks from his injuries, the servicemember was admitted to the Richmond Rehabilitation Center and was recovering from his burns and fractures.

By the 120th day following his injuries, we were transferring him to the Polytrauma Transitional Rehabilitation Program, and he was also receiving services from blind rehabilitation and community rehabilitation. On the 210th day after his injuries, he returned home. VA continues providing outpatient care through the polytrauma network site as well as vocational rehabilitation and family counseling. Today he is living at home with his spouse, exploring work and volunteer opportunities, and continuing close case management with VA. This is one of many stories that we are proud of, and this Committee should also take pride in helping to make it possible.

Although we have accomplished much since we established these programs, we recognize that there are still challenges to overcome. For example, we need to improve the availability of services in rural areas. One way we are pursuing this goal is through the use of telemedicine. Four of our facilities, including Denver, now offer TBI screening and evaluation to veterans in rural areas. In addition, we are always looking to establish new relationships with high-quality local care providers and strengthen the more than 300 local agreements that are already in place.

In closing, let me thank you again for your support and the opportunity to appear before you today. I look forward to our continued partnership on this issue. Thank you.

[The prepared statement of Ms. Beck follows:]

Chairman Akaka. Thank you. Thank you very, very much. Now we will hear from Colonel Jaffee.

STATEMENT OF COLONEL (DR.) MICHAEL JAFFEE, NATIONAL DIRECTOR, DEFENSE AND VETERANS BRAIN INJURY CENTER (DVBIC), U.S. DEPARTMENT OF DEFENSE TRAUMATIC BRAIN INJURY PROGRAM, ACCOMPANIED BY KATHERINE HELMICK, INTERIM SENIOR EXECUTIVE DIRECTOR FOR TBI, DEFENSE CENTERS OF EXCELLENCE FOR PSYCHOLOGICAL HEALTH AND TRAUMATIC BRAIN INJURY

Colonel Jaffee. Mr. Chairman, members of the Committee, thank you for the opportunity to discuss the progress that has been made in the diagnosis and treatment of traumatic brain injury (TBI), and the highly collaborative and fruitful relationship between the Department of Defense and the Department of Veterans Affairs.

The high rate of TBI and blast-related concussion events are felt within each branch of the service and throughout both the DOD and VA health care systems. We have been providing acute management for the entire spectrum of traumatic brain injury--mild, moderate, and severe. The vast majority of the traumatic brain injuries in the Department of Defense are mild TBIs, also known as concussion. Almost 90 percent of individuals who sustain mild TBI will have a complete resolution of their symptoms within days or weeks of the incident. We have focused a lot

of effort on the appropriate, safe management of these patients to avoid recurrent injuries during their recovery.

Both the DOD and the VA have dedicated significant resources for the prevention, early detection, treatment, and rehabilitation of servicemembers and veterans with TBI. I will describe our efforts in these areas and how they support the direction of this Committee and the Veterans Traumatic Brain Injury and Health Programs Improvements Act of 2007.

Prevention of TBI is a critical component of our overall strategy. Central to the preventative approach is the continued development of state-of-the-art personal protective equipment, along with a broad-based awareness campaign to provide servicemembers with strategies to mitigate risks both in a deployed location and at home.

After prevention, we ensure our early detection efforts are directed at identifying potential TBI as close to the time of injury as possible. Mandatory concussion screening occurs at four levels: in-theater, at Landstuhl Regional Medical Center in Germany for all medically evacuated personnel; during the Post Deployment Health Assessments and Reassessments; and at VA facilities where veterans present for treatment.

DOD has developed and proliferated--with the input of VA and civilian subject matter experts--a systematic method

for conducting these screenings. The Military Acute Concussion Evaluation, or MACE, has been used for in-theater screening following an incident. DOD and VA also jointly developed and are using a screening tool in the Post-Deployment Health Assessment and Reassessment and the VA's TBI Clinical Reminder. Both of these tools have been recommended to the DOD by the Institute of Medicine.

Once TBI is identified, DOD, in collaboration with VA subject matter experts, developed guidelines for the management of concussion in mild TBI in-theater. These initiatives have been adapted by several of our NATO allies.

For providers delivering care in the combat theater, we have introduced an electronic consult service for use by all service providers that connects them with a TBI expert--jointly manned by DOD and VA specialists. For care in the U.S., the DOD and VA partnered to develop evidence-based guidelines for the management of mild traumatic brain injury. The Defense and Veterans Brain Injury Center, DVBIC, a congressionally mandated collaboration between the DOD and VA, has facilitated or led a number of TBI conferences, including focused approaches to managing minimally conscious TBI patients, TBI patients with other clinical conditions to include PTSD, and efforts at cognitive rehabilitation.

We have worked with the VA on the Assisted Living for

Veterans with TBI project, and we helped establish a pilot age-appropriate TBI-specific assisted living program at one of nine State-owned comprehensive rehabilitation facilities. Simply put, the DOD and VA collaboration could not be stronger and more results oriented than what we have accomplished in this area. An independent article published by the Journal of Head Trauma Rehabilitation cited that DVBIC collaboration between DOD and VA as the most fully developed system of care in the U.S. for brain injury. Still, much remains unknown about the short- and long-term effects of blast injury on the brain, and so our research continues.

Last year, DVBIC published the largest randomized-controlled trial of cognitive rehabilitation for moderate to severe patients. The DOD is leveraging the latest advances in stem cell regenerative medicine through a collaboration between the Uniformed Services University and NIH. The DOD has been recognized for innovative research utilizing the latest advances in neuroimaging. The DOD is leveraging national expertise and resources in TBI research through more than $200 million allocated through the congressionally directed Medical Research Program.

Servicemember and family outreach is an equally strategic element of our educational efforts. At Congress' direction, we assisted the development of a Family Caregiver

Program to meet the needs of family members, and this included a panel with members from the VA subject matter experts. We have developed a number of award-winning multi-media educational initiatives to include partnerships with public television, Brainline.org. Finally, we have established a National Care Coordination Network identifying all personnel with TBI who have been evacuated from theater. They get regular follow-ups upon their return home, and this program is closely linked with the VA's Polytrauma Federal Care Coordination System.

We have had the benefit over the past several years of significantly increasing the number of civilian providers who are eligible to care for patients in our TRICARE network. We have been implementing a number of pilot initiatives to enhance our telemedicine projects in the rural outreach.

The DOD and VA and our civilian colleagues have performed extraordinary work across this country to advance our understanding of TBI, particularly as it relates to the unique nature of combat. Substantive progress has been made to implement the provisions of the 2007 law, and we are very pleased to have worked with the VA as colleagues in this endeavor.

Mr. Chairman, members of the Committee, I want to again thank you for your steadfast support of our Military Health

System and your ongoing investment in traumatic brain injury research and care. I look forward to your questions.

[The prepared statement of Colonel Jaffee follows:]

Chairman Akaka. Thank you very much, Colonel Jaffee.

Colonel, one marine who returned from Afghanistan in December 2009 was in a lightly armored vehicle that struck an IED. The incident was fatal for other occupants of the vehicle and amputated the legs of the turret gunner. The marine in question was knocked unconscious.

After seeking treatment from his corpsmen, having the incident documented in his medical record, and making the proper indication on his PDHA, he has since received no follow-up care. He has not been contacted by anyone about his PDHA. He has even sought care from several different military medical sites and has been turned away.

Can you comment on what the Department is doing to ensure servicemembers actually receive the treatment that is outlined in the policy?

Colonel Jaffee. Thank you, Mr. Chairman. There are a couple of ways that we are trying to increase the penetration and ensure that people get the appropriate treatments, one of which is we are in the process of transitioning our system for evaluations from a subjective, voluntary approach where a servicemember would have to raise their hand and say that they have a problem and access care, to one in-theater, which is more of a mandatory--if you have been involved in an incident that is associated with a blast, even if you are being stoic and denying that you have

symptoms, you would still receive a mandatory evaluation. And the current protocol for that also includes that that gets appropriately documented in-theater, which can help facilitate further follow-up. And your particular case mentioned assuring more robust care and follow-up in the post-deployment aspects throughout all of the facilities.

One of the things that is very important to the Department of Defense is providing the appropriate education and resources to all of our primary care providers in the military health care system on the systems and resources and guidelines that are in place to care for this very important population. To that end, we have been investing a lot of resources in providing appropriate education to all members of our military health care system. This includes having instituted for the past 3 years annual training events, which have trained more than 800 DOD and VA providers to make them aware of these newer developments and guidelines. We have put in a system, a network of education coordinators throughout the country. We have 14 of these people throughout the country whose job is to outreach to make sure that they are providing appropriate education and resources to our primary care providers at all of our military facilities. And we recently are very pleased by the collaboration that we have with our line commanders. So the medical community does not feel like we are doing this alone

in the military, we have the unmitigated support of our line commanders who want to assure that we--and help us get the appropriate education out to all of our servicemembers, and part of that education campaign includes not just education to the patients, not just the providers and the family members, but actually involves the commanders and the line, so that if they are aware that one of the servicemen or servicewomen under their command is not getting the appropriate services, they will have an awareness of the types of resources available and can also assure that they will get the appropriate referrals and treatments.

The other aspect that we have is oftentimes when people come back, we have that immediate screening, that post-deployment health assessment. But we are aware that some people may not have problems that develop until several months after they return home. To address that challenge, we have implemented the post-deployment health reassessment, which occurs 90 to 100 days after they return home, and we have found that that system can sometimes identify individuals with problems that were not identified initially, which also helps expedite getting them transitioned to the appropriate care network.

Chairman Akaka. In the case of this particular case where this person has claimed that he has been turned away, what alternative does this person have?

Colonel Jaffee. There is a number--we have a network of those regional care coordinators who can certainly reach out and help facilitate getting--assuring that that individual can get to a facility that can provide the appropriate resources, be it a Federal facility or a local facility within the TRICARE network. That is the purpose of that program, to try and reach out to individuals like that, because the goal is to keep anyone from falling through the cracks.

Chairman Akaka. Thank you.

Dr. Beck, as you know, Congress recently passed legislation I introduced that would create a comprehensive program of caregiver support services. If you could make any changes you wanted, how would you implement this program for veterans with TBI?

Ms. Beck. Thank you. We at the VA are very pleased that Congress has recognized the significant sacrifices that are made by caregivers and that there is support and legislation for the expansion of benefits and services to meet their needs.

The additional benefits outlined in the legislation will be of great value to families and to veterans with traumatic brain injury who require a primary caregiver in the home. VA looks forward to working with Congress and other key stakeholders on the implementation of the plan.

We think the legislation is comprehensive and will address the needs that our caregivers have.

Chairman Akaka. Dr. Beck, the Secretary's March 23, 2010, report to the Committee says that, and I quote, "Collaborations with private sector facilities are regularly used to successfully meet the individualized needs of veterans and complement VA care."

Can you cite examples of private facilities providing care for veterans with the most severe TBIs?

Ms. Beck. Yes, sir. I would think first of hospitals like Kessler Hospital in New Jersey, Casa Colina in California, the Rehabilitation Institute in Chicago, Spaulding Hospital in Boston, Marianjoy in Chicago, the National Rehabilitation Hospital here in the District of Columbia. I am aware of active-duty servicemembers who have been treated or where we have shared treatment with those facilities.

I would also like to point out that at the military treatment facilities, our servicemembers have a choice. They may choose the private sector at the military treatment facility. That is their choice. Some of them do use the private sector, but many of them choose to transfer to Polytrauma Rehabilitation Centers. And since the beginning of conflicts in Afghanistan and Iraq, our polytrauma centers have been available to take patients. We have not denied

admission, and we have had rehabilitation services available to the servicemembers and their families.

Chairman Akaka. Thank you very much.

Senator Burr, your questions.

Senator Burr. Colonel, I heard you mention that every servicemember who might be exposed to a blast has a mandatory evaluation. Let me just ask you: Severe traumatic brain injury is pretty identifiable.

Colonel Jaffee. Yes.

Senator Burr. What we are really concerned with is people on the margins. Even with a mandatory evaluation, how in the world are we going to catch it if we do not have a baseline to compare? I think you are talking about a quiz that we send servicemembers through, and yet we know that this is a problem that is going to affect a lot of people. Why aren't we taking a baseline on these folks before they are deployed so we have got some comparison?

Colonel Jaffee. Well, sir, I am happy to report that actually the DOD does have a program to do cognitive baselining. To date, since that program was implemented, we have baselined more than 500,000 servicemembers prior to their deployment. The purpose of that program is that we can better inform and make the safest determination for when it is safe to return them to duty in theater following an injury so that we can access that baseline information and

compare it to their post-injury evaluation when we think we are preparing to send them back into the fight.

Senator Burr. So how does that baseline follow that servicemember from medical facility to medical facility or in-theater?

Colonel Jaffee. Well, the baseline is meant to help inform those decisions in-theater, so currently it is in a system which at the moment the in-theater providers reach back to a help desk to access that, and we are in the process of enterprising the execution of a system through our Defense Health Information Management System to tie those results directly into the theater computer systems where the providers who are in theater can directly access it from their computer.

Senator Burr. And do you know how many people in-theater know that that exists?

Colonel Jaffee. I know that there has been a steady increase in utilization of that help desk since it was implemented.

Senator Burr. Okay. Dr. Beck, Dr. Gans with the Kessler Institute appeared 3 years ago, and 3 years ago he sort of brought to the Committee's attention that we were doing little to reach outside. Now, you quoted all these places that we go, but let me quote from Dr. Gans' testimony today. "It appears that little has changed since 2007

regarding the use of local care providers for TBI care." Would you like to comment on that?

Ms. Beck. Yes, sir. Thank you. As I noted in my testimony, during fiscal year 2009 the VA treated 3,700 veterans in the private sector and spent over $21 million. There were 1,500, approximately, either facilities or individuals who provided that care to the Nation's veterans.

Senator Burr. What is the VA's criteria for determining whether you use a local provider?

Ms. Beck. The criteria are that the care is either not--number one, that we cannot provide the care at the VA. We do not have the services available at the VA.

Senator Burr. But define that for me. If the VA facilities is 90 miles away and they provide the care, is that their point of delivery?

Ms. Beck. What we do in those cases is we have a geographically accessible statement, and that is a medical decision that is made by our physicians who manage the care, and that is related to distance from the facility, condition, and the specialty care needs. So the geographically accessible is implemented based on those three conditions under the direction of a physician.

Senator Burr. What is the DOD criteria, Colonel?

Colonel Jaffee. Basically it is up to the--if a certain resource or specialty is available at the military

treatment facility, then that is where the servicemember would receive their treatment. If a particular specialty or need is not available, then we would go to the TRICARE network looking at the number of facilities and providers.

Senator Burr. Do you also have a geographical area for the DOD facility?

Colonel Jaffee. This is done more local and regional by the facility, so it is at the facility itself, if you have the resources; if not, then you try and utilize the expertise as close to the area as possible. That is why we have local TRICARE networks, and each MTF sort of keeps track of those local providers by specialty who are involved in the TRICARE network.

Senator Burr. Dr. Beck, in late 2007, we passed the Wounded Warrior Act, and in that legislation, we created a pilot program that provided residential living options.

Now, in your testimony, you say that we currently have "four veterans with moderate to severe TBI that have been placed in private facilities that specialize in providing rehabilitation services for TBI (residing in Virginia, Wisconsin, Kentucky, and Texas.) Up to 26 veterans are projected to be enrolled in the program in [fiscal year] 2010 and 14 more in [fiscal year] 2011."

Let me just ask you: Why are so few being served under this pilot?

Ms. Beck. We have capacity to serve more under the model. So far--

Senator Burr. Let me just point out, this is 2010. We passed this in 2007. And to date, we have four veterans--and I appreciate your projections of 26 in 2010 and 14 in 2011. But based upon the 3-year ramp-up to get four in, I am somewhat skeptical about the ability to meet those. What has been the problem?

Ms. Beck. We have done extensive outreach, and many of our veterans prefer to be cared for--preferred to get their care in their homes with their families.

Secondly, I also referred in my testimony to our Transitional Rehabilitation Centers. We have those at our four regional centers, and we frequently use those centers for community reintegration, which is a type of care, community-based reintegration, that we would use before we would go to assisted living.

We are doing extensive outreach to make this program known, and we have identified 267 private sector facilities who can provide assisted living TBI, and we are--

Senator Burr. Have you identified how many servicemembers this might be appropriate for?

Ms. Beck. We have reached out to our veterans through our OEF/OIF case management programs. We initially identified--they reported to us a possible universe of 168

veterans who were interested and might at some point consider assisted living.

What we are finding is that this is going to be an option we think further out in the recovery period as we look at the stressors that may occur for patients, for our veterans and families when they are at home or in the community.

Senator Burr. Thank you. My time has expired, and I thank the Chairman for his--

Chairman Akaka. Thank you very much, Senator Burr.

Senator Murray?

Senator Murray. Thank you very much, Mr. Chairman and Senator Burr, for holding this really important hearing. Clearly, we all know that we have to get this approach to treating patients with TBI right. And I continue to be concerned as we have a number of veterans returning from Iraq and Afghanistan, and we know that IED explosives continue to be a problem on the ground, and at the same time, the VA is having trouble still hiring enough mental and health care professionals to meet the needs that we have not only today but for tomorrow.

So I am concerned about what our long-term plan is and making sure we continue to do what we need to do from our end to make sure we have the resources to meet that. And I am very concerned that the VA is underestimating the number

of patients who are going to seek VA health care as a result of the wars in Iraq and Afghanistan. Like I said, clearly the VA has to be able to hire enough professionals, including mental health care professionals, if it is to maintain the quality of care that we have an expectation for.

I wanted to ask today if the DOD and VA casualty prediction models are accurate, in your opinion. Dr. Beck or Colonel Jaffee, either one.

Ms. Beck. I would like to take that for the record. I cannot comment on that at this time.

Dr. Guice is our Federal recovery coordinator and works with our severely injured. I--

Senator Murray. So we do not know if they are accurate?

Ms. Beck. I cannot comment on it at this time. Colonel Jaffee?

Colonel Jaffee. What we are most confident in is the number of servicemembers who, after having received a screen, got a clinical evaluation and got diagnosed as having had symptoms thought to be due to a traumatic brain injury. So they get the appropriate clinical evaluation and use an ICD code. There is a very positive initiative over the past 2 years between the VA, the DOD, and the Centers for Disease Control to come to a consensus and a revision of

the ICD-9 codes that are being used by clinicians to evaluate these patients. And so we have a--I think we are confident in clarifying the number of patients who get diagnosed and coded.

One of the things that I alluded to in my earlier statement is we are also trying to very much encourage our servicemembers who may be suffering but not coming forward who we may not know about, and that is why we are transitioning from the system where it is a voluntary symptom-based approach requiring them to raise their hand to this mandatory evaluation which we hope and believe will capture more individuals who may be having symptoms and suffering who may not be raising their hand, which will allow us to get a more accurate prediction and planning for these servicemembers.

Senator Murray. Okay. Well, I would like you then to answer me back for the record because we need to look long term for our budget, and we know that it is not just the care the day they get home or even 3 months later, but far into the future. And the kinds of facilities or treatment that we will need 5, 10, 15, 20 years from now are important, so I would like to have you respond to that.

[The information follows:]

/ COMMITTEE INSERT

Senator Murray. Let me turn to another question then. In 2008, the GAO raised concerns about the screening tool that was used by the VA to assess TBI. Now, I understand that the VA is currently examining its TBI screening tools because of that, and I am interested to know where that research stands right now because it is unacceptable for veterans with TBI, whether it is blatant or unreported, to go undiagnosed really because of lack of training of someone or medical equipment at the VA.

So can someone describe to me where we are with the screening tool assessment?

Ms. Beck. Yes, Senator Murray, we have three research projects now which are evaluating the screening tool and assessing its reliability and validity. We expect the first of those studies to be completed in fiscal year 2011.

Senator Murray. Sometime next year.

Ms. Beck. Sometime next year. And I would like to provide the details as to the status of the other studies.

Senator Murray. Are we doing anything in the interim to address the concerns about the screening tool that is currently being used? Or are we just waiting for a study?

Ms. Beck. No, Senator Murray, what we are doing is we are recognizing that the screen is a screen, that it probably overrefers, and we are conducting a full and complete evaluation of everyone who screens positive, and

providing care and treatment for the symptoms and the disorders that we evaluate during the assessment.

Senator Murray. I am out of time, but I do have additional questions, so I will wait until the next round.

Chairman Akaka. Thank you very much, Senator Murray.

Senator Isakson?

Senator Isakson. Thank you, Mr. Chairman.

Dr. Guice, Laurie Ott at Uptown VA--you are probably already ready for this; I can tell by that smile--sings the praises of your recovery coordinator program and says that it is most particularly beneficial for those that suffer from traumatic brain injury. I understand there are three recovery coordinators at the Uptown VA in Augusta, but I understand there are less than 30 nationwide. What are your plans to expand that program?

Dr. Guice. Thank you, sir. Laurie is a great supporter of the program, and we appreciate her interest and time in helping us do what we need to do.

We currently have three FRCs at Eisenhower Army Medical Center. We currently have 20 nationwide and are in the process of hiring an additional 5. What we do is we constantly project based on the number of referrals we are getting to the program and the number of individuals who enroll in the program as to the need. So we sort of do a just-in-time staffing. Of course, just-in-time does not

mean we can hire them tomorrow. It means we have to have a little bit of a lead time. So I am constantly doing projections to see when those points of hiring need to happen, and we are currently in the process of hiring five additional FRCs.

Senator Isakson. When did you originally implement the program?

Dr. Guice. The program was implemented in--it first started taking clients, which is the best time point, in February of 2008.

Senator Isakson. And they coordinate the transition from DOT to VA Health Care, too, do they not? Aren't they more like a caseworker that follows in that transition?

Dr. Guice. The FRCs, it is a very unique program in that we coordinate the care and benefits that these individuals need across the transition. So if you think about any time we have some individual moving from hospital to hospital or hospital to another facility and finally moving from active duty to veteran status, those are all transitions. And sometimes we have difficulty managing transitions.

What the FRCs do is once they have a client assigned to them, they stay with that client throughout all of the transitions, which is relatively unique given the way we have our system structured where most case managers are

facility based. So they really do stay with that individual and with that family and really try to mitigate any problems almost before they happen and coordinate the benefits and care that they need using all the case managers and all the providers that we have.

Senator Isakson. Well, I apologize I missed Dr. Beck's testimony, but I note that she is the chief consultant to the VA, and I would just say this: In my experience with veterans returning from Afghanistan and Iraq, particularly those with traumatic brain injury, the single biggest problem we had, which is lessening, was they fell between the cracks between DOD and VA. These recovery coordinators are a bridge in that transition, which for TBI, probably more than any other injury, is tremendously important. And they are doing wonderful work down there--I am prejudiced because I am a hometown guy--at Augusta VA, but they are actually returning--they have returned some soldiers who have come home from Iraq or Afghanistan with TBI, have rehabilitated them, and some have actually volunteered to go back, which is an amazing testimony to what Eisenhower has done and what the Uptown VA has done.

Thank you very much, Dr. Guice.

Chairman Akaka. Thank you very much, Senator Isakson.

Senator Tester?

Senator Tester. Yes, thank you, Mr. Chairman.

I have a couple different ways to go here. I think I am going to put forward a couple examples, and then I have got a question for you, Dr. Beck, in relation to these.

One, there is a New York Times article that described a scenario of a wife of a soldier who happened to be recovering from TBI at Fort Carson's warrior transition unit. She was reprimanded when she sought additional therapy for her husband, told by an NCO officer that he does not deserve his uniform, he should give it to her.

About 3 years ago, I visited with a young lieutenant from Shelby, Montana, who was at Walter Reed dealing with a very serious leg injury. He and his wife were very frank with me. They told me they had an impossible time handling the bureaucracy, getting appointments scheduled, and trying to get through the discharge process.

I recall thinking at that point in time you have got a bright, young officer whose wife is in law school. These folks are having a tough time getting through the process. How does anybody ever get anything done here if they do not have an advocate?

The question I have is: Have things improved in the last 3 years? How have they improved in the last 3 years? And do you see this as a problem? I am talking about making sure the needs of the soldier are met without having to have a mother, a father, a wife, a sibling quite their job to

advocate for them?

Ms. Beck. Thank you, Senator Tester. We have placed VA military liaisons, social workers, at the military treatment facilities. We currently have 33 of those VA military liaisons at 18 of our military treatment facilities. We are in discussions with the Army currently to expand those numbers.

We have found that the liaison capability of VA social workers working with the military care coordinators and social workers has improved the transition.

Senator Tester. Okay. And just so I get your numbers right, you have got 33 transition workers at 18 facilities?

Ms. Beck. That is correct, sir, social work liaison.

Senator Tester. So a little less than two per facility, is that fair to say?

Ms. Beck. They are distributed--

Senator Tester. Okay, based on numbers? And what is that ratio? What are those numbers? I mean, how many soldiers does it take to say we need another one?

Ms. Beck. Well, I think we do it based on size and scope of medical services at the military treatment facilities, and we work collaboratively with the commanders at those facilities to determine--

Senator Tester. Okay. So give me--what I am looking for is an idea of how many people these folks could be

responsible for helping them through the maze. And I do not mean that in a bad way, but it kind of collects it. Are we talking one worker per 5 soldiers, 10 soldiers, 20 soldiers, 100 soldiers? And you can answer, Colonel, if you would like. However you want to do it. I am just trying to get an idea if we are even close to meeting the demand that is out there. Are we? I mean, I think they are probably effective. I mean, I do not doubt that a bit.

Ms. Beck. They are--Senator--

Senator Tester. But if we are understaffed, that is another issue that this Committee probably would want to address.

Ms. Beck. The positions and the roles are effective. We recognize that we can always do more, and that is the reason that we are continually working with the military service and the commanders to identify opportunities.

For example, because so many of the seriously injured and the wounded are returning to Walter Reed and Bethesda, we have a higher number of social workers there than we do--

Senator Tester. That makes sense. Could you get back to us with some numbers so we can get some sort of scope?

Ms. Beck. Yes.

Senator Tester. And I am sure it is going to vary from soup to nuts, but if you could give us the number of social workers at each of those 18 facilities and how many

soldiers--that is really the key.

Ms. Beck. Yes.

Senator Tester. How many soldiers they are working--

Ms. Beck. Yes, sir.

Senator Tester. That would be great.

Ms. Beck. We have those numbers, and we have the number of referrals, and I would--

Senator Tester. That would be great.

Ms. Beck. --provide it for the record.

Senator Tester. Thank you very much.

[The information follows:]

/ COMMITTEE INSERT

Senator Tester. With the exception of my friend Senator Begich here to my left, we have got the highest per capita percentage of veterans in the United States. Alaska beats us out. But we have got a bunch. The polytrauma network rehabilitation within--I mean, our nearest center--let me get right to it--is in Seattle or Denver. Senator Baucus and I introduced legislation that would task the VA with a study to establish a new polytrauma center in the area that Montana is in. I think it is a good idea. My question is: Would you commit to doing that study?

Ms. Beck. We are aware of the introduction of that legislation to do that study, and we are preparing views and costs. The Department is preparing views now.

Senator Tester. It would be good. I mean, I think the issue is--and I am going to give up the microphone here because I am out of time. But I think the issue is when you are dealing with--and I know you talked about distance, condition, and specialty care. But when you are dealing with a 12-hour drive--and, actually, that is not the longest. That is from where I live to a place like Seattle or Denver, and I live in the center part of the State of Montana. It becomes a real issue even if it is a minor injury to make that kind of travel.

So thank you very much. I appreciate the panel for being here. Thank you very much. Five docs. That is

pretty impressive. Thanks.

[Laughter.]

Chairman Akaka. Thank you very much, Senator Tester.

Senator Begich?

Senator Begich. Thank you very much, Mr. Chairman.

If I can just tag on to one of the questions that Senator Tester had, Dr. Beck, you have--and I will use my phrases--33 social workers that are distributed around. When you decided to implement that program, I am assuming you did some analysis of the need and, therefore, you had to have some understanding of how many you would need to do the job that you estimated before you started that program. I am assuming that. Right?

Ms. Beck. Yes, sir.

Senator Begich. So there is nothing wrong with saying we do not have enough, so I want you to kind of be eased with that.

Ms. Beck. Yes.

Senator Begich. If we need more, we need to know that. And so I know you had to do an analysis. A program--anything with the VA or the military does not get implemented unless there is a huge analysis behind it. So my assumption is you did an analysis based on what you saw the growth would be in this area and the folks coming back, as well as people who are here that needed services with

social workers from the VA and connected with the DOD. So in doing that, you must have had some ratio, some analysis of where you needed to be to be at optimum delivery level.

Can you share that with us at some point? I know you do not have it now. That to me will tell me what your thinking is rather than what you think you need right now, because that was the basis for moving forward on this, which I think is a great idea to have those social workers there. My staff to this Committee is a social worker, so she is probably very excited about it. I cannot see her facial expression.

Ms. Beck. She is.

Senator Begich. But I am sure she is.

Ms. Beck. She is, sir.

Senator Begich. So that to me is a document that makes a difference.

Ms. Beck. Absolutely.

Senator Begich. So I can only assume you have that, so I will leave it at that. I do not want to speak for Senator Tester, but I think we want to help you in this arena because we think the social workers are an important component.

[The information follows:]

/ COMMITTEE INSERT

Senator Begich. Along with that, in the health care piece of legislation we passed, there was a provision there called the Alaska Federal Interagency Task Force to look at improved services throughout Alaska on health care. It actually started with VA, is what we were kind of looking at, as well as certain services to our active military, but now it is a little broader.

One, are you aware of that? If not, we want to make sure you are engaged in this, because the idea is to look at the delivery of services in a very rural State. As Senator Tester said, we both have a very high percentage per capita of veterans that are not necessarily in urban areas, and how we integrate TBI services in remote areas.

So, one, are you aware of that? If not, we will get you information on it. We want to engage you to make sure we are not disconnected from this. I do not know if anyone can answer that, but I will just start with you.

Ms. Beck. We are aware of that initiative related to providing services in Alaska, and we will make sure that our rehab services group and our Federal Recovery Coordinator Program and our Social Work Case Management Program is engaged in that initiative.

Senator Begich. Fantastic.

The other is, again, in rural areas, telemedicine is--you know, a lot of pioneering has been done in Alaska. I

know the VA has done some, especially around physical therapy, speech therapy.

Ms. Beck. Yes.

Senator Begich. How do you see TBI, if at all, used in telemedicine? And are you using it now? And what is your kind of analysis of that? Whoever wants to answer that.

Ms. Beck. I will start and others can add. We are very committed to and looking carefully at the technologies in telehealth and how they can help us. Currently, we have two projects under way with traumatic brain injury.

One was referred to earlier, and that is, the screening, conducting our screening and our evaluations. Denver actually pioneered that TBI screening and evaluation tool, and we have three other sites that are currently using it. We are evaluating the accuracy, the consistency, the effectiveness of using that tool.

The second initiative that we are evaluating is a case management tool, and it allows us to use a small, what we call a telebuddy system, which looks a lot like a personal assistant or a telephone or an iPhone, and we are establishing capability to dialogue. So every morning the patient can say good morning, work with the case manager: "Have you done this today? Have you done that today?" And then the dialogue exists so that we can call the case manager.

There has been some very good work done in Seattle in the rural environments that may have involved Alaska as well by a rehab group there that has shown that that is an effective mechanism, and actually Dr. Bell, Kathy Bell, who is the chief of physical medicine and rehab at the University of Washington, was a consultant and worked with us on the development of the dialogue.

Senator Begich. Very good.

Ms. Beck. So we are working to implement that this year and see that as a way to do good remote case management in telehealth.

Senator Begich. Very good. Thank you for that.

I will just end on this last question. Should the mental health professionals--you know, lots of times it is the VA kind of going this way with DOD, but DOD has a lot of additional mental health professionals working on the ground in the field all the way through the process. As a member of the Armed Services Committee, we hear a lot about it.

Is there enough of activity from the DOD mental health professional who is following, say, an individual soldier who is starting to show signs of issues that that carries forward into the VA? In other words, that DOD mental health professional does not kind of open their service and then VA picks it up on the next end? Is there enough transition, and do they do enough coming your direction? VA does a lot

going this direction. I know that. You have a much smaller budget. DOD has a huge budget. But do they do enough coming this way? And if you do not want to counter that--I do not want you to have DOD calling you in a few minutes and saying, "Why did you say that?" But I want you to, if you could, just quickly respond, and then my time is up.

Ms. Beck. I have Dr. Batten at the table with us today, and she is VA's representative and is the Deputy Director of the Defense Center of Excellence. We have had an ongoing project and integrated work through the Defense Center of Excellence, and Dr. Batten I think can comment on that.

Ms. Batten. Thank you, sir. It is a great question and one that both Departments have identified as an important area of emphasis. In fact, a new program was implemented about 6 months ago, maybe closer to 9 months ago, called the In Transition Program that is focused on exactly that need that you are identifying, where coaches are assigned to individuals who are transitioning from one care setting to another who are in mental health treatment, and that actually works both for individuals who may be transferring from one MTF to another as well as from an MTF to a VA, to make sure that that transition is kept up. And so it is a great point, and it is one that we are addressing.

Senator Begich. Thank you very much.

Thank you, Mr. Chairman.

Chairman Akaka. Thank you very much, Senator Begich.

Let me ask two fast questions here of Dr. Beck and Dr. Jaffee. We have talked about screening and about coordination, but proper diagnosis is one of the major challenges in treating TBI. The question is: What state-of-the-art imaging techniques, if any, are being used and how? Dr. Beck?

Ms. Beck. Next to me is Colonel Jaffee who has a great amount of expertise in this area. I am going to ask him to respond.

Chairman Akaka. Colonel Jaffee.

Colonel Jaffee. In our research, Investment Resources has been very committed to exploring the latest advances in neurodiagnostics to include neuroimaging and other forms of biomarkers. To summarize a couple of the neuroimaging initiatives, we have done a lot of work with the technology known as diffusion tensor imaging. It allows us to look at some of the subcortical white matter tracks in the brain. We actually were able to complete the first study comparing the patterns on DTI in patients who had blasts as a compliance of their injury compared to more traditional forms of injury. This research was actually recognized by the American Academy of Neurology as one of the six most

important late-breaking research findings of the year and was featured at their annual meeting last year.

We have had DVBIC researchers coordinate with those at the University of California at San Diego evaluating the use of MEG, magnetoencephalography, an advanced imaging technique looking at some of the gray matter in the brain.

We have had investigators and surgeons at the National Naval Medical Center use near-infrared spectroscopy to help in their angiography, getting better pictures and better understanding of the vasculature and the vascular damage that may occur in significant injuries.

There has been a number of work done on PET scans; specifically, Walter Reed has done a great deal of work on that. The SPECT scans, another form of functional imaging, that has been utilized with soldiers at Fort Carson, and there is a protocol about to further evaluate that in San Antonio.

The CDMRP process, the Congressionally Directed Medical Research Process funded some initiatives looking at functional MRI. We have been working with industry as industry is working to modify some of their imaging equipment to make CT and MRI scanners smaller, more portable, utilizing head-only. These would possibly lead to being able to place such devices farther forward in the field to be closer to the points of injury. And in

addition, we have been looking at additional technologies in addition to imaging such as quantitative EEG in neurophysiology, electrical signals from the skull known as piezoelectricity, looking at ultrasound technologies.

One of the things that I am proud of is that at end of this month, May 24th through 27th, USU, the Uniformed Services University, is hosting the seventh annual World Congress of the International Brain Mapping and Intraoperative Surgical Planning Society. This conference features academic presentations featuring the latest technologies in neuroimaging and other translational technologies.

DOD, DVBIC, and the NIH are sponsors of this. Last year's keynote speaker included our Chairman of the Joint Chiefs, Admiral Mullen, and currently slated this year as our keynote speaker is President Obama.

Chairman Akaka. Thank you very much.

Dr. Beck, please update us on the status of the TBI registry that was mandated in 2008, NDAA. How are DOD and VA working together to keep the registry up to date?

Ms. Beck. The TBI Veterans Health Registry is functional, and it is currently providing reports on a monthly basis. We are in a data validation mode now, identifying the data sources, assuring that all of the data feeds that we need are available and assuring that the data

that comes from the registry is valid.

We received a roster from DOD of veterans who have separated and become--or of active-duty servicemembers who have been deployed in support of OEF/OIF and have become veterans. We also are receiving pre-deployment health assessments and post-deployment health risk assessments. And we have those available for integration into the record.

We are also receiving and have added--all of the veterans who have any service connection for traumatic brain injury are in the record. That is approximately 24,000 veterans to date.

Chairman Akaka. Thank you.

Senator Burr?

[No response.]

Chairman Akaka. Senator Murray?

Senator Murray. Thank you. I just had one quick question. I wanted to know, maybe Colonel Jaffee or Dr. Batten, how the DOD is working to distinguish between TBI and PTSD.

Colonel Jaffee. That is an excellent question which has been a major focus of emphasis for both of us in the DOD and VA over the past several years. There has been an ongoing amount of research dedicated to that process, to that end. DVBIC cosponsored with the Congressional Brain Injury Task Force an international symposium on behavioral

health and traumatic brain injury, bringing together a lot of the best researchers in the country throughout the VA and DOD systems and around the world to evaluate the state of the science and develop appropriate ways to manage this.

There has been consensus conferences hosted by the VA, including the DOD, looking at ways to handle what we call these dual diagnoses or comorbidities. And our current guidelines, as we have them, is that if you are identified with symptoms that have either one of them, then you need to undergo screening and evaluation, because our whole philosophy in our current treatment plan and guidelines is that we want to make sure that we are aware of all the conditions an individual may have and incorporate that into their management plan.

We have found from experience that if we focus only on one and not the other, the ultimate outcomes are not as favorable as if you can integrated both together. So what we have found is when we--looking at a lot of the data and research, which is actually from our VA colleagues, who have been very excellent in quantifying this, we have found that not everyone who has a TBI has PTSD; not everyone who has PTSD has a TBI; but there is a robust overlap, and that overlap tends to cluster at approximately 45 percent, which makes that holistic evaluation and incorporation into the treatment plan a very important aspect of that process.

And so through these combined efforts, I think we have been able to, through our educational efforts, get people away from the paradigm of a few years ago, which was looking at this as an either/or phenomenon and looking at this as a comorbidity that requires a comprehensive management plan.

Senator Murray. Okay. I appreciate that. I assume the treatment is different depending on whether you have TBI or PTSD or both.

Colonel Jaffee. There are considerations that need to be taken into account if one has both. As one example, if someone has residual cognitive deficits from their traumatic brain injury, they may not be as capable of participating in the types of psychotherapies that one might choose in certain cases of post-traumatic stress disorder. So being able to quantify and identify these aspects allows us to target the most appropriate treatments for all the symptoms that the individual may have.

Senator Murray. Okay. I appreciate that.

Thank you, Mr. Chairman.

Chairman Akaka. Thank you very much, Senator Murray.

Senator Isakson, any questions?

Senator Isakson. No.

Chairman Akaka. Senator Tester?

Senator Tester. Yes, very quickly. Thank you, Mr. Chairman.

Dr. Beck, are you familiar with VA's Office of Rural Health?

Ms. Beck. I am sorry. Can you repeat the question?

Senator Tester. Are you familiar with the VA's Office of Rural Health?

Ms. Beck. Oh, yes, sir. I am sorry. I did not--

Senator Tester. How closely do you work with them?

Ms. Beck. We work closely with the office. We have participated with the office in the development of requests for proposals and reviews of the projects that Rural Health is undertaking.

Senator Tester. And what kind of projects--are you using--let us just cut right to it. I mean, do you use them for devising plans for outreach to veterans in rural America and treatment efforts? Is that something that is within their purview and that you would utilize them for?

Ms. Beck. I would like to take that for the record, sir, because the scope of services that our Office of Rural Health is providing right now, I think we would like to give you a full listing of those.

Senator Tester. That is fine. I was just wondering how you are utilize them, if they are effective, if there is something that we can do to make them more effective.

[The information follows:]

/ COMMITTEE INSERT

Senator Tester. The last question is: How effective is telemed--Senator Begich asked a little bit about this. How effective is telemed dealing with TBI or PTSD?

Ms. Beck. We are in the early stages of evaluating telemedicine and telehealth technologies for TBI, and--

Senator Tester. How long is this evaluation going to take? The reason I ask is because we are dealing with something that is pretty time sensitive here. I mean, there are all sorts of issues. Senator Begich has told me about a soldier who came back--

Ms. Beck. Yes, we are fast-tracked to look at these technologies.

Senator Tester. So what kind of time frame are we looking at?

Ms. Beck. I expect that we will have our TBI screening up and running this year and be able to give you some feedback on the way that implementation of that program is working.

Senator Tester. As far as the effectiveness of the telemed.

Ms. Beck. Effectiveness and the usefulness of that program.

Senator Tester. Okay. Thank you very much.

Thank you, Mr. Chairman.

Ms. Batten. And there are actually also several PTSD

studies that have been completed. They are with smaller groups because they were pilot studies, but they have shown that telemedicine for PTSD is--at this point, it looks like it is approximately as effective as treatment in person. So those are pilot studies. They are smaller. We cannot draw large generalizations. But so far the pilot data are good.

Senator Tester. Well, I think that is a good sign. The margin for error here is we want to make it as close to none as possible, and that is why I think it is critically important in rural areas because it is one of the ways that are being utilized to reach out to veterans. I think it makes sense if it is effective. If it is not effective, we should not be wasting our time on it.

Chairman Akaka. Thank you very much, Senator Tester.

Senator Begich?

Senator Begich. I do not have anything further right now.

Chairman Akaka. Thank you. Thank you very much.

Let me thank this panel for your statements. It is valuable for what we are trying to do together. And I want to stress that word "together" between DOD and VA as well as the Congress. And we would certainly like to do our best to give the best service we can to the servicemembers and veterans of our country.

Thank you very much.

Ms. Beck. Thank you.

Chairman Akaka. Now I would like to welcome the witnesses on our second panel.

I want to welcome our second panel: Mrs. Karen Bohlinger, the Second Lady of Montana; Mr. Jonathan Barrs, an Operation Iraqi Freedom Veteran; Dr. Bruce Gans, who is the Executive Vice President and Chief Medical Officer at the Kessler Institute for Rehabilitation; Mr. Michael Dabbs, President of the Brain Injury Association of Michigan; and joining him today is the veterans program manager, Retired Air Force Major Richard Briggs, Jr., and he is seated in the front row.

Senator Isakson would like to welcome our next panelist.

Senator Isakson. Well, both welcome--thank you, first of all, Mr. Chairman, for allowing Dr. LaPlaca to testify today, and I am very proud as a Georgian, although I graduated from the University of Georgia, to introduce a distinguished professor at the Georgia Institute of Technology in Atlanta, Georgia, and Emory University in biomedical engineering. Dr. LaPlaca is a graduate with her doctorate degree from the University of Pennsylvania, trained in neurosurgery, and is funded by both the National Institute of Health and the National Science Foundation in her research on brain injury, spinal cord injury, and

cognitive disabilities from both injury as well as aging. So we are delighted to welcome her today to testify.

Thank you, Mr. Chairman.

Chairman Akaka. Thank you very much.

I thank all of you for being here. Your full testimony will appear in the record.

Ms. Bohlinger, would you please proceed with your statement?

STATEMENT OF KAREN L. BOHLINGER, SECOND LADY, STATE OF MONTANA

Ms. Bohlinger. Thank you, Mr. Chairman and members of the Committee. I appreciate the opportunity to speak with you today about TBI from a very personal view. My son, a former Special Forces officer with nearly 12 years of experience, has one severe and one moderate head injury. He is now classified 100 percent disabled.

We are over 4 years into active and ongoing treatment with moderate results. However, this is primarily due to my personal commitment of time and money invested in my son's care, as opposed to the services he has received through the Veteran Administration Health Care System, and he had the unfortunate experience of being on of the early TBIs, so I just need to make that clear, because there have been some incredible improvements since the early years.

I continue to fly to Seattle every 10 days and stay as long as necessary to monitor and assist in his care. I think it was 2008 I was home 22 days out of 365. He is determined to live independently and has surpassed all predictions for functional independence. I cannot bring him home to Montana as Montana does not have appropriate follow-up care for him, and, again, that rural issue is huge. And these are individuals whose culture is rural. They are not used to being in a city environment, and as we all know,

additional stress is not good for a TBI.

Since 2007, I have tried to be an advocate for other veterans and their families, with the hope of their receiving more timely, effective, and state-of-the-art care. I have personally visited several VA medical centers throughout the United States to observe and learn. And I will tell you this very forthrightly, that the guided tour as the Second Lady of Montana and my going in just as an individual are two entirely different experiences.

Our Montana congressional delegation, especially our Senator Tester, and Secretary Shinseki of the Veteran's Administration have been very accessible and responsive. I feel they have shown extraordinary leadership for our veterans and their families.

Changes in the delivery of care since 2008 are unprecedented from my perspective as an organizational psychologist in an institutional setting. Inclusion of family members in case management, caregiver status for reimbursement, care coordination, and outreach efforts are absolutely necessary components of treatment, and while they are mandated by what you all have passed, they are not being implemented across all the VA centers at all. And while we are grateful for the many devoted and competent VA employees--and I would say Dr. Jay Umamoto at the Seattle VA is an extraordinary asset to the VA. What we know is that

consistent standards of care should be available to all veterans.

I cannot stress enough the importance of family involvement, as TBI self-assessment is often very different from the family member's assessment. These guys do not want anything wrong with them. It takes a long time to break through that denial.

The VA Medical System in Baltimore, Maryland, for TBI/PTSD is one shining example of what your legislation did, and so I would just like to let you know that they have a model that preserves the dignity and respect for the veteran. They include the family members. They bring them into a room, and from the very first point, it is total family, open involvement that builds trust rather than separate groups that undermine trust. They really have worked how to best transition the new life together.

I have met and worked with, on a volunteer basis, literally hundreds of soldiers, veterans, and family members. There is not a day that goes by that I do not have a phone call or an interaction, especially with young wives, who have not the life experience to deal with what is now going on in their family.

I have learned some important insights to pass on to you, and number one is this: Neuroimaging is a critical component in a TBI assessment, treatment planning, and, most

importantly, the disability rating. There have been so many cases where the opinion said this soldier is 10-percent disabled, yet their life disintegrates, and then after they get a scan, it is 100 percent. Scans are available in the private sector. Our soldiers deserve no less.

Technology is available that demonstrates brain function. We have already heard about that today. My message is this is not a guessing game. These are people's lives. My son was given many medications which ultimately caused more damage than his original injury. And we have been through hell literally, and it was not necessary.

I private-paid for a brain scan to determine what course of care was scientifically needed. Latest and best technology must be available to all. News correspondent Bob Woodruff--and you all know him--was given the best medical treatment money could buy. His family was with him every step of the way. They were not separate into separate groups. And he had a spirit that would not quit, and his recovery has been remarkable, and he is still advocating for veterans, most recently on the suicide prevention and including family members. Our wounded warriors have the spirit, no doubt about it, but lack the same level of medical care.

When neuroimaging is integrated with neuropsychological and neurocognitive evaluations, biometrics and social

functioning, you can get an effective treatment plan and really make a difference in the soldier's recovery.

Number two, Pre/Post Assessments for cognitive and neural functioning. Current technology allows for biomarker testing. And I do not know what the components are of the screening that the gentleman referred to before, but I would be interested to know if that is included. And what I know is that this is a scientific baseline. It is a statement that cannot be changed. A lot of us know that the self- and counselor assessments are not always accurate. People tell us that they lie on them, period. And so that much we know.

We also know that we do not need more money for this. It is already covered under TRICARE. It is a $450 test. We already give a blood test to all the soldiers.

Number three, follow-up treatment. Functional independence is a realistic goal for many. Re-learning their own abilities and developing strategies to make up for injury related deficiencies and losses--it works. We just k now that it works.

Treatment must be personal, bring about patient engagement, positive response, and include performance-based outcomes.

I was employed one time as a caseworker early in my career at a hospital, and if we did not have measurable outcomes, we did not have a job. That is not the current

state of situation that you have going on right now.

Services should be veteran driven and not for the staff's convenience. Scheduling a TBI group during peak traffic hours is a disincentive for participation because it creates more stress than benefits. And as Mrs. Murray know, eight lanes of traffic in Seattle getting to the hospital on Columbia Way between 3 and 5 o'clock--

Senator Murray. It is stressful for me.

[Laughter.]

Ms. Bohlinger. Me, too, as the Mom driving. It is not good for them, and so this last one was canceled. So when you all get the paperwork, it is going to say, "Gee, there were not enough soldiers who wanted to participate." That is not the case. They just cannot do it at that time of day.

Also, their TBI group was canceled a couple of days before Thanksgiving until the end of January. When do these people need care the most? When do they need a contact? Because they have lost their wives. My son lost his high school sweetheart wife. That is when they need the care. So when I say it should not be staff convenience, I mean it should be veteran centered.

And this one I feel very passionate about.

There are many active-duty soldiers and marines who would ask for help if they could without consequences to

their career. Last fall, I was part of a meeting on a military base with over 400 soldiers in attendance, and family members in addition to that. Many had served at least three tours in Iraq. When asked through a confidential questionnaire how many felt they had symptoms of either TBI or PTSD, over 40 percent responded yes and that they would ask for help if there were not negative consequences attached.

And one example I would like to give you is a soldier, 19 years--19 years--in the Army. He has been to Iraq four times. And he was ordered to go again. He told his commanding officer, "Sir, I cannot do that. I am not okay." He has a wife and four children. And his commanding officer said, "Well, sir, then you are going to get a dishonorable discharge." And so the wife called me, and I got a doctor to donate a scan for him, and he is a mess. And he has a severe TBI along with PTSD, and now he is on a medical stay. So those are the things that we are talking about. Their family did not have the money for a scan.

Additional treatment is not always about more money, however. Effective use of current dollars, with measurable outcomes that would include feedback from veterans and family members--I listened to all of what is going on in this testimony, and I find it really interesting because my personal experience has been so different with no mechanism

by which for me to give feedback--good, objective, accurate feedback. I think that that is a critical component in any care, especially of this magnitude.

Also, create incentives that benefit the veteran. Are they in healthy social networks? You know, what are they involved in? Instead, we have created a system where the community mental health providers for the VA are reimbursed for the number of DSM-IV diagnoses. So they may come in with TBI and PTSD, and now they are diagnosed with depression, sleep disorder, "Oh, you might be bipolar," and, "You know, I think you have a borderline personality as well."

I was in a training session with over 250 VA providers. I overheard them discussing how to "tag" the veteran with multiple diagnoses so they could make more money. Clearly, that does not benefit the veteran, and it does not benefit the taxpayer.

Chairman Akaka. Ms. Bohlinger, will you please summarize your statement?

Ms. Bohlinger. Yes, okay. I just admire that you continue to do this, and they fought for us, protected our freedom. We need to protect them.

And I would just say to you:

What does my son miss most? Just working. He is a Montanan. He wants to work.

Thanks.
[The prepared statement of Ms. Bohlinger follows:]

Senator Murray. [Presiding.] Thank you very much for that testimony. It is extremely helpful, and we will accommodate you in Seattle at any time, although I know the heart of Montana wants to be back home.

Mr. Barrs?

STATEMENT OF JONATHAN W. BARRS, OPERATION IRAQI FREEDOM VETERAN

Mr. Barrs. Well, good morning, Mr. Chairman and Ranking Member Burr and also other members of the Committee. As you know, my name is Jonathan Barrs, and I live in Cameron, North Carolina. I just want to thank you for inviting me to testify today before this Committee.

I am 24 years old, and I served in the Marine Corps in Iraq in 2005-06 and also in 2007-08. During my first deployment in 2005-2006, I was a turret gunner in a Humvee. During combat operations, I experienced two improvised explosive device (IED) blasts in a period of a week. The first IED detonated approximately 30 to 50 feet from my vehicle. When it exploded, the concussion from the blast slammed me into the turret. Glass from the vehicle became embedded in my head, but I did not think much of it at the time and I did not seek medical care. The second IED blast occurred about the same distance away as the first. After the second blast, the corpsman checked me out. It was never really documented. He just shined a light in my eyes to see if I could stay with him, and he asked me what day of the week it was. Of course, I never knew what day of the week it was, but...

Shortly afterwards, I was kept off of mission due to stomach problems. I was eventually taken to another Forward

Operating Base, also known as a FOB, because of excessive weight loss and was given steroids to fix the problem.

I was screened by the DOD for TBI, and it was diagnosed in November of 2008. At that time, I never looked to see exactly how it would impact me in the future. Basically, all I knew was I still wanted to be in the Marine Corps, and I did not know exactly what was going on.

I was medically retired in May of 2009. The hand-off from DOD to the VA was very slow. I have been out of the Marine Corps for almost a year now, and I am just now getting care for the TBI. I have also been screened by VA for PTSD, and I have been diagnosed with PTSD and depression.

So far, the VA care has been good, but this whole time of waiting was very hard, and I had to keep asking my primary care doctor for a consult, which took a very long time. I have a case manager at VA in Fayetteville. Her name is Robin. She is a great woman. She really does do everything she can in her power to help me, mostly by just checking up on me. I get random phone calls from her asking me how I am doing, and she reschedules my appointments when I miss them. She is currently helping me change my primary care doctor. The reason behind that is because the doctor seems like he is not really concerned about me, just more concerned about what the books tell him to do.

The honest truth is dealing with TBI is like a living horror film over and over again. Daily things you are supposed to do, you forget. I have missed at least five important VA appointments, also others not so important. I missed a job interview because I forgot about it. When you forget, the PTSD side of you rolls around because you knew you were never like this before, and it makes it very hard for people to deal with you. For example, the relationship I have with my girlfriend. It has been over a year now, and things are not really right due to the injuries, just mostly because I forget things and I get to the point where I just kind of snap. So dealing with all that is pretty hard.

I went to junior college and tried to get through the course work to get a degree, but I was trying and still failing tests. The teachers found out I was in a special populations group and felt sorry for me, and they started giving me all this leeway and saying they will do whatever it takes for me to get a passing grade. I knew that getting passing grades I had not earned would not be the way I wanted to do things. I was only trying to better myself, and they were making it hard to do that because they were willing to make excuses for me.

In conclusion, of all these things that have been addressed, life for me as of now is hard because I look for jobs and the documentation of my Marine Corps--excuse me. I

am sorry. I look for jobs, and when the documentation of my Marine Corps career is shown to the interviewer, just the look on their face will say it all, basically judging off of what my DD-214 is telling them, and when all is said and done, I am denied a job just because they see the words "temporarily disabled."

For the time being I am focused on getting my VA and Social Security squared away and still looking for another career path.

Thank you, ladies and gentlemen, for your time and efforts to help me and also hopefully other veterans down the road. I will be happy to answer any questions that you have for me.

[The prepared statement of Mr. Barrs follows:]

Senator Murray. Mr. Barrs, thank you so much for your courage in coming forward and telling your story to help us understand others. I appreciate your being here.

Mr. Barrs. You are welcome, ma'am.

Senator Murray. Dr. Gans?

STATEMENT OF BRUCE M. GANS, M.D., EXECUTIVE VICE PRESIDENT AND CHIEF MEDICAL OFFICER, KESSLER INSTITUTE FOR REHABILITATION

Dr. Gans. Thank you very much, Ranking Member Burr and members of the Committee. I am Dr. Bruce Gans. I had the pleasure to be here in 2007 and to provide some input, and I am very pleased to be able to be back here and try to give you some sense of, at least from my view, what has changed, where the advances are, and where we still have opportunities for improvement.

In 2007, I made a few recommendations, and I would just like to give you a sense of what those were and my view of what happened since then.

The big theme was trying to find coordination between the private sector and the VA and the DOD, find a way for the organizations to work together, not just on a day-to-day operational basis but strategically, to plan together, to create seamless systems of care that could take advantage of all the collective resources that would be available. We suggested the creation of a Coordinating Council as a mechanism to do that. I am not aware of that type of enterprise having been conducted, and I am not aware of an organized strategic plan between the field, the private providers as a community, and the VA and the DOD as systems of care to try to make a seamless system of care available

to veterans and active servicemembers.

We also talked about the case management and care coordination services and how they needed to be improved, and there has been very significant improvement, as we have heard today. There are still some deficiencies that I will tell you about when I tell you some stories of family members that I have interviewed recently in anticipation of coming here before you.

I also talked about research that was ongoing and urged that there be some collaboration and cooperation between the existing network of traumatic brain injury research systems, the model systems, and the VA and the DOD. I am happy to tell you that there has been some increasing collaboration. There are some data collection efforts with the model systems and the VA Polytrauma Rehab Centers. We heard about a number of research projects that are also being funded, but I will also tell you there are still opportunities in that regard as well.

In terms of the current state of the treatment of individuals with especially severe, the most severe traumatic brain injuries, there are diagnostic tools that Dr. Jaffee, Colonel Jaffee mentioned to you. I will mention a few others. In addition to the functional magnetic resonance imaging and the magnetoencephalography, there is magnetic resonance spectroscopy, there is quantitative

electroencephalography, near infrared spectroscopy. These are tools that are existing but, frankly, not commonly used and not readily available. And more than just diagnostic tools, we are now started to see that they can even be used as tools to guide treatment, to suggest interventions, to monitor the effective medications, to determine what is going on, and to guide changes in treatment management.

On the treatment front, there really have been some dramatic new technologies made available for patients. Many of them are not yet proven scientifically. We have growing clinical experience. We have anecdotes. We do have some examples of specific studies. I want to mention just a couple of them.

The use of medications to treat brain injuries, conventional medicine would have you use one drug at a time and be careful in its administration to figure out what it does. Now the notion is going to be using many drugs all at the same time by expert clinicians who understand the interaction of these drugs and the fact that in combination they may work differently than individual effect. These so-called drug cocktails, which are actually quite a common strategy in cancer care, have not traditionally been part of the care of patients in rehabilitation from serious brain injuries.

Adding nutraceuticals--these are materials that are

available that are not classified as drugs but are drug-like in their effect. They have many interesting properties. Some come from Eastern medicine. There are centers experimenting with and trying to use these additional stimulating drugs in ways that influence the brain neurochemistry.

And there are a whole host of very intriguing interventional strategies available: peripheral nerve stimulation to help arouse the most severely unconscious individuals; direct brain stimulation using either direct current or magnetic stimulation. These are available technologies. They are non-invasive, they are not harmful. They have very low risks, and they have very, very rapidly expanding scope of potential impact. But they are not being widely used in the world of brain injury rehabilitation, partly because they are so new that the full body of research is not totally available.

The strategies in our clinical experiences at Kessler and a few other centers really suggest that the combination of using neuroimaging technologies and multi-drug and multi-physical modality interventions, along with the traditional rehabilitation strategies that we use, seems to have the best potential for making very significant differences in the lives of the most severely involved individuals.

We have had these kinds of experiences at Kessler with

patients. We recently had a publication that has been approved for publication describing our clinical experiences and are about to launch a very significant research project trying to understand these multi-modality approaches and what beneficial effect they really have to offer.

Another problem that you need to be aware of--it was actually mentioned--is there is a very significant shortage of professionals who know how to take care of people with brain injuries. Whether it is physicians, therapists, psychologists, neuropsychologists, there just are not a lot of people who are highly skilled and dedicated to this population. These folks are extremely difficult to take care of. They are stressful for providers to take care of. And there is not that great capacity to train people in this country, and I am going to make a recommendation or two specifically in that regard as well.

In terms of the coordination opportunities, there have been significant advances in the VA system, and I would like to recognize and applaud the work that has gone on. I personally had the opportunity to visit the Richmond VA Polytrauma Center. I have had a chance to visit the Center for the Intrepid in San Antonio, just as a couple of examples of where the DOD and the private sector and the VA have really made significant improvement in capacity in general to provide for care.

But to find out what it seems to be like in the real world that I live in, I interviewed about two dozen providers of rehabilitation--executives, physicians, people in research, people who run large companies of rehab, people that provide--are part of advocacy organizations--to just ask them 3 years later, how is it going, what is your view, what are you seeing in the real world about how the private community is able to work with veterans, active military, what is going on. And that is, sadly, where I have to tell you that from the views of those of us that I talked to, there just does not seem to be a lot that is different. There definitely are some centers that have had a slow trickle of individuals. Most places have become capable of working with TRICARE to provide services under that financing mechanism. The single most common word I heard from these people I talked to is "frustrating." These are folks who have the capacity to provide high-quality brain injury care and services, want to do it, want to be able to work within the system, but just have not consistently had a flow of individuals.

In late 2007, 2008, some folks experienced a slight increase in referrals. Many of those seemed to disappear with time. It seemed to be coordinated with when the VA became--was able to staff up and build capacity. That may be just fine, but it is an observation that we made.

I would like to just contrast that experience with what is going on with the VA and the DOD in another area, and that is with amputations. We see a number of patients who have traumatic amputations and injuries, and in that case we have seen dramatic advances in the technology of prosthetics by collaboration between the DOD, the VA, private providers, new exciting limbs being developed by DARPA for upper extremity amputees. And we have seen significant improvement in the capacity to care for the amputees and their prosthetic needs. And I would point out to you it was said to me that about 97 percent of the amputee care that is provided by the VA is done through private contractors. So in that particular case, the VA does use a network of community-based prosthetists to actually deliver the care and services, and it is high quality and has all the characteristics I think people would want to see.

Another comment that I would like to share with you is the significant improvement in case management services. But what is interesting is that--what I was told is that, well, they are managing the people, but they are still not able to help them get access to the care, because although they are case managing and coordinating, there are still very significant limitations of who is available to be seen, to be referred to, to provide expert services. So the coordination is good, but the consequence of that

coordination, the actual impact by having services delivered seems to still be deficient in the experience of the folks who I talked to and to some degree the experience--

Chairman Akaka. [Presiding.] Dr. Gans, please summarize your statement.

Dr. Gans. I will.

The last thing I would just like to say is I did talk with three active-duty servicemembers and their families Monday afternoon who are currently at Kessler, and they wanted me to share just a few of their experiences with you. They found that they would like to see easier ways of working with the system, the bureaucracy and the difficulty of having their choice to be expressed, to want to move to another provider outside of the VA Polytrauma System. One wife told me it took her a year from the time she started requesting until she was finally able to get a referral to--it happened to be Kessler in this case, and that was a lot of work and energy. That led to a sense of guilt. If they had only been able to start sooner, might things have been different? They felt that it just all took too long, and they also felt that there was a significant problem with access to services if they were to move into--accept medical discharge. They felt their resource access would be substantially reduced in terms of their flexibility to actually receive care and services.

I guess I would like to close by thanking you for giving me the time to speak to you again, appreciating all the work the VA has done, but saying there are still things left unfinished.

[The prepared statement of Dr. Gans follows:]

Chairman Akaka. Thank you very much, Dr. Gans. Mr. Dabbs?

STATEMENT OF MICHAEL F. DABBS, PRESIDENT, BRAIN INJURY ASSOCIATION OF MICHIGAN

Mr. Dabbs. Good morning, and thank you, Senator Akaka and Senator Brown and members of the staff of the Senate Committee on Veteran Affairs, for the opportunity to address you about how effective State, local, and private entities have been engaged by the Veterans Administration to provide the best access to care and services for veterans with TBI.

The Brain Injury Association of Michigan was incorporated in 1981 as a 501(c)(3) nonprofit organization and is one of 44 chartered State affiliates of the Brain Injury Association of America. We are one of the leading State affiliates due to Michigan having more brain injury rehabilitation providers than any other State in the country. This extensive provider network has been developed over the past 37 years as a result of Michigan's auto no-fault insurance system. It provides a lifetime continuum of care with a singular focus: to assist the injured victim recover to their fullest potential. My written testimony provides a comprehensive overview of our association, its veterans program under the guidance of Major Richard Briggs, Jr., U.S. Air Force (Retired), who is with me today, and the collaboration with the Michigan Department of Military and Veterans Affairs, the members of the Joint Veterans Council, the Veterans Service Organizations, the Michigan Association

of County Veterans Counselors, and the Veterans Integrated Service Network 11 director and staff. As a result of this collaboration, I will share my observations, possible approaches, and potential solutions in response to the Committee's inquiry. My comments only reflect my experiences within the Michigan region of VISN-11, which is the lower peninsula of Michigan.

In Secretary Shinseki's report, he indicated a number of "landmark programs and initiatives that VA has implemented to provide world-class rehabilitation services for veterans and active-duty servicemembers with TBI." These are important developments, but let me express a few concerns.

One, Enclosure A of his report, page 2, states that "VA directed medical facilities are to identify public and private entities within their catchment area that have expertise in neurobehavioral rehabilitation and recovery programs for TBI." To date, in Michigan there have been only three such referrals according to the VISN-11 Cooperative TBI Agreements Patient Tracking FY09 report. One of these was due to a mother's insistence that such care be provided to her son.

This is a critical part of my testimony. I have provided a chart based on the information shown on the Commission on Accreditation of Rehabilitation Facilities,

better known as CARF, website that indicates all accredited brain injury providers in the United States. This report indicates that in military commission alone, there are nine brain injury residential rehabilitation providers with 78 facilities; that is 24 percent of the U.S. total. Eight brain injury home and community-based rehabilitation providers with 16 facilities; that is 33 percent. And there are similar percentages for outpatient rehabilitation providers and vocational rehabilitation services.

There are even more non-CARF-accredited providers in Michigan, but, unfortunately, none of these providers or the CARF-accredited providers are being utilized to the extent they should be by the VA. And I am going to provide the Committee with this book, which is our directory of facilities and services in Michigan to the Committee as a future reference.

Point two, Enclosure A, page 2, of Secretary Shinseki's report, the second paragraph states the numbers and cost of veterans with TBI receiving inpatient and outpatient hospital care through public and private entities for fiscal year 2009. The average cost indicated is approximately $5,800 per veteran. Let me give you a comparison.

As part of the Michigan Department of Community Health's TBI Grant from HRSA, Michigan's Medicaid data during the past 4 years indicates the annual average cost of

$28,500 just for services with a TBI diagnosis, an annual average cost of $41,200 for services with TBI and non-TBI diagnosis. I believe these numbers may be further indication of less than optimal use of outside contractors or, at the very least, not fully using these contractors and should be reviewed in greater depth.

Point 3, Enclosure A, page 4, number 4 discusses "Programs to maximize Veterans' independence, quality of life, and community integration, and establish an assisted living pilot." I would recommend to the VA that they immediately explore and/or expand such a pilot using the Michigan CARF-accredited providers. In fact, the solider whose mother was insistent on the care outside of the VA system might be one to include in such a pilot.

There are other concerns of equal importance that have been stated to us by the Michigan Department of Military and Veterans Affairs. I urge the Committee to review these as part of my report to you in terms of your future actions.

Again, let me thank the Committee for allowing me to testify. Brain injury is an unique injury that has by some been called a "life sentence" to veterans and to their families who do not receive timely--and I want to emphasize that word, "timely"--comprehensive, and sufficient cognitive rehabilitative care.

In wrapping up, let me personally testify to this fact.

My father, who served with the United States Marines during the assault on Guadalcanal, sustained a brain injury that we learned about near the end of his life. His undiagnosed brain injury was diagnosed in the late 1970s, early 1980s as PTSD. The VA's treatment at that time was to overprescribe (my opinion) medication. It was not until there was a determination that there was a brain injury and the medication protocol was greatly changed did he ever have the quality of life he should have had while raising his family.

On behalf of today's veterans, let me plead that we collectively do everything in our wisdom and power to prevent their lives having the same fate. Thank you.

[The prepared statement of Mr. Dabbs follows:]

Chairman Akaka. Thank you very much, Mr. Dabbs.
And now we will receive the statement of Dr. LaPlaca.

STATEMENT OF MICHELLE C. LAPLACA, PH.D., ASSOCIATE PROFESSOR, WALLACE H. COULTER DEPARTMENT OF BIOMEDICAL ENGINEERING, GEORGIA INSTITUTE OF TECHNOLOGY, AND INSTITUTE OF BIOENGINEERING AND BIOSCIENCE, LABORATORY OF NEUROENGINEERING, EMORY UNIVERSITY, ATLANTA, GEORGIA

Ms. LaPlaca. Good morning, and thank you, Mr. Chairman and the Committee, for the opportunity to share my thoughts and experience from a professor and a research's point of view on the current state of traumatic brain injury research, diagnosis, and treatment.

We have heard a lot about transitioning between DOD and Veterans. What I am going to be discussing is a transition that occurs before then in terms of getting the latest research into the clinic and to our warfighters and our veterans in a timely manner.

My primary research interests, as Senator Isakson pointed out, are in traumatic brain injury. I studied biomechanics as well as acute mechanisms and different treatments.

I first became interested in the brain when I took a research assistant position at Walter Reed Army Institute of Research as a sophomore in college. The complexity of the brain is what intrigued me then and what still drives my enthusiasm today over 20 years later. Since that time, we

have passed what NIH termed the "Decade of the Brain," entered a new century and several military conflicts which have exposed new war-related health care issues.

The advent of new protective materials, as has been noted, has improved survivability, and that is a wonderful thing and I commend the biomaterials and the engineer folks who developed those protective mechanisms. But they have left us with more injured warfighters and more disabled veterans than ever before to care for. So I will highlight some of the advances, some of which have already been noted. I will be brief.

Collectively, TBI researchers--and that is in military labs as well as academic labs--have uncovered numerous cell pathways over the past few decades that lead to cell damage. Cells can be compromised in different ways. They can be injured from both what we are calling a traditional brain injury--a contusion--and from a blast. In both cases, the brain tissue itself undergoes deformation, although blasts produce that deformation at a much higher frequency. We need to learn what we can from existing models of brain injury because they do tell us things that blast injury models have yet to uncover.

We have refocused attention on damaged receptors, membranes, and white matter, all of which affect cell communication and lead to ultimate disabled function.

Inflammation, vascular damage, and edema are all events that have multiple components to them and are being revisited by scientists. How exactly these are related to each other and how they can be targeted for therapeutic intervention, however, is still not well understood.

Genomics and proteomics techniques where large numbers of genes and proteins can be screened offer an enormous opportunity, also an enormous amount of information that must be analyzed using very sophisticated models. A repository of both experimental and clinical data would provide data sets to researchers to drive validation studies and generate new directions of research and potential treatments.

As of today, we have no FDA-approved treatments for TBI itself. Most clinical interventions will stabilize symptoms, such as reducing intracranial pressure, and then the warfighter, the TBI patient goes on to rehabilitation and post-care. Some of the reasons for that are divided into four broad categories.

One, the heterogeneity. No two traumatic brain injuries are alike. We heard about polytrauma that is now being appreciated. We do not model polytrauma in the lab. This is a huge gap in research.

Variables like age, underlying health, genetic make-up, and environment factors all affect injury outcome. One size

does not fit all in terms of treatment or rehabilitation, and personalized care must be sought.

Complexity is the number two reason for no treatments. Injury mechanisms are poorly understood and leave the question as when to intervene and how to intervene. Combination therapies are likely.

Diagnosis is different and crude due to the heterogeneity and the complexity I just discussed, as well as the clinical classification systems. New diagnostic tools such as biomarkers and imaging must be worked into this classification system. And there are poor clinical translation avenues. Most of the clinical trials are funded by industry. Most researchers do not know how to translate their successful results. Clinical trials must be done on sound science, but yet many of the successful experimental results are never tested in the pre-clinical setting.

So, lastly, some of the challenges that were faced as a result of this: continued and increased collaboration between academic, medical, and military training facilities in terms of medical care, TBI awareness, and treatment strategies. Programs that fund pre-clinical experiments, better diagnostic and uniform registries across the country. These need to be developed in parallel with point-of-care technologies and diagnostics.

More coordination is needed between basic and clinical

research. One of the most underutilized laboratories is the clinic itself. Systems engineering and informatics approach to handle the vast amounts of data will be needed to implement and decipher all of these compromise data sets. And continued dissemination of findings and dialogue among educators and the clinic and the VA is required.

Clinical trials must be fast-tracked and have uniform injury management guidelines, as well as deal with HIPAA and IRB compliance, and these are major hurdles in the current system.

So, in closing, the fields of neurotrauma and trauma medicine are at a very exciting crossroads, and I thank the Committee for providing me the opportunity to share my thoughts on this.

[The prepared statement of Ms. LaPlaca follows:]

Chairman Akaka. Thank you very much, Dr. LaPlaca.

This question is for all the witnesses. You can do it in one word or a brief comment. It is my view that VA care for TBI has dramatically improved since the start of the war in Iraq. My simple question to you is: Do you share that view?

[Ms. Bohlinger nodding affirmatively.]

Chairman Akaka. Ms. Bohlinger says yes.

Mr. Barrs?

Mr. Barrs. Yes, sir.

Chairman Akaka. Dr. Gans?

Dr. Gans. Yes, it has.

Mr. Dabbs. I would tend to agree.

Ms. LaPlaca. I would agree.

Chairman Akaka. Now, Ms. Bohlinger, you mentioned the importance of family, family involvement in treatment, and I certainly agree with you. As the mother of a veteran with TBI, and as a family caregiver, what services and support have been most important to you in helping to care for your son?

Ms. Bohlinger. I would say, Mr. Chairman, the most important has been the TBI group on an ongoing basis, because what it does is give him real people to be around. His life is very isolated now, and even the telemedicine, while that is going to be really important, for some of

these individuals their worlds have become so small that they do not get a person-to-person contact.

So I would say that group setting has been helpful. They just need to schedule it at a time that is convenient for the veteran.

Chairman Akaka. What services did you not receive that would have been helpful?

Ms. Bohlinger. Services that I did not receive would include the scan when that was requested, because I knew the other assessments were not correct. Services for me, you know, it is wearing. I am emotionally, physically, financially exhausted after 5 years. And when we talked about integrating family members, in our situation that is not going on yet. They set up separate groups. Then they used information, very candid information that we gave, and then went to our loved one and told them, and it undermined trust. And so you can imagine then having to create another bridge to get back with your loved one and have him trust you.

Really, it just all needs to be together. It needs to all be together.

Chairman Akaka. Thank you.

Mr. Dabbs, you mentioned that in VISN-11, only three veterans have been referred to private care by VA. Do you have any sense of why this is the case or how many other

veterans could benefit by increasing referrals?

Mr. Dabbs. Yes, sir. I think as it pertains to your question and in answer to this one as well, the VA has made significant strides of improving care, but I believe, at least what we are seeing in Michigan, that there is total inadequate resources available within the VA to be able to execute that care for the numbers of people involved. And therein lies the problem. I think it speaks a bit to Dr. Gans' point a moment ago where he indicated that there is a very finite number of people who work in the field of brain injury and brain injury rehabilitation. The VA does not have them. The private sector does not have them. It means that it is more critical than ever that the two work together close to be able to provide this care that is needed.

Chairman Akaka. Thank you.

Dr. LaPlaca, while I am a strong supporter of VA research, your testimony about the difficulty you have had in cooperating with VA is unfortunate. What benefits would you expect to see if you were able to work more closely with VA?

Ms. LaPlaca. Thank you for the question. It is a very important issue. There are many successful research collaborations between academic professors and VA researchers, and there is a lot of encouragement to do so.

So although I have had some frustration at the level between myself and other researchers, there is a lot of enthusiasm to share ideas, share research resources.

I think an added benefit for me is to have more exposure to the patient. The VA researchers, they have a more realistic idea of the needs and how that can trickle down and what needs to drive our research.

I think the main problem is that there is bureaucracy. There is a lot of IT issues. You know, computers cannot come out of the VA, so data sharing has to be done pretty much off-site, which requires approval. There are hurdles like that that are just--that part of it is frustration. But it is possible, the VA system has made it possible for academic researchers to have appointments within the system and compete for VA merit grants. But it is not widespread, and it can be difficult.

Chairman Akaka. Thank you very much.

Senator Tester?

Senator Tester. Thank you, Mr. Chairman.

I think it is important to point out before I get into my questions that the previous panel stuck around--and I want to thank them for that--to listen to the comments of this panel. I very much appreciate that, and I appreciate your commitment.

I want to start with Ms. Bohlinger. You talked about

the fact that your son is a rural kid living in Seattle in an urban area, and it is just impossible to get them back to the State. What would the VA have to do to be able to allow you to bring your son back to a State like Montana?

Ms. Bohlinger. Well, I would like to see a polytrauma center, because he goes in twice a week yet for services, and we do not have those services available. His medical team is important.

Senator Tester. So if a polytrauma center was set up, that would take care of it.

Ms. Bohlinger. Yes.

Senator Tester. Okay. One of the things that I think is very important is everybody has equal access, and you talked about in your opening remarks that you got different treatment as--I will just say "as a regular person" than as the Second Lady of Montana. Could you tell me what the difference was? Can you give me an example of how it was different? Because it should not have been. It should not have been different for you or me or anybody in the audience. The level of respect and treatment should be the same.

Ms. Bohlinger. An example would be when I was led through a particular center, I was able to talk with certain veterans only. I went back on my own time to talk to whoever I wanted to, and the other veterans that they

steered me away from, they said, "Oh, no, you cannot go in that door; that gentleman is having issues," I went back and talked to people and found out what they were really experiencing.

Senator Tester. Okay. Dr. LaPlaca, you talked about--and I am not a researcher. I am not an M.D. I majored in music, not in science, so this is out of my area. You talked about you could not duplicate polytrauma in the law. I do not want to put words in your mouth, but that is what I heard you say.

Is that because we have not tried, or is that because it just cannot be done?

Ms. LaPlaca. No, let me rephrase that. Perhaps I misspoke. I said it is not studied in the laboratory.

Senator Tester. Okay.

Ms. LaPlaca. It is not a common--our injuries that we study are very homogeneous, not heterogeneous like the real population.

Senator Tester. Would it be your advocacy then that we head in that direction?

Ms. LaPlaca. I think it is going to be very important. I think there will be some hesitation to do that because even studying an isolated brain injury alone is so complex that I think it scares most researchers to think, okay, well, let us add, you know, a leg injury or a lung injury to

that.

However, I think we have to bite the bullet, and we have to move forward in that direction in order to--I mean, a drug that works on a brain injury may not work or may be adverse to give to a patient who has multiple thoracic injuries.

Senator Tester. Okay. Thank you very much.

I want to thank everybody on the panel today for being here and sharing your time and your stories and your vision with us. Thank you very much.

Thank you, Mr. Chairman.

Chairman Akaka. Thank you very much, Senator Tester.

Senator Brown?

Senator Brown of Massachusetts. Thank you, Mr. Chairman. I appreciate your patience with me running around today. I have a bunch of different hearings, so thank you. And thank you to the panel.

Jonathan, in dealing with your situation--first of all, thank you for your service and your sacrifice. I know you are dealing with trying to get your life back on track. What can you tell me that would help other soldiers who are in similar situations? Because in reading about you and having my team brief me, it seems to be the biggest problem was the time and the fact that it was like molasses. You always felt like you were in quicksand trying to get the

answers, trying, you know, to get help, trying to get the services. I was hoping you could tell us what would be something that would be--that we could do and make recommendations to the appropriate agencies?

Mr. Barrs. Thank you, sir. I would say when I first got out I was still--I guess as you can say, I can meet a new person, it is okay, because, you know, you got new guys coming in the Marine Corps all the time. And like I said in one of my statements, I just started getting treatment for my TBI. That was last month. And I think if they were to be faster with it, it would be--I cannot think of the word.

Senator Brown of Massachusetts. Better results? Quicker results?

Mr. Barrs. Along that, and also you would be able to, I guess, talk to somebody and let them know, because as Ms. Bohlinger, her son, I actually know what she is talking about. I am not very good at meeting new people, and I am isolated. I do not just speak for myself. I think it is for everybody else out there that also has this injury.

So I think--and also it does not, like waiting on, for instance, myself, Winston-Salem to give me a letter, I mean, that is--I can wait all day for that. But when you got a primary care doctor, as I stated, he is more--he is more going on the book, what the book is telling him what to do. I am asking for certain things. I am not asking it--well,

as they say, "I am not asking for my health." Actually, I am.

[Laughter.]

Ms. Bohlinger. That is okay.

Mr. Barrs. It is just the doctors--it seems like just the doctors I have met, I guess that is where it starts. And it is like they are 9:00 to 5:00 people. You know, I am over here struggling wondering how I am going to get the next meal on the table because I have not got my VA rating yet. And this guy is making $100,000 a year, and he is just basically pushing me off.

Senator Brown of Massachusetts. So let me ask you a question. When you came off of active duty, traditionally you get, you know, the--you get evaluated, you get determined if there is any type of disabilities, any injuries that are--did you go through that exit process with your unit?

Mr. Barrs. What happened, see, as you guys said, yes, there is a pre-deployment and post-deployment, but as I can say--and I do not mean to sound rude--you have to realize--you know, I have seen combat. I know I am going to be different. And I am not going to write on some piece of paper, yes, I have seen this, yes, I have seen this, because, yes, there are consequences. I never wanted to get out. But--I totally--I am sorry.

Senator Brown of Massachusetts. No, that is okay, because what I am trying to just figure out is in my experience as a JAG in the military, one of the biggest problems, Mr. Chairman, that I recognize, and members of the panel, is that as a lawyer I look at, okay, this is the problem, how do we solve it, how do we make it better, how do we streamline and how do we get the services and access better. And not to put Jonathan on the spot, but what I found--and I am hoping that you all can address, whoever is in the room dealing with these things--is when the people are doing their post-deployment and they are being evaluated, we need to make sure that we have--that every State has the tools and resources to quickly and effectively and compassionately evaluate our soldiers, because you are taught in the military to be macho and to be tough and to, you know, bite the bullet, pull up your pants, you know, the whole--it is the same with postpartum depression with women. And I am hopeful that each States--and Massachusetts is a little bit different. We have identified it a little bit better. Montana is different, it seems.

So how do we make sure that each soldier that is getting through with their duty is quickly and effectively evaluated? And is there anyone on the panel that can address that? Sir?

Mr. Dabbs. Senator, what we have done in Michigan,

Major Briggs has developed a great working relationship, and every single unit that comes back Major Briggs briefs regarding brain injury. Also as part of that, he briefs their families. And it is really--as Mrs. Bohlinger indicated earlier, it is often the family that is really the key person, the key group to help identify.

That does not solve the screening issue or any of that, I realize, but I think it is the easiest step that could be executed immediately in almost every State of this country if we were to choose to do so.

Senator Brown of Massachusetts. Well, is there a national plan that is, in fact, being instituted or is it being left up to individual States to do this? Is there a national model where we are saying to the States and/or the individual units, whether Guard, Reserve, active, "Hey, this is what you guys need to do. When somebody gets home, this is going to happen. We are going to brief the families and let them know"--is there a plan like that?

Mr. Dabbs. Sir, I am not aware of one. You know, and let me as part of that, though, throw out one other point that I think the Committee needs to recognize. We talk about the VA, or at least what we have seen in Michigan, being overburdened. I got some figures yesterday from the Department of Military and Veterans Affairs of Michigan that indicate that there are over 725,000 veterans in Michigan,

and yet only 230,000 are enrolled in the VA. So not everyone is even taking advantage of that system, and yet the system is already just overburdened. Just overburdened.

Senator Brown of Massachusetts. Right. Mr. Chairman, do I have a chance to continue on for a little bit?

Chairman Akaka. Surely.

Senator Brown of Massachusetts. Thank you.

And that is one of those reasons because, you know, not everybody stays in the military system. They get better primary care coverages, obviously. And one of the biggest complaints that I have heard in my many, many years of serving and just being alive is that people do not feel that they are getting the best service, the most quality services the VA--as evidenced by what happened a few years ago. I know we are trying to tackle those very sensitive problems, but, ma'am, if I could direct my question to you, thank you for your sacrifice and your family's sacrifice and your son's service. You mentioned briefly the respite care that you have, and you have made the resources a little better for you to travel and go to see your son and the like. And being who you are, you get that little extra help, which is--whatever it is, if it was my son, I would not care. I would go through the wall. It does not matter.

What suggestions or improvements can you give to us that we can convey to the appropriate authorities as to how

to help people in your situation who are affected by, you know, the change in their kids' lives.

Ms. Bohlinger. Thank you for that question. I would just refer back quickly to what Jonathan said because I think this is at the core of it. It is that length of time delay. While I did have resources, I have spent over $180,000 of my retirement on this care.

Senator Brown of Massachusetts. Right.

Ms. Bohlinger. Now, that is going to be difficult at my age to try and make up. And, frankly, I will spend it all if I need to. But when he said, "I do not know where the next meal is coming from"--because there are no resources in between. If you do not have a family member who is going to pay your rent, buy your groceries, pay your bills, get everything taken care of for you, you know, a couple of years go by, that is a lot of money. And it is very stressful, if I may do this, for the individual because you guys are taught to be macho. Failure is not an option. You take the warrior creed. And so then to not only be dependent and know that your life has changed, but now you have to ask someone to, you know, buy your groceries and help you put food on the table because you served your country and in a year or two they cannot get that determination done?

Senator Brown of Massachusetts. Right. You know, Mr.

Chairman, one of the things I would hope that with your leadership we could direct and insist that we speed up the process, because when somebody is hurt like this and they need our help and resources, I feel the delay is the biggest obstacle. We should be able to process these soldiers quickly and effectively and give them the funds and care and love and attention that they need right away. And to think that somebody is going a couple of years before they even get, you know, screened properly and properly identified in this day and age just blows my mind. And I do not know, you know, offline, if we can talk, the three of us, and kind of come up with a plan and get some guidance and try to push the buttons and get the fire--you know, put the fire under somebody, because it is unacceptable to me, Mr. Chairman. But I thank you for your allowing me to inquire.

Ms. LaPlaca. Excuse me. May I add to that? I think there is another reason to speed up the time, not just in terms of these very important issues, but also the injury is getting worse over time.

Senator Brown of Massachusetts. The recovery time.

Ms. LaPlaca. The window for recovery is--

Senator Brown of Massachusetts. It gets smaller and smaller.

Ms. LaPlaca. It is small. Things are ongoing. You can do delayed treatment, but the longer you wait, the less

beneficial it is going to be for most veterans.

Senator Brown of Massachusetts. That makes sense with any injury, and since you spoke up, how do you think the VA can better partner with nongovernmental health care providers to help in that effort?

Ms. LaPlaca. I think more of what we are already doing in terms of collaboration, I think multi-agency funding mechanisms that require and encourage basic findings to get to the right level, and--

Senator Brown of Massachusetts. But none of that is in place now, right, really? In reality, none of that--

Ms. LaPlaca. No, the previous panel spoke about many granting programs that are in place, and the 2007 appropriations for traumatic brain injury research included both clinical and basic research. But I think, you know, that was a good boost for the community, but it needs to continue. We need more of it. We need more cooperation among the agencies.

Senator Brown of Massachusetts. Thank you.

Mr. Chairman, I have to get back to the other hearing now. Thank you.

Chairman Akaka. Senator Brown, thank you so much for your questions and the responses that you received. I agree with you. This is why we are holding these hearings, to bring the different parts of our Government, including

Congress and the administration, together so that we can move more quickly. And I would tell you that we are so fortunate we have brought into play advanced funding to deal with this because without resources we cannot do it. So now it is a little easier to do it because we now have the possibility for better resources.

And so all of these are coming in quickly, and I expect to see movements faster than there has ever been before. And so with your experience and your recommendations, we can move more quickly in a concerted way.

Mr. Dabbs, do you have a comment to make?

Mr. Dabbs. Senator, if I may--and it may go out of the purview of this Committee, but I would like to at least toss out the idea that one of the hindrances that we have seen with TRICARE is that they operate under the Medicare guidelines. The Medicare guidelines do not provide for cognitive rehabilitation for long-term care, and therein lies one of the major stumbling points that is affecting the VA as well as DOD. So I would urge, if there is a way that that could be addressed, I would certainly be willing to share our thoughts with the Committee at a later date.

Chairman Akaka. Well, with that, may I ask any member of the panel for any--if you want to, make a closing statement as to what you think about what we can do. Dr. Gans?

Dr. Gans. I would like to just add that the notion that I have heard from family members and those patients who are able to advocate for themselves is very similar to what Ms. Bohlinger and Jonathan Barrs have said. It is timely access and it is choice, and whether it is choice of staying within the VA Polytrauma System, which many people are very happy with and that is their choice, that is great, but if it is choice for using a facility that has certain other resources available in a different location or if it is choice to be closer to home and community, and it is timeliness, the stories that I heard from the family members I talked about, waiting a year and fighting for a year to provide services, to get Members of Congress to help advocate on their behalf to get services provided. It is just not the right way to treat these folks.

Chairman Akaka. Thank you.

Dr. LaPlaca?

Ms. LaPlaca. Chairman, as an engineer and as a scientist, we are constantly looking for innovative solutions to these very problems. However, I do think we need to take a look at home health care and simple solutions. I mean, cognitive rehab over a long period of time can be done in a simple manner, in an inexpensive manner, if it is organized and if it is part of these programs.

So while people are waiting for the doctor--I mean, there are a lot of problems here that need to be addressed. But organizing these case managers and some of these transitional programs, it is worthwhile, in my opinion, to look for simple solutions that can be implemented and taken home, and that I think partially addresses some of the rural area problems as well as some of the cognitive rehabilitation that is so critical.

Chairman Akaka. Let me ask a final question to Mr. Barrs because I think your answer and what you have been through will help us. I am very concerned about your testimony that you were twice exposed to IED blasts in your first tour, but were not screened for TBI until late 2008. In the interim, you were sent back for a second tour without proper treatment. Were you ever told why it took so long for you to be screened and treated?

Mr. Barrs. Mr. Chairman, when I was in Iraq for my first tour, we were at this train station that we were building up, so we did not really have that much to work with. And I had in my statement that I had to go to another FOB, also known as the Forward Operating Base, because of excessive weight loss. I was puking every day. I could not hold anything down. And I lost approximately 40 pounds in 2 weeks. That was my biggest issue, I guess, and because we had really nobody--I never really noticed that I had glass

in my head until I got back to the FOB. I took off my Kevlar, and then when I ran my fingers through my hair, that is when I noticed it. So I did not really say anything. I am still walking. You know, the good Lord let me keep alive, so I was just, like, okay.

And the second one, it was noted. It was never put into my medical record. It is just the corpsman just checked me out and went, and I never said anything on my pre-deployment--or, you know, post-deployment/pre-deployment stuff because I am United States Marine. I am not--I am not good to--I am not going to argue. The only thing that really got it started was I had these horrible migraines, and finally it took several BAS appointments just to get looked at for my migraines, and as soon as that hit, I really did not have time to think. It was appointment, appointment, okay, you are out of the Marine Corps now.

So it could have been, you know--like I say, it could be my fault, too, that it was not done fastly. But like I said, also I am United States Marine, and I am not going to argue about what I do.

Chairman Akaka. Thank you very much, Mr. Barrs. I asked that because we need to deal with some of these delays that have occurred and improve our system.

I believe that together we have made important strides in caring for veterans with TBI. VA has dramatically

improved services for these veterans. We are learning more each day about how to screen, diagnose, and treat this signature wound of the current wars. I thank the VA employees and providers throughout the entire VA system for making this possible. However, as long as we have any veterans with undiagnosed TBI, partnerships with community providers left untapped, or research left undone, there is still work to do.

I will conclude by thanking all of our witnesses for your testimony today. Your insights, without question, have been helpful in better understanding the state of TBI care. I especially thank Mr. Barrs for his service and his sacrifice. Also, Mrs. Bohlinger, I thank you and thank your son for his service as well.

Finally, I again acknowledge and commend the roughly 280,000 VA employees who choose to work for veterans and their families. As many of you know, this is Public Service Recognition Week, an ideal opportunity to recognize and thank those who serve or our former servicemembers with such dedication and commitment. I offer you our gratitude.

Thank you very much, and thank you for this great hearing. This hearing is now adjourned.

[Whereupon, at 12:06 p.m., the Committee was adjourned.]