

Traumatic Brain Injury/Brain Injury Association of America

Veterans with TBI - The Veterans Health System

February 1, 2008

>> On behalf of Jamie Martin Heppel, the director of the traumatic injury program. I would like to welcome you today to the webcast. We've had a focus on returning service members with TBI since it was a significant injury of the Iraqi and Afghanistan wars. They're connected with defense and veteran systems to ensure our service members with TBI are identified and receive the services and community support that they need. The veterans health system is a critical provider of these services to veterans and their families. To assist our grantees in partnering and collaborating we're pleased to provide this webcast which will give an overview of the system and special resources available to service members with TBI.

Before we begin there are a few housekeeping things I need to go over with you. The slides will appear in the central window and should advance automatically. The slide changes are synchronized with the speaker's presentations. You do not need to do anything to advance the slides. You may need to adjust the timing of the slides to match the audio by using the slide delay control at the top of the messaging window.

We encourage you to ask the speaker questions at any time during the presentation. Simply type your question in the white message window on the menu, on the right interface -- on the right of the interface, select question for speaker from the drop down menu and hit send. Indicate your state or organization in your message so we know where you're participating from. The questions will be relayed to the speaker periodically throughout this webcast. If we don't have the opportunity to respond to you during the

broadcast we'll email you afterwards. Again, we encourage you to submit questions at any time during the broadcast.

On the left of the interface is the video window. You can adjust the volume of the audio using the volume control slider, which you can access by clicking on the loudspeaker icon. Those of you who selected accessibility features when you registered will see text captioning underneath the video window.

At the end of the broadcast, the interface will close automatically and you'll have the opportunity to fill out an online evaluation. Please take a couple of minutes to do so. Your response will help us to plan future broadcasts in this series and improve our technical support. Our speaker for today is Ms. Jean Langbein. Now, Jean received her masters of social work degree at the University of Pittsburgh. Worked with a licensed clinical social worker for the past 16 years at the Pittsburgh VA and the Washington, D.C. VA Medical Centers. She's the Operation Iraqi Freedom, Operation Enduring Freedom Program Manager at Washington and the lead program manager for Vision V. Veterans Integrated Services Network. She was a case manager at Washington, D.C. She has been a speaker at both regional and national conferences, on the topics of polytrauma and issues related to Operation Iraqi Freedom and Operation Enduring Freedom. Please welcome miss Jean Langbein.

JEAN LANGBEIN: It's a pleasure to be here and on behalf of the VA we're pleased to have an invitation to come from HRSA and speak on this very important topic that we hold very near and dear to our hearts. Today I'll be talking about the VA and how it has developed its system of care in regards to TBI and the Polly trauma system of

rehabilitation care. Because of the new era of casualties we're seeing we've had to step up and provide and develop a new kind of care to address these issues.

Next slide. The VA has a National Program Office Team and located within that team is Dr. Lucille Beck, who is a consultant for rehabilitation services. Dr. Barbara Sigford. The national director for Physical Medicine and Rehabilitation Services. Gretchen Stephens, the national coordinator for the Polytrauma Program and Dr. Micaela Cornis-Pop, Dr. Sigford is out of Minneapolis and Gretchen Stephens and Dr. Cornis-Pop are located in the Richmond, VA. Our team is national in scope.

The next slide. What we have tried to develop is a program and a system of care to provide a sense of continuity. We're seeing a number of individuals and service members survive very serious injuries that in previous times would not have done so. We are also, due to technology, able to receive a lot more information, more expeditiously and the service members are being expedited out of combat, they're moving on to regional medical center at a quick rate. From there they're stabilized and move to Walter Reed Army and Bethesda Naval Medical Centers. In previous times it may have taken days or weeks to get to state side. Now we're seeing it almost occur in hours. So the process is being speeded up greatly. From Walter Reed Army and Bethesda National Naval Medical Centers the VA is being incorporated and brought into the part where the acute rehabilitation services are being provided.

Next slide. What do these patients really need? Well, because of their severity of injuries and the type of injuries we're seeing they really require a closely integrated network and that network is rehabilitative care that covers across the battlefield moving to the military

treatment facility and then into the VA facility. In that process they require seamless transition and what we want to do is optimize when and where that treatment is received.

Next slide. Because of the type of injuries that we're seeing, they also require highly-trained clinicians, a very significant infrastructure and administrative support and a unified treatment and communications system. Throughout that whole process, they also require comprehensive case management of each individual. What we want to make sure is that they are appropriately and expediently transitioned throughout care. It's patient focused, patient driven and the patient care needs determines when and where the treatment is provided.

Next slide. The VA is in the business of helping to rebuild wounded lives. If you look at some of these pictures we want to help that person return to a level of independence, to back establishing close family ties, enjoying recreational activities, living as full and successful life as is possible. These individuals are also much younger than a population that the VA has seen in years past. So because of that, we've had to adjust some of our needs and issues and programs and services available to the younger population. We see people coming back that have small children, young families, people that have career dreams of going on to school and returning to work. So we want to promote that to every extent that we can.

Next slide. This looks a little bit like a complicated slide to follow but if you look on the left-hand side, and this is really when they're in the acute trauma care stage, you're focusing on the service members medical and surgical needs. You want to get those issues addressed first. Once that is taken care of, then the patient is moving into the acute rehabilitation stage and that can include programs such as emerging consciousness, in

patient acute rehabilitation. Inpatient sub acute rehabilitation as well as outpatient evaluation and management. Once a person has been able to go through the process of the acute rehabilitation stage, then they will be moving on to the next stage, which is the post acute rehabilitation stage. In that area we're looking at helping them transition back into the community. That may be in the form of going to a residential program. It may be in the form of going to a day program, or it may be in the form of going to outpatient treatment and therapy that is still indicated. The rehabilitation there does not actually stop, however. It is a lifetime and the community care is definitely needed. As you continue to work with that person, you're going to be looking into programs such as supported living, vocational needs that they may have, any educational needs they may have. What is this person going to do during the day and fill it with activities? What type of support groups are they going to need to help them adjust to their limitations? They may need skilled nursing. They may need total care and they may still continue to need outpatient follow-up. Along the bottom you can see a number of different areas, family support, case management, benefits management and records management. That starts at the very beginning stage. It starts from the point of acute and trauma care and continues throughout the lifetime. Basically because those needs are going to change when they're going from one phase of rehabilitation to the next. So we want to make sure that the support the case management and records management is there to follow them when they transition from one stage of care to another.

Next stage. This really is -- has become a new paradigm of care because what we're seeing are patients that have not just a brain injury, they have brain injury plus a multitude of other serious complications. However, brain injury tends to drive the care because working with somebody who has a brain injury is going to impact their ability to function and work with other therapies involved. What we have to focus on now is simultaneous

treatment of multiple injuries and we're seeing a higher level of acuity. We want to sequence and integrate therapies to meet the patients' needs. If somebody is getting cognitive rehab therapy they'll have to work with them and have the process carry over to when they're getting occupational therapy, physical therapy, whatever therapy needs they may have. This certainly involves a coordinated team effort with an expanded team of consultants.

Next slide. So how is the VA addressing this new paradigm of care? We've developed an integrated system of care for veterans with TBI and within the polytrauma system of care.

Next. Within the polytrauma system of care, there is a system of specialized experts to provide the best available medical care and integrative rehabilitation centers. We have had a history of having TBI lead centers as far back as 1992. We've also had a longstanding collaboration with the Defense Veterans Brain Injury Center commonly known as DVBIC. We have an agreement with the VA and DoD and the VA has a lifelong commitment to provide care. We know getting involved early on with the care of the individuals will benefit them when they become a veteran. We know they are going to benefit from getting into our system early on so that they can understand the benefits and access the services that they need. So since we have the TBI lead center since 1992, they use that as a basis and foundation to develop what is known as Polytrauma Rehab Centers and I'll talk a little more about that.

Next. For some individuals, they have a little bit of confusion regarding exactly what polytrauma means. For purposes of the polytrauma system of care, two or more injuries to regions or organ systems, one of which may be life threatening resulting in physical, cognitive, psychological or psycho social impairment and functional disability. Because of

multiple injuries we're tending to see TBI frequently occurring along with other conditions. And those conditions can include things such as amputation, auditory and visual impairments, spinal cord injury, PTSD and other mental health conditions. However, injury to the brain is the impairment that primarily guides the course when patients are admitted to our polytrauma rehabilitation centers.

Next. Within the polytrauma system of care we're treating a number of different types of individuals. We are treating active duty that have sustained serious combat injuries, we're treating active duty with non-combat injuries. For example, stateside or training accidents. There are a number of people that are injured from motor vehicle accidents not as a direct result of combat that certainly result in TBI as well as other complicating factors. The conditions we treat may be polytrauma. That does not have to include a TBI. It maybe mono traumatic in nature such as an amputation, spinal cord injury but we refer back to the initial definition where two or more injuries to physical regions or organ systems, one of which may have been life threatening.

Next. Within our system of care, I briefly mentioned the Polytrauma Rehabilitation Centers. Right now there are four of them across the country with plans for a fifth one. And as you can see from this slide, the focus is not linear. The person does not to go a polytrauma rehab center and on down the line. What has been established are polytrauma network sites. These are located within each region, which encompasses several VAs within that region. There are now actually 22. And from the polytrauma network site the person may transition to a VA which is closer to their home and they may be a designated polytrauma support clinic. Currently we have 76 of those and then smaller clinics, a community-based clinic or something along that line that the VA may be what a designated as a polytrauma point of contact and currently there are 54. So a person may

move from one site to another, from one component of care to another. They may go back and forth. They may skip over one and move directly to a VA closer to home but the end result is to get that person back home and back functioning.

Next. The PRC, which is the polytrauma rehabilitation center is a regional center. It is a concentrated expertise with clinicians there and their role is to oversee the polytrauma network sites that fall within their region. They're able to provide collaboration, coordination of care and once somebody transfers from a PRC to a PNS, they still help coordinate that care. They are there for collaboration, if necessary. Each polytrauma network site for PNS is then also responsible for the polytrauma support clinic within their smaller region. They again are also able to provide collaboration and oversight and coordination of care to the veteran if they are receiving care at the polytrauma support clinic. The polytrauma support clinic is also a resource for this polytrauma point of contact. That's where we referred to these smaller clinics that may not have specialized care. They are still able to access that specialized care through the polytrauma support clinic teams, through the polytrauma network sites as well as the polytrauma network centers. It's have coordinated as far as coordination of care goes.

Next. The rehab centers or the four that we talked about are tertiary care hospitals. They have the ability to provide intensive services and a very high level of expertise. They have access to a variety of medical specialists. For example, they can call in infectious disease, neurology, neurosurgery, orthopedics and so on. They are used to working with somebody with multiple injuries in that very acute rehabilitation stage. So they're working with people who have a brain injury and they may also have an amputation, vision loss, hearing loss, skeletal injuries or burns. What the PRCs are able to offer is comprehensive interdisciplinary inpatient rehabilitation. It is not uncommon that once a service member

who has been seriously injured goes to a military treatment facility, they work to get that person onto the rehabilitation center as quickly as possible so that the rehabilitation can start and that person can start to regain functioning as soon as possible. Next. Now, this slide shows where the PRCs are located. They divide up the country by regions. The area marked in red is actually follows the eastern region is followed through the Richmond. The area in purple is the southern region. That region is followed by the PCR located in Tampa. The yellow area is followed by the Minneapolis PRC and the green area, which is quite large, is followed by the Palo Alto PRC. There are plans in place to have another PRC down in the Texas area so it will help break up some of the larger regions. If you consider the size of the country and some of the larger regions, these PRCs are responsible for, you can see how important it is to have an integrated network system. Everybody within that region will have access to either a polytrauma point of contact, a team, a polytrauma network site or the rehab center itself. Next. This is just a slide to show you what the PRCs look like. Their outside is very different. Their insides are all the same because there has been a push to provide a uniform standardized level of care. It doesn't matter if you go to the PRC in Minneapolis versus Tampa, Palo Alto or Richmond. Because we're all working along the same guidelines you should still receive the same level of care at any of the Polytrauma Rehab Centers.

Next. As far as the PRC scope of practice, they do very comprehensive, interdisciplinary, inpatient evaluation. Something that they've been involved with more recently is the issue of emerging consciousness. Previously they felt they needed somebody to be able to actively participate in rehab in order to place them in acute rehab. Now that is something they're actively involved with is the issue of emerging consciousness to get a person to this point where they can actively participate in acute rehab. They look at transitional community reentry. Each PRC also functions as a PNS or Polytrauma Network Site. They

have the rehabilitation component as well. They're available to do re-evaluations. So if a person is at another site and needs an evaluation, they can be referred to that PRC to get a second opinion, to go back for a tune-up, to draw on that expertise. They certainly offer ongoing case management and follow-up, even after patients leave the PRC and go on to the next component of care, they're doing follow-up and making sure that the transition has taken place, the case management is continuing, the care is being provided. And they also serve the important function of being a consultation service because they have such a high level of expertise at that level, they are there to be a consult service to the other components as well.

Next. Just a snapshot of some of the typical patients that we're seeing nowadays, which is very different than some of the previous patients we have been caring for. The right-hand slide shows somebody that is blind as well as having a brain injury. And how is that TBI going to affect their ability to learn to function now that they're blind? The lower left-hand picture shows somebody that obviously has a right arm, wrist, hand impairment, as well as some visual impairment and has a TBI as well. So how are you going to work with them and help them function, become independent, go back to the community of reentry when you're dealing with multiple types of impairments? It has definitely become a challenge that has led us to develop and expand programs and services to meet these very special needs.

Next. Within the interdisciplinary rehabilitation team, these are some of the core people that are involved, some of the core clinicians you are looking at a physiatrist rehabilitation, nursing, speech and language pathology. Occupational therapy, physical therapy.

Therapeutic recreation specialist, a blind rehabilitation specialist, psychology,

neuropsychology, a family therapist, a social work case manager, driving training and prosthetists and orthotists.

Next. When that core team is developing that treatment of plan, they are going to need to call on some specialized consultants and certainly at the PRCs they have access to all these specialized consultants. I won't go through each and every one of them but you can certainly see how extensive it is. Even pulling in the vocational specialist. What is that person's life going to be like after they go through some rehabilitation? What are their needs going to be down the road?

Next. When we talk about the comprehensive rehabilitation care at the PRC, you can see they're at the center. Actually the patient is at the center of that rehabilitation care and if they have a hearing loss, then they're going to need to hook them up with that audiology program. If they have an amputation, they're going to need to hook them up with the amputee program and so on along the line. Certainly a lot of these people have been injured through IEDs, motor vehicle accidents and just the emotional shock is presenting itself with some overlap of PTSD on top of the TBI so they definitely need to be pulling in the PTSD program offering support, counseling and guidance to help them through that.

Next. Family support is also a very, very key issue because we're not taking care of just the patient, we're also taking care of the family as well. And what we realize is that after that patient leaves the PRS or the PNS or the other VAs they're going to be going home and taking -- getting back in with the family. So having the family educated, be part of that planning process, understanding what the needs are is crucial to what the person is going to be working with down the road. We want to help that family transition from the military treatment facility to the VA. And in that process, there is a lot of logistics and needs that

the family has. Where are they going to stay? You know, who is going to be able to stay? Who is going to be taking care of the home? Is somebody going to have to stop working in order to take care of this new patient? What about the young children that that patient may have at home? It's not uncommon that we're seeing all these different issues to deal with that are new and challenging. Certainly a situation like this lends itself to a lot of family stress. So we want to be very supportive of the family.

A very key issue is providing information and education and involving them in support groups. It is very beneficial when you have an inpatient in a rehabilitation program for the family members or the caregivers to be able to talk to somebody in the next room that's sharing some of those same feelings. The same sense of loss, the same sense of what do I do now? I didn't expect this type thing. That's a very big issue. Because they're being transferred from an MTS to a VA sometimes there may be the perception that the military does not want to deal with them any longer. And so we want to try and enforce the fact that they are still military and help them maintain that military identity. There are military liaisons stationed at all the PRCs to help with the logistics that goes along with that. The PRCs have developed family-friendly environments. They want the children to feel comfortable to ride on their dad's lap as he goes to therapy. They want them to be part of it. What can you do to support the family that may be at a facility for months and months on end? And there are all sorts of services and programs that have been developed. One patient in particular, while he was at a rehab center, his wife gave birth to a newborn child. That lends a lot of family stress to the issue when you're talking about a newborn and your husband is in an acute rehabilitation facility. So it's a very stressful time for them. We want to help them feel as comfortable as they can. And we know that because of the situation, it is not going to be a fast or easy recovery. They are going to have prolonged recovery time and it is going to result in possibly lifelong impairments. So what we want to help them do

is find meaningful activities, help them regain that sense of identity, make them feel important.

Next. When I talk about the family program, I mentioned the VA liaisons help them deal with the transition issues. What is that active duty service member going to do about getting convalescent leave? What if they want to go home and be with their family for a little bit of time? What about their unit that still needs to be kept informed with what's going on with them? That's where the VA military liaisons come into play very heavily. The VA liaisons play a key role because they're located right at the military treatment facilities and are able to start to talk to the families at that point in time. They can dispel some fears, some anxieties and educate them about what the next step is for that service member. They can talk to them about what the VA is like. What they're going to be expecting and help them with that transition. The VA liaisons are really the ones primarily responsible for making those referrals to the Polytrauma Rehab Centers for the various other components depending on the patients' needs. In regards to logistics voluntary services is a key issue. Being able to provide a family a night out at a restaurant and help them to feel some sense of normalcy again is very important. Social workers play a key role in regards to case management and helping to coordinate all the different services that have to come into play in making sure the plan of care is being put into place. There are obviously some types of spiritual needs you can call on chaplain service to address. Education is a very key element here and through interdisciplinary team meetings the family is pulled on to know what is going on with the patient. What to expect, what role they can play and what is the next level. Certainly the psychologist is able to offer some support through counseling and help them get through that very difficult time period.

Next. There are also going to be ongoing specialized care needs because what we realize is that the sequelae are lifelong. Somebody may be stabilized and over time emerging complications. We have a patient that was doing quite well with his amputations, a bilateral amputee and on his prosthetic limbs for too long. Developed an infection, had to be hospitalized and there was some complications that he was doing fine before, we had to get more heavily involved and make sure that he got back on track again. Even changes in the developmental stage. Because primarily the individuals we're seeing are a young individual. You have to think about the developmental stages. Most times people in that age group are coming back and they're thinking about going to school. They're going to work, establishing relationships, getting married, having families, and the injury that they have sustained may stop that developmental stage from happening so we have to work with them through those different stages. Changes in social situations. What happens over time when the caregiver no longer becomes available? Maybe due to their own health needs. All that needs to be taken into consideration. Certainly there are always new treatments or new technology that is going to be coming out and so as their needs change, technology is going to change to address those needs. So we need to be aware of that and constantly updating ourselves on what's available. Tune-ups. Somebody may be doing fine but what we want to do is assure that they come in on a regular follow-up basis just to make sure everything is okay. Just to see if there has been any change in the social situation. Any need for further intervention. We want to offer that support and connectivity and aging with that disability. What will it do to impact a person's life 10 to 20 years down the road.

Next. The polytrauma system of care, the other picture showed the country broken down into the four regions that the PRCs follow. We mentioned the polytrauma network sites are broken down and closer to home. They show how these are broken down, where the

numbers are located are the number of the VISON. It may be difficult to see on your slide there but they do have small dots for the polytrauma network site. If somebody lives in the Midwest and not very close to Palo Alto they'll be closer to, say, the Denver PNS that they can hook in for specialized care at that facility. The goal again is to get that person closer to home because we know that's going to be able to offer support and that's what's going to be there over the long haul.

Next. The polytrauma network sites right now, there are 22 with the newest one being San Juan. And so they continue to develop the expertise available at the polytrauma network sites. Next. In regards to the polytrauma network sites, they have their own scope of clinical services as well. They are able to provide that post-acute rehabilitation services. Now, that may be offered on an inpatient basis or it may be offered on an outpatient basis depending on the patient's needs. They are also going to be responsible for management of existing and emerging sequelae. They'll be managing patients in consultation with the PRC. If somebody transfers from the PRC to the PNS they'll be able to collaborate back and forth with the PRC. They'll have the follow-up and make sure the plan is being followed. The PNS is going to be able to work and identify VA and non-VA resources for care across that region. And I can't stress strongly enough how important it is not just to know what VA resources are available, but also what community resources are out there because that may be the closest thing to that individual's home. So we need to know within our own region what is available for us to access and link that patient with for services really close to home. They provide proactive clinical and psycho social case management, as well as continued support for families. They provide regular follow-up care and checkups, and they're going to be coordinating services. They'll be working between the PRC, the PSCH, the PSA, the DoD and even the private sector comes into play. If there is a service that is not available through the VA or if a person lives too far

from the VA to obtain that service they may be able to get services for a program called fee-basis linking with the private sector to provide something specific in care.

Next. The PNS also has its own interdisciplinary team very similar to the PRC. Their core team is also comprised of files eye try, registered nurse, social work, case manager. Occupational and physical therapy, speech therapy, and a blind rehabilitation specialist among others. The PRC is focusing more on that acute inpatient rehab, the PNS is focusing more on the sub acute rehab. So primarily the PNSs are going to be seeing people on an outpatient basis.

Next. The telehealth network that has been developed for polytrauma is very extensive and what it's able to do is link polytrauma sites within and across regions. So if somebody is at an MTF and being referred to a PRS, a polytrauma rehab center a videoconference can be held so the providers on the one end can discuss the care needs with the providers on the other end. It is also very valuable in being able to link the patient and the family members with people and individuals that are going to be providing them care at the next step. So when they get to where they're going for that next level of care they're already going to have some sense of knowing who that is. They will have at least seen their face and been introduced to them even at a distance away. They are also able to facilitate discharge planning and coordination of care, so the plan of care that is started at one component is able to be followed up at the next component. Through the videoconferencing you can have provider to provider consultation. Somebody is being seen and followed. You aren't sure exactly what else might be indicated, you can do a videoconference with another level of expertise and get the answers to your services questions. And also it's a very good source for providing education for providers as well as

families. Educating the other levels what is going to be needed for that service member, educating them on what the polytrauma system of care is able to offer.

Next moving on to the next component of polytrauma, the support clinic teams, these are the ones that are going to be closer to that veteran's home or that active duty service member's home. That would most likely be called their home VA facility. The one that would really be closest for them to get to for follow-up care, primary care and so on. The polytrauma support clinic teams are really going to be following them over the long lifelong. They're the ones that are going to be providing the integration back into the home community and they are distributed across the country. Now there are 75 of them and counting. But those are the ones that the person is going to come to on an outpatient basis more often than not to get continued therapy that they need.

Next. Usually by the time the person or patient is transferred to the polytrauma support clinic team their condition is fairly stable. So they want to be able to manage that care within a stable treatment plan. What they're going to be doing is reviewing and updating that treatment plan as there are changes in the patients' needs. They're going to continue to promote the functional improvement and one of their primary goals is going to be to prevent decline. So they're going to have scheduled follow-up with them. They'll be staying in contact with them, pulling them in for appointments as needed, coordinating their care within that home VA. They are also proactively monitoring for new needs to change in the developmental stage. The polytrauma support teams fall under the coordination of the polytrauma network site. So as new technology or new treatments come back they'll be aware of that and coordinating that care. They are really the ones that are going to be responding to emergent problems. That's the first site they're going to call. That's the site that is going to have to coordinate where and how that problem gets

addressed. And also they're going to be the ones responsible for providing support for the patients and the family. That's the site that they'll be following over the distance. Next. Within the PSCT teams, they also have their core team members that are available to be involved in the care and treatment of these patients comprised of a physiatrist, rehab nurse, psychology, social work, physical therapy, occupational therapy, speech/language pathology and other specialists as needed such as neurology, orthopedics and audiology. At every level so far the core team has been multidisciplinary in nature. Everyone is involved in making sure that the treatment plan is patient-centered and that they get the needs they have.

Next. The last component of the polytrauma system is what's referred to as polytrauma point of contact. These may be smaller community-based clinics. They may not be large VA facilities. They are actually located in 54 VA medical centers and out a distance away from the most local VA facility. That may be where the person goes to receive their primary care. They may have limited support services there and for some specialty care they may need to refer to person back to the main VA facility or the PSCT. They are, however, trained in the polytrauma system of care. But what their role is to refer to the appropriate component. So if they identify an issue or a need or they need consultation, then their role is to hook them up with the polytrauma support clinic team and if the polytrauma support clinic team needs assistance they have consultation through the network site and they have also consultation through the rehabilitation centers as well.

Next. Case management has become a very key issue in the management of polytrauma patients. In regards to the case management, it usually involves a certified rehabilitation nurse, as well as a licensed clinical social worker. And what the role of those two clinicians are is to monitor the implementation of the care plan. Each of them plays a different piece.

A lot of their duties and responsibilities and functions are the same. Sometimes they overlap. But they came at it from very different angles. The certified rehabilitation nurse is going to be looking more on the medical issue of it. The clinical social worker will be looking at it from a biopsychosocial issue. They compliment each other very well and make sure the care plan gets implemented. Their role will be assessing emerging issues. They're going to be looking into and identifying what resources are out there, does that person need. Is it something that the VA offers? Is it something that's in the community they need to link that person with? Those two clinicians are also going to be key in providing patient and family support. They are going to be assigned to every polytrauma patient within their program. Whereas they may be seeing different speech and language pathologists, these people are really going to be following all the patients. Their role also is to provide indication to the patient and the family and assist with that transition from military to VA transition. It is not uncommon that active duty service members are transferred to a component of a polytrauma level site for care and then they may return to that military treatment facility. They may be placed on medical hold but they're still going to be following that person and staying in contact with that military case manager to see if there are any other needs. If the person is able to return to active duty, then they're able to close out that case. But they want to make sure that if something comes up, that they can be linked with the available services to them.

Next. Within the case management services polytrauma patients are viewed as receiving lifelong case management. We realize that changes occur throughout one's life and that the polytrauma system of care is going to be there for that patient. It is provided across all episodes and all types of care and can include the coordination of services, evaluation, family education and support services and certainly to assist with successful community reintegration. Veterans receive a warm handoff to the polytrauma social work case

manager as the next component as they move throughout the system of care and oftentimes that's done through videoconferencing that we discussed earlier.

Next. In regards to case management, how much case management and the level of intensity is based on the patient's needs. And you can move back and forth from one level to another depending on your own situation. But if there are dramatic changes in a person's situation they'll get intensive case management where that first patient or family will be contacted daily or weekly and there may be significant changes either in their functioning status, their medical status, their mental health status, family needs and so on. But if there are needing that intensive level they'll get regular contact. If a patient situation is a little more stable, then they may be able to go to the progressive case management stage. At that stage they are still maintaining contact. It may be on a monthly basis or it may be a little more often. There again depending on the patient's needs but the patient's medically stable but still need management of the plan of care and addressing other issues. Getting a little bit more stable in the situation, they could move to the supportive case management level in which they're contacted at least monthly. This may involve those that are active duty service members in medical hold, still at the military treatment facility, or when things are pretty stable for the patient, the patient is well established in the system of care and they're pretty much getting what they need but they still need regular monitoring. Then, of course, we reference lifetime case management on at least an annual basis to make sure that there are no significant changes but no other interventions are needed.

Next. When it comes to the issue of TBI screening, actually the VHA began screening for possible TBI back in April of 2007. As far as all clinicians were mandated to obtain TBI training, there is in our computerized record system a clinical reminder that pops up and

prompts the provider to ask the patient for simple screening questions. If a patient screens positive to one of those questions, it does not necessarily give them a diagnosis of TBI but what it does indicate is that that person needs further evaluation. This has become very valuable in identifying and screening for mild TBIs, moderate to severe TBIs are fairly easy to recognize and clear-cut. But somebody with a mild TBI may look okay and walk okay and talk okay but there might be just not processing everything okay. And so you need to really identify that because that's going to impact what else happens in their plan of care. Something else that we're looking at certainly through this screening tool is the exposure to multiple types of blasts or multiple exposure to possible TBI. Depending on the severity of that TBI that person may not be fully able to identify what you're screening for. The screening tool is very valuable in picking up some things like that.

Next. If a patient does screen positive on that initial four-question screening instrument, then they're referred for a second level exam. This is a much more complete and comprehensive exam. You do pull interdisciplinary team to look at what is going on and what you're going to be doing is screening for the TBI sequelae. An instrument that's used is the neurobehavioral symptom inventory. It helps diagnose how severe the symptoms are right now and it also screens for comorbidity and when helps develop a comprehensive treatment plan. How severe were the injuries afterwards? What symptoms did you have immediately after? What symptoms are you having now and how severe are the symptoms that you're having now?

Next. Case management is certainly going to be involved in this second level exam because what they want to do is make sure that that care plan is coordinated, provides support and it is certainly recommended for those undergoing active treatment with multiple issues. Those needing assistance due to any type of cognitive impairment or

other potentially vulnerable or fragile veterans. We recognize the fact there are individuals that are going to need case management services regardless of whether they have a diagnosis of TBI or what their situation is. Case management will continue as long as the patient is active in the clinic.

Next. VHA and DoD has developed some clinical practice guidelines and this was done in the early 1990s. And the CPGs or clinical practice guidelines are derived through rigorous reviews of the evidence to outline the clinical practice. If you'd like to know a little more about this, there is a website there that you can log onto and get more information. But the clinical practice guideline is for the assessment and treatment is under development and hope to have it completed by this summer. Next. Some broad goals of the mild TBI is to promote evidence-based management of patients diagnosed with the mild to moderate traumatic brain injury. Assess a patients' complaints, to identify the critical decision points in the management of patients with a TBI, to improve the local management of patients with mild TBI and there by improve patient outcomes. To promote evidence-based management of individuals with post deployment health concerns related to head injury, blast or concussion. And to accommodate local policies or procedures such as those regarding referrals to or consultations with specialists. Those are some of the broad goals.

The next slide breaks it down a little bit more specific goals. One of those specific goals is to diagnose the mild TBI accurately and certainly in a timely manner. We want to be able to appropriately assess and identify patients who show signs of post concussion disorders or other consequences of head injury. What are the consequences when you are exposed to blast after blast after blast? What are the long term effects of that? To identify patients who may benefit from further assessment intervention and treatment, to improve the quality and continuum of care for patients with mild TBI and to identify patients who may

benefit from early intervention and to improve health-related outcomes for patients with mild TBI. Next. This slide looks a little bit confusing at first note. On the right-hand side you'll notice it's some of the services available through the Department of Defense. The left-hand side pulls in the services available through the Department of Veterans Affairs and in the center is the polytrauma system of care because we recognize that individuals are going back and forth particularly for active duty service members within that. So the polytrauma continuum of rehab care is there. They want to focus on providing the right care, the right time and in the right place and they recognize that by doing so they're going to have better functional and clinical outcomes, higher satisfaction and certainly lower costs. To do the right care at the right time and the right place is going to be accessing the correct specialized rehabilitation services, keeping the survivor and the family informed and educated about what is going on and realizing that we're crossing over back and forth the use of the state and community resources, everybody really needs to be involved in providing enough care for these individuals. Next. In regards to some of the veterans benefits administration there are a number of services available for those of you who may not be as familiar with the veterans administration. There is a component for healthcare. A component for compensation and pension, education, home loans, burial benefits, benefits for dependents and survivors, life insurance and one key component that we're accessing with the polytrauma patients is vocational rehabilitation and employment. We want to get that person back into the community again.

Next. There are a number of resources here along with their websites. They are certainly not all inclusive but they are a source that you can access for additional information and education for your own benefit, as well as individuals that you may be coming across. What we want to stress is that if you're in a local agency or facility and you identify somebody as needing services, we hope that you would ask them, are you a veteran?

Then link them with the VA resources. There are other resources in here listed, traumatic service members, group life insurances through the military. Next. Here are some more resources, military severely injured joint support operations center. The fallen patriot fund, army disabled soldiers support system. Army one source, navy one source and these are all valuable resources particularly for the active duty serviceman to be able to access that while they're still on active duty. Next. The more resources, Marine Corps community one source, Air Force, DoD resources for returnees and the severely injured career Center for the military.

Next. As well as The National Center for PTSD Iraq war clinicians guide which is a very valuable resource for a lot of information. What has been a challenge for a lot of the providers is the overlap of PTSD as well as a brain injury. Some of the symptoms appear very similar and you have to really tease out. Is this a TBI, PTSD or a component of both and how will you treat each one individually to help pull that all together? As well as the Iraq war veterans organization. The VA certainly needs to collaborate with state and local organizations. The VA knows that you are eyes and ears out there for us. That we can help you provide care to people that you're servicing as well as you can help provide services to the veteran population.

Next. The defense and veterans brain injury program is longstanding and established back in 1992. And they collaborate very heavily with the Department of Defense and the Department of Veterans Affairs. It's actually funded by Congress and they provide a lot of medical care, clinical research and education centers. That's a very valuable website to go on and get a lot of information about brain injury in particular, as well as resources available.

Next. This is the website that you can go on if you would like to find out more about the polytrauma program. It's WWW.polytrauma.VA.gov. If you're interested in more general benefits about the VA go on to WWW.VA.gov. If you go into the main VA website you're able to find the facility that is located closest to you. You can put in your zip code and it will pull up the VA closest to your site. So you can go onto the VA website or certainly the polytrauma VA website to find out more about what's available in your particular area. I think we have some time for questions.

>> We've got quite a few questions. We have about 30 minutes. We're going to try to get to all the questions. If not, we'll answer them at a later date via email. The first question is, are we going to be able to access these slides for future reference? The slides can be downloaded from mchcom.com and they are also available and you can download them and put them on your website. The webcast is going to be archived for future viewing but it is going to be about a week or so that it's available online at mchcom.com. The first question for you, Jean, is where the is the fifth Polytrauma Center going to be built?

>> It will be in Texas. San Antonio.

>> Is there a detailed listing with contact information for the entire network, meaning Polytrauma Center, TBI lead centers etc.

>> Yes, go onto the polytrauma.VA.gov website and it will list all the different components. The rehabilitation centers, the network sites, the support clinic teams as well as the polytrauma points of contact.

>> The TBI technical assistance center will also get that information out to you. It sounds like the VA has created a very comprehensive system of care for those with polytrauma and severe TBIs. Are there -- those with mild and moderate TBI eligible for the services and how can they access the system to work for them?

>> Well, the first part is actually identifying somebody who might have a diagnosis of mild TBI. In most instances, when somebody screens positive for that mild TBI on the four screening questions, they're going to need to be referred for that second level evaluation that we talked about. That more comprehensive and in-depth evaluation. At that time, there is going to be a determination made does this person need the benefits and services through the polytrauma system of care? Or can those services be provided simply through consultation and collaboration with their primary care provider, specialty services such as neurology, speech therapy and so on? So the determination of whether somebody might be polytrauma is going to be based on that second level evaluation if they screen positive for the TBI.

>> Okay. Next question, if someone discovers a brain injury later how would they connect with the system.

>> Well, certainly, I mean, the TBI screening is generated to come up -- it's a one-time screening. What we're seeing are a number of individuals that are sent for multiple deployments. So somebody could have separated from the military, come into the VA and screened negative for TBI. But then sent and been redeployed. For every period of redeployment and they come back there is another period of separation so the TBI screening would pop up again. Certainly if they come into a provider and identify something that has happened, if there has been a motor vehicle accident, a head injury, a

fall or something of that nature, then their primary care provider certainly can access whatever system of care is going to be appropriate for them.

>> What about people who do not want to leave their homes to go to a VA center? How do they access specialized services with trained clinicians?

>> Well, the focus is really with the polytrauma system of care going back and forth is to get that person closest to home. So even if they are close to one of the polytrauma support clinic teams or close to one of the polytrauma points of contact, that's going to be close to home and those individuals, the team members there, are going to have access to the specialized services at the larger center. We would certainly hope that if it's indicated, that that person could be referred to the network site or the rehab site for more extensive evaluation. If necessary, some inpatient rehabilitation.

>> The next question is are the VISN and MIRECCs collaborating with the VA, addressing ways to support veterans with TBI and --

>> The voc rehab component is very large at both systems do access, definitely. We want to help that person reintegrate back into the community of the part of that reintegration may involve them accessing those voc rehab services. So we want to tap them into that resource and voc rehab and employment can determine what is the best benefit for that person to use.

>> Also can you speak to the difficulty in distinctioning whether they have post TBI, post traumatic stress disorder or both?

>> That can be challenging. As I mentioned before, so many of the symptoms overlap. When you're asking them questions related to the neurobehavioral symptom inventory things such as irritability or memory loss or sleep problems can be interpreted for signs of PTSD or signs of mild TBI, or it may be a sign of both. And that's where that more conclusive in-depth second level evaluation is going to come into play. Certainly the provider doing those evaluations are going to try different things. They're going to have a mental health person doing their mental health evaluation to see if PTSD is a component of that and if so, how are we going to treat that as well as the TBI?

>> How are the profound issues of loss dealt with systematically across the system? Issues such as not being able to return to their unit, staying on active duty and accommodating physical, sensory and psychological losses?

>> Certainly because we try and focus on not just the patient but the family as well, I referenced all the support and the education and the information that is being provided at each level. And certainly when somebody experiences such a severe loss, you can't sidestep that. You can't let it go by. You really have to address it because you know that loss is going to be lifelong. They may have lifelong impairments as a result of that. Having military liaisons at the PRCs is very crucial in helping them stay linked and still feel part of and maintaining that military identity. When the decision comes that that person is no longer able to stay in the military, that's when we try to help that transition over to the VA. So we try to accommodate that as best we can, knowing that, you know, dealing with loss in regards to physical and sensory and psychosocial issues, it's not a one fix is going to do it. We know that you can't set a time frame on that. We know that it is going to take time for that individual to come to grips with that, as well as a lot of the family members and whatever support system they have is going to need to draw upon the resources

available. They're going to need -- the case managers, psychology services, whatever resources are there to help them cope with those losses.

>> Okay. How does the VA deal with basic family needs like housing, medical care and counseling during the patient process?

>> We realize that the family is -- the patient is part of the family unit and the family is part of the patient's unit, so to speak. Although we're not able to directly provide treatment to family members, we are able to provide treatment to them in the form of support groups. Through educational sessions, through helping them work through the needs that are going to be necessary for that individual. So we realize that the family is a key piece and a key element in what happens when that person leaves the rehabilitation process.

>> Is there a role for a family survivor organization which provides staff training from the perspective of families and survivors?

>> I think there is always a role for an organization such as that. And that's a place where the community could certainly have some resources available for the VA to refer people to. And there again collaborating with the community.

>> Grantees from this program are using very limited funds to reach out to service personnel. Are you aware of a funding within the VA or elsewhere to assist bridging and connecting these services?

>> I'm not aware of specific things. I do know that certainly when I talk about at each level site you need to know what community resources are out there and so it's finding out

what's out there so you can link what services are available. It's crucial for the VA to know what else they can link up with to provide services.

>> Where can we find the most accurate current numbers of returning soldiers with TBI by state?

>> I do not have those numbers personally. I know that they are monitoring that at the national level. They are tracking that and they would be -- they're able to maintain numbers but I don't have that information with me.

>> What are the four questions for TBI screenings?

>> The very first question asks them if they have been exposed to any type of blast, RPG, mortar, attack. Have you been exposed to a motor vehicle accident. Any type of head injury or fall? If you answer yes to any of those, then it goes to the second series of questions where it asks you what type of symptoms did you have immediately after that? If you answer yes to any of those questions, then the next set of questions asks you what type of problems are you having now? And then it goes on to the severity of that. So if somebody says yes to one question and then no the next, it cancels out the reminder.

>> Okay. What terminates the patient's active status in the clinic? This patient needs lifelong monitoring because problems are likely to be lifelong. What would determine when they're terminated from the clinic?

>> When they're no longer coming for care. As long as they're coming for care they're still considered active polytrauma patients. And what's going to determine how much interaction there is the level of intensity for case management. They may only need an annual follow-up. But as situations change, as conditions change, then they may need more intensive case management.

>> Where do soldiers from Hawaii go to receive care?

>> There is a VA in Hawaii. It's on OAHU at the Honolulu VA.

>> How can the civilian health facilities link into this system of care allowing veterans to be closer to home? I guess maybe the health department or health clinic approved by DoD link into the system of care for the VA?

>> Certainly contacting the closest VA and letting them know that they want to connect with them to provide care.

>> In regards to social changes and physical changes of young soldiers, have you tracked any specific changes in women that were exposed to IED explosions and since getting out have had a child and thus may be struggling more?

>> Have I?

>> Has the VA tracked the physical conditions of young soldiers, particularly women who may have been exposed to IED explosions. Since getting out they've maybe given birth.

>> I know they're tracking and monitoring it and would have some figures because they do track whether somebody is male or female and could certainly follow that up to see what the situations were.

>> Okay. Before polytrauma rehabilitation centers have military liaison at the additional -- is there a military liaison?

>> There is a military liaison at each of the four Polytrauma Rehabilitation Centers, yes.

>> Okay. If a patient is being case managed at the PSCT level, should case management also be provided at the PNS and -- there is oversight because they're regionally located, the polytrauma network sites coordinate the care at the polytrauma support clinic teams. A lot of that is done through monthly phone calls and interdisciplinary treatment team meetings where the polytrauma network site will review the case, they will see what they think the goals of treatment are, oftentimes if a person is being followed at a PSCT and needs further evaluation, they may refer them to the polytrauma network site or they could even refer them to the PRC if that's indicated as well. So there is oversight by the PNS of the PSCT just the same as there is oversight of the PNSs by the PRC.

>> What model programs or services have been identified that are effective in supporting TBI veterans when pursuing college education?

>> What we have seen is a very big increase for these individuals to go back to college. If they have any type of cognitive impairment, though, they certainly may need some type of accommodations. So we would encourage them to link up with the Office of disabilities at the institution that they're going to and they could certainly work with the therapists such

as a speech and language pathologist, occupational therapist to develop work hardening skills. They could work with them on their concentration and we can also request that that facility or institution offer some types of accommodation. Somebody with a cognitive impairment may need extended time to take a test. They may need a quiet place to take a test. They may need to have access to a professor's blackboard or lecture notes in advance so when they're in class, they can just listen and not try to take notes at the same time. Anything like that is going to be very helpful for them in being successful. We also would not encourage somebody with any type of cognitive impairment to overload their curriculum, either. It may mean they take one class instead of four or five classes, so you try it out, see what works, the therapists work on maintaining their attention span, they use different types of memory devices to help them with their notes and so on.

>> We have one more question. Is there a value to add military liaisons to additional 17 polytrauma network sites?

>> This is just my personal opinion. Certainly I think it is because we are seeing a number of active duty service members that do transfer to the polytrauma network sites and having that access to have somebody. Now, the PNSs, you have to realize, are still in contact with the military. So service member has a military case manager. So we are updating them on the treatment they're receiving, they want to know how much longer does this person need therapy. So they're still maintaining that military connection. Even if there isn't a liaison right on site.

>> Okay. That's it for the questions. I want to thank you, Jean, for this very informative presentation and we thank you all for joining us. This webcast will be available on mchcom.com. Thank you.

>> Thank you.