United States Air Force



Presentation

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Department of Defense Medical Centers of Excellence

Witness Statement of Lieutenant General (Dr.) Charles B. Green, Air Force Surgeon General

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Chairwoman Davis, Representative Wilson, and distinguished members of the Committee, thank you for this opportunity to discuss Department of Defense (DoD) Centers of Excellence and, specifically, plans for the Hearing Center of Excellence. The Centers of Excellence are an outstanding example of how the Military Health System strives to achieve "the Quadruple Aim." This new MHS strategic view for care to our beneficiaries focuses on readiness, population health, a positive patient experience and responsible management of health care costs. The Center of Excellence supports our efforts to meet these goals through focused research, training and education.

The creation of a Center of Excellence in prevention, diagnosis, mitigation, treatment, and rehabilitation of hearing loss and auditory system injuries, as set forth in the 2009 National Defense Authorization Act, is an important step in responsive care of our military members and veterans. Hearing loss is a significant cost-incurring disability for the DoD and the Department of Veterans Affairs (VA). Tinnitus is the number one diagnosis of veterans of Operations ENDURING FREEDOM and IRAQI FREEDOM. Tinnitus and hearing loss were the most prevalent service-connected disabilities for veterans who began receiving compensation during Fiscal Year 2009. As our patients age, those eligible and seeking benefits may increase and drive the cost higher.

The Hearing Center of Excellence (HCE) is a collaborative DoD and VA team effort to address prevention, diagnosis, mitigation, treatment and rehabilitation of hearing loss, auditory system injury, as well as multisensory injuries that include inner ear dysfunction. In October 2009, the MHS designated the Air Force Medical Service as the Lead Component to guide the Hearing Center of Excellence journey with the goal of ensuring optimal DoD and VA collaboration. The executive hub will be located in San Antonio at Wilford Hall Medical Center

on Lackland Air Force Base. Lt. Col. Mark Packer, an Air Force neurotologist stationed at Wilford Hall, has been named Interim Director and is guiding HCE's development.

The HCE will bring new methods and research to current hearing conservation programs, but will not replace existing hearing conservation efforts. DoD-VA will collaborate on comprehensive plans for tracking hearing loss and auditory system injury incurred by members of the Armed Forces while serving on active duty. We are developing a Hearing Loss and Auditory System Injury Registry to meet this objective. The Registry will include injury, diagnosis, surgical interventions and other therapeutic interventions for hearing loss and auditory system injuries that occur during the course of care for Armed Forces members. It will also include an electronic, bidirectional exchange of information with the VA to ensure tracking of eventual hearing outcomes for veterans who are entered into the registry and subsequently receive treatment through the VA. The Hearing Center of Excellence will provide policy oversight and will coordinate the sharing of information and clinical advances in all areas of auditory system injury to optimize prevention, clinical care and research.

The HCE is working closely with the other DoD Centers of Excellence, as exemplified by the collaborative approach to establishing the Registry. The HCE, shaped by input from a working group of multidisciplinary representatives from each Service and the VA, is working to finalize identification of the hearing loss and auditory injury-specific data fields for the core Registry structure originally developed by the Vision Center of Excellence. The HCE executive office will be comprised of a lean cadre of staff working as an administrative hub leveraging technology to create and sustain a network of regional treatment facilities across DoD and VA. Additionally, Centers of Excellence leaders are regularly meeting to identify and leverage common support functions to achieve optimal efficiency and effectiveness.

Wilford Hall Medical Center is an excellent site for the HCE hub. With ten Air Force otolaryngologists, five Army otolaryngologists and nine audiologists, Wilford Hall is the most robust clinical otolaryngology and audiology department in the DoD and rivals the excellence found in the best civilian and academic departments. Wilford Hall is integrated with Brooke Army Medical Center supporting Graduate Medical Education of otolaryngology and audiology residents. The Wilford Hall/Brooke Army partnership provides support for the Audie Murphy and Central Texas VA hospitals, and provides didactic and surgical training support for the University of Texas at San Antonio Medical School. This local support underpinning the Hearing Center of Excellence hub will ensure success as links with other regional facilities are developed. The BRAC-directed integration of hospitals to the San Antonio Military Medical Center will provide convenient, top-quality platforms critical for focused preventive, clinical and research activities.

Wilford Hall otolaryngology and audiology providers have a strong legacy and understanding of deployment medicine supporting special operations, aeromedical evacuation, and humanitarian roles and are keenly aware of the ongoing dichotomy faced by troops between hearing protection and the essential need for optimal situational awareness and communication. Additionally, the departments have a solid research foundation and working relationship with the Army system, the VA system, and joint trauma surgeons, and have established collaborative teaching and research ties with the Navy, acclaimed universities, and national and international industry leaders. The San Antonio military medical community supports Ft. Hood, the Army's largest armored post, the Center for the Intrepid, Air Force entry-level enlisted training and the new military Medical Education and Training Campus located on Fort Sam Houston.

San Antonio is a rich research environment. It is the site of the Joint Center of Excellence for Battlefield Health and Trauma, as well as Centers of Excellence in molecular research, cardiovascular care, diabetes care, and maternal-fetal medicine. It is home to the Institute of Surgical Research, enroute care research center, and the Air Force combat casualty care center. It has two full-scale clinical investigations labs, a medical education simulation and training lab, an advanced diagnostics lab, and a state-of-the-art temporal bone lab. Wilford Hall otology and audiology departments have ties to the University of Texas at San Antonio bioengineering lab, and have collaborated in the development of both semi and fully implantable hearing technologies with new interest in bone conduction devices.

Troop readiness and population health are top priorities of HCE focus. To promote responsible management of health care costs, interagency regional directors will be identified and leveraged at spoke medical centers and research sites that will network with the central hub. Through this network, collaborative, evidence-based work will be coordinated to establish, promote, and implement the best preventive, therapeutic, and rehabilitative strategies. Since troop readiness is a function of troop capacity, initial and sustained efforts of the HCE will be to prevent hearing loss, promote protection, and deliver clarity throughout a Service member's career to enhance capability, retainability and longevity.

The DoD and VA have a long history of excellent clinical care for those with hearing loss and auditory injury. This system of regional medical facilities has well trained and well equipped experts who deliver excellent evidence-based care and routinely deliver positive patient experiences. The addition of access to the central Registry and development of an integrated DoD/VA Electronic Health Record will further facilitate implementation of best practice clinical

guidelines and longitudinal continuity for better outcomes. The Hearing Center of Excellence will facilitate identification and implementation of optimal mitigation and therapeutic choices.

Auditory research is already in progress within DoD and VA. Establishment of the Hearing Center of Excellence will greatly enhance research efforts by creating synergistic work, communication, coordination, collaboration, and reporting to fuel efficient, productive research. The Hearing Center of Excellence will provide collaborative research through: 1) Institutional Review Board assurance portability between centers or agencies; 2) retention and continuity among research-oriented providers; 3) knowledge of potential funding sources; 4) tracking of health records between agencies (DoD/VA); and 5) good availability of computable audiometric data. Data available from the Registry will spur a research agenda leading to better prevention, optimal diagnosis, best practice guidelines and optimal rehabilitation strategies. The Hearing Center of Excellence will pursue these objectives through communication, funding advocacy, and clinical case management for continuity and coordination in electronic health records.

An initial state-of-the-science seminar was held with Telemedicine and Advanced Technology Research Center (TATRC), following the Association of Research in Otolaryngology international conference, to detail current understandings of hearing, hearing loss, tinnitus, and balance function, dysfunction, and rehabilitation. Gaps were identified, and research lines were proposed to address specific needs based on injury patterns seen in current conflicts. Twenty-three projects were identified with joint applicability. These research lines focus on prevention, diagnosis, rescue and rehabilitation of hearing loss, tinnitus and inner ear function as well as the ear as a shock organ relating to blast injury. Many of these projects will be facilitated by the Registry. Several collaborative efforts are being pursued, but broad scale

sustained collaboration, integration of outcomes, and dedicated focus will require coordination by the Hearing Center of Excellence.

Since designation of AFMS as Lead Component for the HCE, the Interim Director has worked with the Tri-Service/VA working group to draft the concept of operations and to direct and define the functional needs for the hearing loss and auditory injury Registry. The Lead Component structure supports cross-talk with other DoD Centers of Excellence and enables the Service Surgeons General to be fully engaged in the execution of activities down to the military treatment facility level.

In conclusion, establishment of the DoD's Hearing Center of Excellence is well underway. The Hearing Center of Excellence is positioned to roll out the necessary programs to connect, coordinate and focus the DoD and VA prevention, clinical care and research efforts for each injured military member and the expanding population of auditory disabled Veterans.

We could not achieve our goals of better readiness, better health, better care and best value for our heroes and their families without your support. Thank you.