

United States Air Force



Testimony

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Military Health System Overview and Defense Health Program Cost Efficiencies

Statement of
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Mister Chairman and distinguished members of the Committee, thank you for this opportunity to appear before you today, representing the Air Force Medical Service and our nearly 59,000 Total Force medics. I look forward to working with you again this year to achieve mutual goals in support of our military members and their families. We appreciate your immeasurable contributions to the success of our mission.

Military Health System achievements have changed the face of war. We deploy and set up hospitals in 12 hours of arrival almost anywhere in the world. We move wounded warriors from the battlefield to an operating room within minutes and have achieved and sustained less than 10 percent died-of-wounds rate. We move our sickest patients in less than 24 hours of injury and get them home to loved ones within 3 days to hasten recovery. We have safely evacuated more than 86,000 patients since Oct. 2001, 11,300 in 2010 alone, many of them critically injured. This is all pretty amazing.

The Air Force Medical Service (AFMS) has a simple mantra: “Trusted Care Anywhere.” This fits what we do today and will continue to do in the years ahead. It means creating a system that can be taken anywhere in the world and be equally as effective whether in war or for humanitarian assistance. This system is linked back to American quality care and refuses to compromise on patient safety. These are formidable challenges, but we have the foundation we need and the best creative minds working with us to achieve this end.

Providing Trusted Care Anywhere requires the AFMS to focus on patients and populations. Patient-centered care builds new possibilities in prevention by linking the patient to a provider team and both patient and provider team to an informatics network dedicated to improving care. Efficient and effective health teams allow recapture of care in our medical

treatment facilities (MTFs) to sustain currency. Continually improving our readiness ensures patients and warfighters always benefit from the latest medical technologies and advancements.

Patient-Centered Medical Home

To improve Air Force primary care and achieve better health outcomes for our patients, we implemented our Family Health Initiative (FHI) in 2009, which is a team-based, patient-centered approach building on the Patient-Centered Medical Home (PCMH) concept established by the American Academy of Family Physicians. We aligned existing resources and now have PCMH at 32 of our MTFs caring for 340,000 enrolled patients. By the end of 2012, 1 million of our beneficiaries will have a single provider and small team of professionals providing their care at all AFMS facilities. This means much greater continuity of care, with our patients seeing the same physician or their professional partner 95 percent of the time. The result is more effective health care based on trust and rapport for both the patient and the provider.

Air Force Medical Home integrates the patient into the health care team, offering aggressive prevention and personalized intervention. Physicians will not just evaluate their patients for disease to provide treatment, but also to identify risk of disease, including genetic, behavioral, environmental and occupational risks. The health care team will encourage healthy lifestyle behavior, and success will be measured by how healthy they keep their patients, rather than by how many treatments they provide. Our goal is that people will live longer lives with less morbidity. We are already seeing how PCMH is bringing that goal to fruition. For example, diabetes management at Hill AFB, Utah, showed an improvement in glycemic control in 77 percent of the diabetic population, slowing progression of the disease and saving over \$300 thousand per year.

Patient feedback through our Service Delivery Assessment survey shows an overall improvement in patient satisfaction for patients enrolled in PCMH, with the greatest improvement noted in the ability to see a personal provider when needed. As relationships develop, our providers will increase their availability to patients after hours and through secure patient messaging. This will further enhance patient satisfaction and reduce costs by minimizing emergency department visits.

Our next step is to embark on an innovative personalized medicine project called Patient Centered Precision Care, or PC2, that will draw and build on technological and genetic based advances in academia and industry. Effective, customized care will be guided by patient-specific actionable information and risk estimation derived from robust Health Information Technology applications. We're excited about our collaboration opportunities with renowned partners, such as the Duke Institute for Genome Sciences and Policy, IBM, and others.

Patient-centered care includes caring for Air Force special needs families, and we are working closely with our personnel community to ensure these families receive the specialized medical or educational support they require. The Air Force Exceptional Family Member Program (EFMP) is a collaborative and integrated program that involves medical, family support, and assignment functions to provide seamless care to these families. Enhanced communication of the program will be facilitated by an annual Caring for People Forum at each installation, giving families an opportunity to discuss concerns and receive advice. Starting in FY 2012, the Air Force will begin adding 36 full-time Special Needs Coordinators at 35 medical treatment facilities (MTFs) to address medical concerns and assignment clearance processes.

An important aspect of patient-centered preventive care includes safeguarding the mental health and well-being of our people and improving their resilience, because no one is immune to the stresses and strains of life. While Air Force suicide rates have trended upward since 2007, our rate remains below what we experienced before the inception of our suicide prevention program in 1997. The most common identified stressors and risk factors have remained the same over the last 10 years: relationship, financial and legal problems. Although deployment can stress Airmen and their families, it does not seem to be an individual risk factor for Airmen, and most Airmen who complete suicide have never deployed. We are redoubling our efforts to prevent suicide and specifically target those identified at greatest risk.

We use the Air Force Post-deployment Health Assessment (PDHA) and Post-deployment Health Reassessment (PDHRA) to identify higher risk career groups for post-traumatic stress disorder (PTSD). While most Air Force career fields have a very low rate of PTSD, others such as EOD, security forces, medical, and transportation have higher rates of post traumatic stress symptoms.

Advances in treatment, such as the Virtual Reality Exposure Therapy (VRET) system we call “Virtual Iraq,” have been fielded to treat service members returning from theater with PTSD, Traumatic Brain Injury (TBI), and other related mental health disorders. This system is founded on two well established forms of psychotherapy: Cognitive-Behavioral Therapy and Prolonged Exposure Therapy. VRET is now deployed at 10 Air Force mental health clinics and is lauded by patients.

The Air Force provides additional support to our most at-risk Airmen with frontline supervisor’s suicide prevention training given to all supervisors in career fields with elevated

suicide rates. Mental health providers are seeing patients in our primary care clinics across the Air Force. They see patients who may not otherwise seek care in a mental health clinic because of perceived stigma. We have significantly expanded counseling services beyond those available through the chaplains and mental health clinic. Other helping programs include Military Family Life Consultants, who see individuals or couples; and Military OneSource, which provides counseling to active duty members off-base for up to 12 sessions.

A recent example of how suicide prevention skills saved a life is the story of how Senior Airman Jourdan Gunterman helped save a friend from halfway around the world in Afghanistan. His training first helped him recognize the warning signs of a friend in trouble: drinking heavily, violent outbursts, disciplinary actions, and recent discharge from the Air Force following a challenging deployment. A cryptic emotional message on Facebook from the friend led Airman Gunterman to question his friend's disturbing behavior. He discovered his friend had ingested a bottle of pills.

When his troubled friend no longer responded, Airman Gunterman obtained the friend's phone number on-line from another friend, Senior Airman Phillip Sneed, in Japan. Airman Sneed promised to keep calling the friend until he picked up. Meanwhile Airman Gunterman enlisted the help of his chaplain to locate the suicidal friend. Finally, locating a hometown news release about his friend, Airman Gunterman was able to learn his friend's parents' names and then used a search engine to find their address. He contacted the local police, who rushed to the friend's house and saved him. Airman Gunterman is an expert with social media -- but more important -- he is an incredible Wingman who saved his buddy's life.

Resiliency is a broad term that describes the set of skills and qualities that enable Airmen to overcome adversity and to learn and grow from experiences. It requires a preventive focus based on what we have learned from individuals who've been through adversity and developed skills to succeed. Distilling those skills and teaching them will lead to a healthier force.

The Air Force uses a targeted resiliency training approach, recognizing different Airmen will be in different risk groups. For those who have higher exposure to battle, we have developed initiatives such as the Deployment Transition Center (DTC) at Ramstein AB, Germany, which opened in July. The DTC provides a two-day reintegration program en route from the war zone, involving chaplain, mental health, and peer facilitators. The DTC provides training, not treatment – the focus is on reintegration into work and family. Feedback from deployers has been overwhelmingly positive.

We teach our Airmen that seeking help is not a sign of weakness, but a sign of strength. Lieutenant Colonel Mary Carlisle is an Air Force nurse who struggled with PTSD following her deployment. She shares her story of how she was able to overcome PTSD by seeking help and treatment. She realized that she would be affected forever, but is now more resilient from her experience and treatment. She shared her story with over 700 of my senior medics at a recent leadership conference. Lt Col Carlisle's openness and leadership are an invitation to others to tell their stories, and in so doing change our culture and shatter the stigma associated with mental health care.

In addition to the Air Force-wide approach, some Air Force communities are pursuing other targeted initiatives. The highly structured program used by Mortuary Affairs at Dover AFB, Delaware, where casualties from OIF and OEF are readied for burial, is now being used as

a model for medics at our hospitals in Bagram, Afghanistan, and Balad, Iraq, where the level of mortality and morbidity are much higher than most medics see at home station MTFs. The Air Force continually seeks to leverage existing “best practice” programs such as Dover’s for Air Force-wide use. If we can help our Airmen develop greater resiliency, they will recover more quickly from stresses associated with exposure to traumatic events.

Recapturing Care and Maintaining Currency

Trusted Care means good stewardship of our resources. In an era of competing fiscal demands and highly sought efficiencies, recapturing patients back into our MTFs is critical. Where we have capability, we can provide their care more cost-effectively by managing care in our facilities. Equally important is building the case load and complexity needed to keep our providers’ skills current to provide care wherever the Air Force needs them. We have expanded our hospitals and formed partnerships with local universities and hospital systems to best utilize our skilled professionals.

We value our strong academic partnerships with St. Louis University; Wright State University (Ohio); the Universities of Maryland, Mississippi, Nebraska, Nevada, California and Texas, among others. They greatly enrich our knowledge base and training opportunities as well as provide excellent venues for potential resource sharing.

Since the early 1970s, many Air Force Graduate Medical Education (GME) programs have been affiliated with civilian universities. Our affiliations for physician and dental education at partnership sites have evolved to include partnership sponsoring institutions for residencies. In addition, our stand-alone residency programs have agreements for rotations at civilian sites. Our Nurse Education Transition Program (NETP) and Nurse Enlisted Commissioning Program

(NECP) have greatly benefited from academic partnerships. The NETP is available at 11 sites with enrollment steadily increasing, while the NECP enrolls a total of 50 nursing students per year at the nursing school of their choice. A nursing program partnering with Wright State University and Miami Valley College of Nursing in Ohio, and the National Center for Medical Readiness Tactical Laboratory has produced a master's degree in Flight Nursing with Adult Clinical Nurse Specialist in disaster preparedness, a first of its kind in the country.

Our GME programs are second to none. Our first-time pass rates on specialty board exams exceed national rates in 26 of 31 specialty areas. Over the past four years, we've had a 92 percent overall first time board pass rate. I am very proud of this level of quality in our medics and grateful to our civilian partners who help make Air Force GME a success.

Partnerships leveraging our skilled work force prepare us for the future. Our Centers for the Sustainment of Trauma and Readiness (C-STARS) in Baltimore, Cincinnati and St. Louis continue to provide our medics the state-of-the-art training required to treat combat casualties. In 2009 we complemented C-STARS with our Sustainment of Trauma and Resuscitation Program (STARS-P) program, rotating our providers through Level 1 trauma centers to hone their war readiness skills. Partnerships between Travis AFB and University of California at Davis; Nellis AFB and University Medical Center, Nevada; Wright-Patterson AFB and Miami Valley Hospital; Luke AFB and the Scottsdale Health System; MacDill AFB and Tampa General Hospital; and others, are vital to sustaining currency.

Our hospitals, C-STARS and STARS-P locations are enhanced by the Air Force medical modeling and simulation Distributed High-Fidelity Human Patient Simulator (DHPS) program. There are currently 80 programs worldwide and the AFMS is the DoD lead for medical

simulation in healthcare education and training. Over the next year, we will link the entire AFMS using Defense Connect Online and our new Web tele-simulation tool. This will enable all Air Force MTFs to play real time medical war games that simulate patient management and movement from point of injury to a Level 3 facility and back to the States.

Our partnership with the Department of Veterans Affairs (VA) has provided multiple avenues for acquiring service, case mix, and staffing required for enhancing provider currency. Direct sharing agreements, joint ventures and the Joint Incentive Fund (JIF) have all proved to be outstanding venues for currency and collaboration.

A great example is the JIF project between Wright-Patterson Medical Center and the Dayton VA. The expansion of their radiation-oncology program includes a new and promising treatment called stereotactic radio surgery. This surgery, really a specialized technique, allows a very precise delivery of a single high dose of radiation to the tumor without potentially destructive effects to the surrounding tissues. Without a single drop of blood, the tumor and its surrounding blood supply are destroyed, offering the patient the hope of a cure and treatment that has fewer side effects.

In another Air Force/VA success story, Keesler AFB and VA Gulf Coast Veterans Health Care System Centers of Excellence Joint Venture is receiving acclaim. Ongoing clinical integration efforts have shown an increase in specialty clinic referrals. Plans for continued integration are on track, with many departments sharing space and staff by FY 12 and the joint clinic Centers of Excellence in place by FY 13.

Providing a more seamless transition for Airmen from active duty to the VA system remains a priority. This process has been greatly enhanced with the Integrated Disability

Evaluation System (IDES). Expansion of the initial pilot program is occurring by region in four stages, moving west to east, and centered around the VA's Veteran Integrated Service Networks (VISN). Phase 3 of the expansion has added an additional 18 Air Force MTFs for a total of 24. The Services and the VA continue to conduct IDES redesign workshops to further streamline the process to be more timely and efficient for all transitioning Service members. The goal is to provide coverage for all Service members in the IDES by September 2011.

We continue to look for innovative ways and new partnerships to meet our currency needs and provide cutting-edge care to our military family. We will expand partnerships with academic institutions and the VA wherever feasible to build new capabilities in health care and prevent disease.

Continuously Improving Readiness Assets

We have made incredible inroads in our efforts to be light, lean and mobile. Not only have we vastly decreased the time needed to move our wounded patients, we have expanded our capabilities. Based on lessons learned from our humanitarian operations in Indonesia, Haiti and Chile, we developed obstetrics, pediatrics and geriatrics modules that can be added to our Expeditionary Medical System (EMEDS). We simply insert any of these modules without necessarily changing the weight or cube for planning purposes. Medics at Air Combat Command are striving to develop an EMEDS Health Response Team (HRT) capable of seeing the first patient within one hour of arrival and performing the first surgery within 3-5 hours. We will conduct functional tests on the new EMEDS in early 2011.

On the battlefield, Air Force vascular surgeons pioneered new methods of hemorrhage control and blood vessel reconstruction based on years of combat casualty experience at the Air

Force Theater Hospitals in Iraq and Afghanistan. The new techniques include less invasive endovascular methods to control and treat vascular injury as well as refinement of the use of temporary shunts. Their progress has saved limbs and lives and has set new standards, not only for military surgeons, but also for civilian trauma.

A team of medical researchers from the 59th Medical Wing Clinical Research division has developed a subject model that simulates leg injuries seen in Iraq and Afghanistan to enable them to try interventions that save limbs. The team is also studying how severe blood loss affects the ability to save limbs. Their findings show blood flow should be restored within the first hour to avoid muscle and nerve damage vs. traditional protocol that allowed for six hours. Team member and general surgery resident Captain (Dr.) Heather Hancock, stated, “You cannot participate in research designed to help our wounded soldiers and not be changed by the experience.”

We are also advancing the science and art of aeromedical evacuation (AE). We recently fielded a device to improve spinal immobilization for AE patients and are working as part of a joint Army and Air Force team to test equipment packages designed to improve ventilation, oxygen, fluid resuscitation, physiological monitoring, hemodynamic monitoring and intervention in critical care air support.

We are finding new ways to use specialized medical equipment for our wounded warriors. In October, we moved a wounded Army soldier with injured lungs from Afghanistan to Germany using Extracorporeal Membrane Oxygenation (ECMO) support through the AE system -- the first time we have used AE ECMO for an adult. The ECMO machine provides cardiac and respiratory support for patients with hearts and/or lungs so severely diseased or

damaged they no longer function. We have many years of experience with moving newborns via the 59th Medical Wing (Wilford Hall) ECMO at Lackland AFB, Texas, but the October mission opened new doors for wounded care.

Another new tool in battlefield medicine is acupuncture. The Air Force acupuncture program, the first of its kind in DoD, has expanded beyond clinic care to provide two formal training programs. Over 40 military physicians have been trained. We recognize the success of acupuncture for patients who are not responding well to traditional pain management. This is one more tool to help our wounded Soldiers and Airmen return to duty more rapidly and reduce pain medication usage.

We've made progress with electronic health records in the Theater Medical Information Program Air Force (TMIP-AF), now used by AE and Air Force Special Operations. TMIP-AF automates and integrates clinical care documentation, medical supplies, equipment and patient movement with in-transit visibility. Critical information is gathered on every patient and entered into our deployed system. Within 24 hours, records are moved and safely stored in our databases stateside.

Established in May 2010 with the Air Force as lead component, the Hearing Center of Excellence (HCE) is located at Wilford Hall in San Antonio. This center continues to work closely with Joint DoD/VA subject matter experts to fine-tune concepts of operation. Together we are moving forward to achieve our goals in the areas of outreach, prevention, care, information management and research to preserve and restore hearing.

DoD otologists have worked internally and with NATO allies to investigate emerging implant technologies and have developed plans to test a central institutional review board (IRB)

in a multi-site, international study to overcome mixed hearing loss. The HCE is also pursuing standardization of minimal baseline audiometric testing and point of entry hearing health education within DoD. They are working with the Defense Center of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) to establish evidence-based clinical practice guidelines for management of the post-traumatic patient who suffers from dizziness. The HCE has worked with analysts within the Joint Theater Trauma System to develop the Auditory Injury Module (AIM) to collect auditory injury data within the Joint Theater Trauma Registry (JTTR). These, among others, are critical ways the HCE supports the warfighter in concert with our partners at DCoE and the VA.

All of these advances I've addressed are critical to improving medical readiness, but the most important medical readiness assets are our people. Recruiting and retaining top-notch personnel is challenging. We continue to work closely with our personnel and recruiting partners to achieve mission success. Optimizing monetary incentives, providing specialty training opportunities, and maintaining a good quality of life for our members are all essential facets to maintaining a quality work force.

The AFMS continues to optimize the use of monetary incentives to improve recruiting and retention. We are working with the Air Force personnel and recruiting communities to develop a sustainment model specific for each of the AFMS Corps. Specifically, we are targeting the use of special pays, bonuses, and the Health Professions Scholarship Program (HPSP) to get the greatest return on investment. Congress' support of these programs has helped to maintain a steady state of military trained physicians, dentists, nurses, and mental health professionals.

The new consolidated pay authority for health care professionals allows greater flexibility of special pays to enhance recruitment and retention of selected career fields. While we use accession bonuses to attract fully qualified surgeons, nurses, mental health specialists, and other health professionals to the AFMS, HPSP remains the number one AFMS pipeline for growing our own multiple healthcare professionals.

We were able to execute 100 percent of HPSP in FY09 and FY10 and were able to graduate 219 and 211 new physicians, respectively, in these years. In FY10, 49 medical school graduates from the Uniformed Services University of the Health Sciences also joined the Air Force Medical Service. These service-ready graduates hit the ground running. Specialized military training and familiarity with the DoD health care system ensures more immediate success when they enter the work force. Once we have recruited and trained these personnel, it is essential that we are able to keep them. We are programming multiyear contractual retention bonuses at selectively targeted health care fields such as our physician and dental surgeons, operating room nurses, mental health providers, and other skilled healthcare professions to retain these highly skilled practitioners with years of military and medical expertise.

For our enlisted personnel, targeted Selective Reenlistment Bonuses, combined with continued emphasis on quality of life, generous benefits, and job satisfaction, positively impact enlisted recruiting and retention efforts. Pay is a major component of recruiting and retention success, but we have much more to offer. Opportunities for education, training, and career advancement, coupled with state-of-the art equipment and modern facilities, serve together to provide an excellent quality of life for Air Force medics. Successful and challenging practices remain the best recruiting and retention tool available.

We look 20 to 30 years into the future to understand evolving technologies, changing weapon systems, and changes in doctrine and tactics to protect warfighters from future threats. This ensures we provide our medics with the tools they need to fulfill the mission.

We continue to build state-of-the-art informatics and telemedicine capabilities. Care Point now allows individual providers to leverage our vast information databases to learn new associations and provide better care to patients. These same linkages allow our Applied Clinical Epidemiology Center to link health care teams and patients with best practices. VTCs are now deployed to 85 of our mental health clinics broadening the reach of mental health services, and our teleradiology program provides digital radiology systems interconnecting all Air Force MTFs, enabling diagnosis 24/7/365.

We are engaged in exciting research with the University of Cincinnati to enhance aeromedical evacuation, focusing on the challenges of providing medical care in the darkened, noisy, moving environments of military aircraft. We are studying how the flight environment affects the body, and developing possible treatments to offset those effects. Clinical studies are examining the amount of oxygen required when using an oxygen-concentrating device at higher altitudes. Simulators recreate the aircraft medical environments and are used extensively to train our medical crews. This new research expands our knowledge and training opportunities, and offers the possibility of future partnering efforts.

We are also developing directed energy detection and laser assisted wound healing; advancing diabetes prevention and education; and deploying radio frequency identification technology in health facilities. We partner with multiple academic institutions to advance knowledge and apply evidence based medicine and preventive strategies with precision. These

are some of the critical ways we seek to improve readiness, advance medical knowledge and keep the AFMS on the cutting edge for decades to come.

The Way Ahead

While at war, we are successfully meeting the challenges of Base Realignment and Closure as we draw near to the 2011 deadline. We have successfully converted three inpatient military treatment facilities to ambulatory surgery centers at MacDill AFB, Florida; Scott AFB, Illinois; and the USAF Academy, Colorado. By September of this year, the medical centers at Lackland AFB, Texas; and Andrews AFB, Maryland; are on track to convert to ambulatory surgery centers. The medical center at Keesler AFB, Mississippi, is poised to convert to a community hospital. Medical Groups at McChord AFB, Washington; and Pope AFB, North Carolina have been effectively realigned as Medical Squadrons. Military treatment facilities at Shaw AFB, South Carolina; Eglin AFB, Florida; McGuire AFB, New Jersey; and Elmendorf AFB, Alaska; have been resourced to support the migration of beneficiaries into their catchment areas as a result of BRAC realignments.

At Wright-Patterson AFB, Ohio, we have relocated cutting-edge aerospace technology research, innovation, and training from Brooks AFB. In tandem with our sister Services, we have also relocated basic and specialty enlisted medical training to create the new Medical Education and Training Campus (METC), the largest consolidation of training in DoD history.

Our strategy to control DoD healthcare costs is the right approach to manage the benefit while improving quality and satisfaction. Adjustments to the benefit such as minimally raising TRICARE enrollment fees for working retirees, requiring future enrollees to the U.S. Family Health Plan to transition into TRICARE-for-Life upon turning 65 years of age, paying sole-source community hospitals Medicare rates, and incentivizing the use of the most effective

outlets for prescriptions are prudent. There will be limited impact (prescription only) on Active Duty Family Members. By implementing these important measures we will be able to positively affect the rising costs of healthcare and improve the health of our population.

The AFMS is firmly committed to MHS goals of readiness, better health, better care and best value. We understand the value of teaming and treasure our partnerships with the Army, Navy, VA, academic institutions, and health care innovators. We will continue to deliver nothing less than world-class care to military members and their families, wherever they serve around the globe. They deserve, and can expect, Trusted Care Anywhere. We thank this Committee for your support in helping us to achieve our mission.