DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 2012

WEDNESDAY, APRIL 6, 2011

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:10 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Daniel K. Inouye (chairman) presiding.

Present: Senators Inouye, Leahy, Mikulski, Cochran, and Murkowski.

DEPARTMENT OF DEFENSE

MEDICAL HEALTH PROGRAMS

STATEMENT OF LIEUTENANT GENERAL ERIC B. SCHOOMAKER, SURGEON GENERAL, DEPARTMENT OF THE ARMY

OPENING STATEMENT OF CHAIRMAN DANIEL K. INOUYE

Chairman INOUYE. I would like to welcome all of you to this special hearing.

There will be two panels this morning. First, we will hear from the Surgeons General, Lieutenant General Eric B. Schoomaker, Vice Admiral Adam Robinson, Jr., and Lieutenant General Charles Green. Then we will hear from our Chiefs of the Nurse Corps, Major General Patricia Horoho, Rear Admiral Elizabeth Niemyer, and Major General Kimberly Siniscalchi.

I understand that this will be the last hearing for General Schoomaker and Admiral Robinson, and I would like to thank both of you for your dedicated service and wish you well in your future endeavors.

General Green, I look forward to continuing our work to ensure the future of our military medical programs and personnel.

Every year, the subcommittee holds this hearing to discuss the critically important issues related to the care and well-being of our service members and their families. As such, the Surgeons General and nurses have been called upon to share their insight on medical issues that need improvement and areas that are seeing continued success and progress.

The healthcare benefits we provide to our service members and their families are one of the most basic benefits we can provide to the men and women serving our Nation. It is also one of the most

important effective recruiting and retention tools we have at our disposal.

The advancements military medicine has made over the last several decades has not only dramatically improved medical care on the battlefield, but also enhanced healthcare delivery and scientific achievements throughout the aspects of medicine. The result impacts millions of Americans who likely have no idea that these improvements were initiated by the military.

While there has been significant success and momentum advanced in modern medicine and the care we provide, there is much more to be done. The Department of Defense must stay ahead of the curve and remain vigilant to the ever-changing healthcare needs of our forces and their families. Even in this challenging fiscal environment, we must continue to provide the resources required to maintain and grow the expertise needed to stay at the forefront of military medicine.

Times have certainly changed since I was a soldier. For instance, when I was injured in World War II, it took 9 hours to evacuate me. Now the military's goal is to evacuate within the so-called Golden Hour. In my regiment, for example, there were no double amputee or traumatic brain injury survivors because they died en route. Today, thanks to military medicine advancements and helicopter and other transport devices, our men and women in uniform survive these grave injuries.

Despite the great progress made by the military medical community, more and more of our troops are suffering from medical conditions that are much harder to identify and treat, such as traumatic brain injury (TBI), post-traumatic stress, and depression. I know that all of you here today are striving to address these issues, and I applaud your efforts to place more mental health providers throughout the medical facilities, and especially within primary care offices. In addition, you employ more of these specialists in theater to provide early intervention and prevent further escalation.

Due to the prolific number of medical assistance efforts being offered, there can be confusion on where to seek help. I have heard many stories of service members who have six different magnets on their refrigerators identifying a website or a phone number for where to seek help. I believe it is essential that we offer these services, both anonymously and officially, but it can also be very difficult to navigate through this maze of options that are available. It is my hope that in your efforts to provide increased and advanced services, that you work to consolidate these services and make it easier for service members and their families to find the help they need.

These are some of the issues we hope to discuss today. I look forward to your testimony and note that your full statements will be included in the record.

I wish to now call upon the vice chairman of this subcommittee, Senator Cochran, for his opening statement.

STATEMENT OF SENATOR THAD COCHRAN

Senator COCHRAN. Mr. Chairman, thank you very much.

I am pleased to join you in welcoming this distinguished panel of witnesses to our subcommittee today, the Surgeons General of our military forces. We appreciate your distinguished service, and thank you for your cooperation with our subcommittee to assess and review the budget request for the next fiscal year.

Thank you.

Chairman INOUYE. All right. Thank you very much.

Our witnesses on the first panel are Lieutenant General Eric B. Schoomaker, Surgeon General of the Army, Vice Admiral Adam Robinson, Jr., Surgeon General of the Navy, and Lieutenant General Charles B. Green, Surgeon General of the Air Force.

Surgeon General of the Army.

General SCHOOMAKER. Thank you, sir.

Chairman Inouye, Vice Chairman Cochran, and distinguished members of the subcommittee, thank you for providing me this opportunity to talk with you about the dedicated men and women of the United States Army Medical Department, who bring value and inspire trust in Army medicine.

As you noted, Mr. Chairman, I am joined today by my Deputy Surgeon General and our Chief of the Army Nurse Corps, Major General Patty Horoho. Some of my staff have characterized this as an awful Broadway production of "Beauty and the Beast".

Despite over 9 years of continuous armed conflict, every day our soldiers and their families are kept from injuries, illnesses, and combat wounds through our health promotion and prevention measures, are treated in state-of-the-art fashion when prevention fails, and supported by a talented medical force, including those with a warrior on the battlefield.

Army medicine partners with our soldiers, their families, our veterans, our fellow service members, and the interagency to provide innovations in trauma care and preventive medicine. We save lives and we improve the well-being of our warriors, delivering the very best care at the right time and place.

Let me discuss our work through the lens of five Es: Enduring, early, effective, efficient, and in an enterprise fashion.

We have an enduring commitment through initiatives, such as our Warrior Care and Transition Program and the soldier medical readiness campaign plan. We have an enduring responsibility as part of the military health system and with the Department of Veterans Affairs to provide care and rehabilitation for our wounded, ill, and injured for many, many years to come.

The United States Army's Warrior Transition Command, under the leadership of Brigadier General Darryl Williams, is a key part of the enduring provision of care and provides oversight of the Army's Warrior Care and Transition Program. Since the inception of these Warrior Transition Units in June 2007, more than 40,000 wounded, ill, and injured soldiers and their families have either progressed through or are now being cared for by these dedicated caregivers. Over 16,000 of these soldiers have rejoined the force, and the remainder remain—have been returned to the community with dignity and respect.

The Soldier Medical Readiness Campaign helps to maintain a healthy and resilient force. Major General Richard Stone, our Deputy Surgeon General for Mobilization, Readiness, and Reserve Af-

fairs, leads that campaign. Among the campaign's tasks are the—are to provide commanders with a tool to manage their soldiers' medical requirements, identify those medically non-ready soldiers, and reduce this population so that we can have a fully fit and capable, ready Army. The end state is healthy soldiers and increased medical readiness.

Those soldiers who no longer meet retention standards must navigate the Physical Disability and Evaluation System. Assigning disability has long been a contentious issue. The Department of Defense and VA have jointly designed a new Disability Evaluation System that integrates DOD and the Veterans Administration (VA) processes with a goal of expediting the delivery of VA benefits to service members. The pilot of the new Integrated Disability Evaluation System, or the IDES, began in November 2007 at Walter Reed. It is now in 16 medical treatment facilities, and it will be the DOD and VA replacement for this Legacy Disability Evaluation System that we have had for upwards of 60 years.

But even with this improvement, disability evaluation remains complex and adversarial. Our soldiers still undergo dual adjudication with the military rates only for unfitting conditions and the VA rates for all service-connected conditions. Dual adjudication is confusing to soldiers. It leads to serious misperceptions about the Army's appreciation of the wounded, ill, and injured soldiers' complete medical and emotional situation. The IDES has not changed the fundamental nature of the dual adjudication process. Under the leadership of our Army Chief of Staff General George Casey and the Army G–1, we continue to forge the consensus necessary for a comprehensive reform of the Physical Disability and Evaluation System, which the Army and DOD only determines fitness for duty and the VA determines disability compensation.

Our second strategic aim is to reduce suffering, illness, and injury through early prevention. Army Public Health protects and improves the health of Army communities through education, the promotion of healthy lifestyles, and disease and injury prevention.

The health of the total Army is essential for readiness, and prevention is the key to health. Examples of our practices include the implementation of the Patient-Centered Medical Home for Primary Care Delivery, something that we are doing in concert with our fellow service members, led by the Air Force, frankly, the Army's development and use of vaccines, and the early advocation of management of battlefield concussion.

We lead in the recognition and treatment of mild traumatic brain injury, or concussion, through what's called the educate, train, treat, track strategy. Under the personal leadership of the Vice Chief of the Army, General Pete Chiarelli, and refined by Brigadier General Richard Thomas, our Assistant Surgeon General for Force Projection, we have fielded a program that has led to increased awareness and screening for traumatic brain injury and decreased the stigma associated with seeking early diagnosis and treatment.

This leads into the use of evidence-based practices aimed at the most effective care. As an example, Army medicine now strengthens our soldiers' and families' behavioral health and emotional resiliency through a campaign to align the various behavioral health programs with the deployment and reset cycle, a process we call

the Comprehensive Behavioral Health System of Care. Under the leadership of the Deputy Surgeon General, Major General Patty Horoho, this program uses multiple touch points to assess both the health and behavioral health for a soldier and the family. Coupled with the advances in battlefield care under the Joint Theater Trauma System, we have made great strides in managing the physical and emotional wounds of war.

Additionally, we have developed a comprehensive pain management strategy to address chronic and acute pain that many of our soldiers face. This strategy uses state-of-the-art modalities and technologies. It focuses on the use of non-medication pain management modalities, incorporating complementary and alternative or integrative approaches, such as acupuncture and massage therapy, yoga, and other tools. We were recently recognized by the American Academy of Pain Medicine with a Presidential commendation for the impact on pain management in the United States.

Our fourth strategic aim is optimizing efficiencies through leading-edge business practices, partnerships with our other services and veterans organizations, to support the DOD and VA collaboration on treating post-traumatic stress disorder, and pain, and other healthcare issues, and electronic health records should seamlessly transfer patient data between partners to improve efficiencies, effectiveness, and the continuity of care.

No two health organizations in the Nation share more nonbillable health information than the Department of Defense and the Veterans Administration. The Departments continue to standardize sharing activities and deliver information technologies to improve the secure sharing of information.

Finally, our fifth aim is the Army enterprise approach. We have reengineered Army medicine, such as the creation of a provisional Public Health Command, to optimally serve the soldier. We have aligned our regional medical commands with the TRICARE regions, resulting in improved readiness and support from the managed care support contractor to our regions. Three standardized continental United States-based regional medical commands are now aligned with the three TRICARE regions in the continental United States.

We also have regional readiness cells now that can reach out to our Reserve components within their areas of responsibility, ensuring that all medical services required are identified and provided at all times. Part of this reorganization has been the standup of a public health command under the command of Brigadier General Tim Adams. This consolidation has already resulted in an increased focus on prevention, health promotion, and wellness.

As you have noticed here, this is my last congressional hearing cycle as the Army Surgeon General and the Commanding General of the United States Army Medical Command. I thank the subcommittee for allowing me to highlight the accomplishments we have made, the challenges we continue to face, to hear your perspectives regarding health of our extended military family and the healthcare we provide. I have appreciated your questions, your insights, and your commitment to our Army soldiers and their families.

PREPARED STATEMENT

On behalf of the over 140,000 soldiers, civilians, and contractors that make up my command in Army medicine, I also thank Congress for your continued support and for providing the resources that we have needed to deliver leading edge health services and build healthy and resilient communities.

I welcome your questions.

Chairman INOUYE. All right. Thank you very much, General Schoomaker.

[The statement follows:]

PREPARED STATEMENT OF LIEUTENANT GENERAL ERIC B. SCHOOMAKER

Chairman Inouye, Vice Chairman Cochran and distinguished members of the committee. Thank you for providing me this opportunity to talk with you today about some of the very important work being performed by the dedicated men and women—military and civilian—of the U.S. Army Medical Department (AMEDD) who bring value and inspire trust in Army Medicine.

Now in my last congressional hearing cycle as the Army Surgeon General and Commanding General, U.S. Army Medical Command (MEDCOM), I would like to thank the committee for the opportunities provided over the past 4 years that have allowed me to share what Army Medicine is, to highlight the accomplishments we have made, to detail the challenges we have faced, and to hear your collective perspectives regarding the health of our extended Military Family and the military healthcare we provide. On behalf of the over 70,000 dedicated Soldiers, civilians, and contractors that make up Army Medicine, I also thank Congress for your continued support of Army Medicine and the Military Health System, providing the resources we need to deliver leading edge health services to our Warriors, Families and Retirees.

Despite over 9 years of continuous armed conflict for which Army Medicine bears a heavy load, every day our Soldiers and their Families are kept from injuries, illnesses, and combat wounds through our health promotion and prevention efforts; are treated in state-of-the-art fashion when prevention fails; and are supported by an extraordinarily talented medical force including those who serve at the side of the Warrior on the battlefield.

Army Medicine is a dedicated member of the Military Health System and is equally committed to partnering with our Soldiers, their Families, and our Veterans to achieve the highest level of fitness and health for each of our beneficiaries. Army Medicine historically is a leader in developing innovations for trauma care and preventive medicine that save lives and improve well-being for our uniformed personnel, improvements which have also favorably influenced civilian care. We are focused on delivering the best care at the right time and place. Army Medicine operates using the following strategic aims—The Five E's: Enduring, Early, Effective, Efficient, and Enterprise to reflect our commitment to selfless service.

—To provide Enduring care through initiatives such as the Warrior Care and Transition Program and the Soldier Medical Readiness Campaign Plan.
—To reduce the need for subsequent care through Early prevention; for example, Army Medicine identifies medical issues early with its concussive protocols and behavioral health practices, and promotes healthy lifestyles with the patient-centered medical home model of primary care delivery.
—To use evidence-based practices which provide the most Effective treatment for medical issues such as pain management and post-traumatic stress (PTS).
—To optimize Efficiencies through leading edge business processes and partnerships with other services and veterans organizations.
—To be an integral part of the Army Enterprise approach through re-engineering Army Medicine such as the provisional Public Health Command (PHC) to keep the Army strong and with other Army commands and agencies to optimally serve the Soldier and Family.

We must continue to provide the very best ongoing care for wounded, ill, or injured Soldiers. We have an enduring responsibility—alongside our sister services and the Department of Veterans Affairs (VA)—to provide care and rehabilitation of our wounded, ill, and injured for many years to come. The U.S. Army Warrior Transition Command (WTC) is a Major Subordinate Command under the MEDCOM and a key part of the enduring provision of care. The WTC Commander, Brigadier General Darryl Williams is also the Assistant Surgeon General for Warrior Care and

Transition. The WTC's mission is to provide centralized oversight of the Army's Warrior Care and Transition Program. This includes providing the necessary guidance and advocacy to empower wounded, ill, and injured Soldiers and Families with dignity, respect, and the self-determination to successfully reintegrate either back into the force or into the community. The WTC supports Army Force Generation (ARFORGEN) by supporting those who have returned from combat and require coordinated, complex care management to help them cope with and overcome the cumulative effects of war and multiple deployments.

At the heart of the Warrior Care and Transition Program are 29 Warrior Transition Units (WTUs) located at major Army installations worldwide, and nine Community Based Warrior Transition Units (CBWTUs) located regionally around the United States and Puerto Rico. Today, 4,280 highly trained cadre and staff oversee a current population of 10,011 wounded, ill and injured Soldiers. Since their inception in June 2007, more than 40,000 wounded, ill, or injured Soldiers and their Families have either progressed through or are being currently cared for by these dedicated caregivers and support personnel. Over 16,000 of those Soldiers have been returned to the force.

The Army, with great support of Congress, has spent or obligated more than $1.2 billion in military construction projects to improve the accessibility and quality of Wounded Warrior barracks, including the development of Warrior Transition complexes that will serve both Warriors in Transition and their Families. Construction of complexes continues through fiscal year 2012 at which time 20 state-of-the-art complexes will be in operation.

Since 2004, the Army Wounded Warrior Program (AW2) has supported the most severely wounded, ill, and injured Soldiers. Soldiers are assigned an AW2 Advocate who provides personalized assistance with day-to-day issues that confront healing Warriors and their Families, including benefits counseling, educational opportunities, and financial and career counseling. AW2 Advocates serve as life coaches to help these wounded Warriors and their Families regain their independence. Since its inception, AW2 has provided support to nearly 8,000 Soldiers and Veterans.

The WTC is refining a policy change to enhance the Army's ability to ensure Reserve Component Soldiers recovering at home from wounds, illnesses, or injuries incurred while on Active Duty benefit from the same system of care management and command and control experienced by Soldiers who are recovering in WTUs. The revised policy makes it easier for Reserve Component Soldiers who do not require complex medical care management to heal and transition closer to home.

To support each wounded, ill, or injured Soldier in their efforts to either return to the force or transition to Veteran status, the Army has created a systematic approach called the Comprehensive Transition Plan (CTP). The CTP is a six-part multidisciplinary and automated process which enables every Warrior in Transition to develop an individualized plan that will enable them to set and reach their personal goals. These end goals shape the Warrior in Transition's day-to-day work plan while healing.

Additionally to help Warriors in Transition achieve their physical fitness goals, WTUs offer several adaptive sports options to supplement the Warrior in Transition's therapy, often in coordination with the U.S. Olympic Committee's Paralympic Military Program. The WTC is also coordinating the Army's participation in the 2011 Warrior Games to be held at the U.S. Olympic Training Center in Colorado Springs, Colorado May 16–21, 2011.

We created a Soldier Medical Readiness Campaign to ensure we maintain a healthy and resilient force. Major General Richard Stone, Deputy Surgeon General, Mobilization, Readiness, and Reserve Affairs, is the campaign lead. The deployment of healthy, resilient, and fit Soldiers and increasing the medical readiness of the Army is the desired end state of this campaign.

The campaign's key tasks are to provide Commanders the tools to manage their Soldiers' medical requirements; coordinate, synchronize and integrate wellness, injury prevention and human performance optimization programs across the Army; identify the medically not ready (MNR) Soldier population; implement medical management programs to reduce the MNR Soldier population, assess the performance of the campaign; and educate the force.

Those Soldiers who no longer meet retention standards must navigate the Physical Disability Evaluation System (PDES). Assigning disability has long been a contentious issue. The present disability system dates back to the Career Compensation Act of 1949. Since its creation problems have been identified include long delays, duplication in DOD and VA processes, confusion among Service members, and distrust of systems regarded as overly complex and adversarial. In response to these concerns, DOD and VA jointly designed a new disability evaluation system to streamline DOD processes, with the goal of also expediting the delivery of VA bene-

fits to service members following discharge from service. The Army began pilot testing the Disability Evaluation System (DES) in November 2007 at Walter Reed Army Medical Center and has since expanded the program, now known as the Integrated Disability Evaluation System (IDES), to 16 military treatment facilities. DOD is now planning on replacing the military's legacy disability evaluation system with the IDES.

The key features of the of the IDES are a single physical disability examination conducted according to VA examination protocols, a single disability rating evaluation prepared by the VA for use by both Departments for their respective decisions, and delivery of compensation and benefits upon transition to veteran status for members of the Armed Forces being separated for medical reasons. The DOD PDES working group continues to reform this process by identifying steps that can be reduced or eliminated, ensuring the service members receive all benefits and entitlements throughout the process.

The WTC is also working with U.S. Army Medical Command staff to develop the concept of "Medical Management Centers." Medical Management Centers utilize the case management approaches developed for the WTUs to assist Soldiers who remain in their units but require a PDES determination. The WTC is also working closely with Army Reserve and Army National Guard leadership to develop and provide necessary support to the Reserve Component Soldier Medical Support Center (RCSMSC) being established in Pinellas Park, Florida. The RCSMSC is intended to ensure the PDES process also runs smoothly and efficiently for Reserve Component Soldiers not on Active Duty or in WTUs.

Army Medicine strives to reduce the need for subsequent care through early prevention and the emphasis on health promotion. Over the past year Army medicine has initiated multiple programs in support of this aim and I would like to highlight a few of those starting with the new U.S. Army Public Health Command (Provisional) (PHC).

As part of the overall U.S. Army Medical Command reorganization initiative, all major public health functions within the Army, especially those of the former Veterinary Command and the Center for Health Promotion and Preventive Medicine have been combined into a new PHC, located at Aberdeen Proving Ground in Maryland, under the command of Brigadier General Timothy K. Adams. The consolidation has already resulted in an increased focus on health promotion and has created a single accountable agent for public health and veterinary issues that is proactive and focused on prevention, health promotion and wellness. The PHC reached initial operational capability in October 2010 and full operational capability is targeted for October 2011.

Army public health protects and improves the health of Army communities through education, promotion of healthy lifestyles, and disease and injury prevention. Public health efforts include controlling infectious diseases, reducing injury rates, identifying risk factors and interventions for behavioral health issues, and ensuring safe food and drinking water on Army installations and in deployed environments. The long-term value of public health efforts cannot be overstated: public health advances in the past century have been largely responsible for increasing human life spans by 25 years, and the PHC will play a central role in the health of our Soldiers, deployed or at home.

The health of the total Army is essential for readiness, and prevention is the best way to health. Protecting Soldiers, retirees, Family members and Department of Army civilians from conditions that threaten their health is operationally sound, cost effective and better for individual well-being. Though primary care of our sick and injured will always be necessary, the demands will be reduced. Prevention—the early identification and mitigation of health risks through surveillance, education, training, and standardization of best public health practices—is crucial to military success. Army Medicine is on the pathway to realizing this proactive, preventive vision.

While the PHC itself is relatively new, a number of significant public health accomplishments already have been achieved. Some examples:

—Partnering with Army installations to standardize existing Army Wellness Centers to preserve or improve health in our beneficiary population. The centers focus on health assessment, physical fitness, healthy nutrition, stress management, general wellness education and tobacco education. They partner with providers in our Military Treatment Facilities (MTFs) through a referral system. I hold each MTF Commander responsible for the health of the extended military community as the installation Director of Health Services (DHS).

—Hiring installation Health Promotion Coordinators (HPCs) to assist the MTF Commander/DHS and to facilitate health promotion efforts on Army installations. HPCs are the "air traffic controllers" or coordinators of services and iden-

tifiers of service needs; they work with senior mission commanders and installation Community Health Promotion Councils to synchronize all of the installation health and wellness resources.

—Providing behavioral health epidemiological consultations to advise Army leaders and program developers on the factors that contribute to behavioral health issues including high-risk behaviors, domestic violence and suicide.

—Identifying Soldier physical training programs that optimize fitness while minimizing injuries and resultant lost-duty days and improve Soldier medical readiness.

—Decreasing the rate of overweight and obese Family members and retirees by adopting the Healthy Population 2010 goals for weight and obesity and implementing a standardized weight-management program developed by the VA.

—Integrating human and animal disease surveillance to better assess health risks.

The Army recognizes that traumatic brain injury or TBI is a serious concern, and we will continue to dedicate resources to research, diagnose, treat and prevent mild, moderate, severe, and penetrating TBI. The Army is leading the way in early recognition and treatment of mild TBI or concussive injuries with our "Educate, Train, Treat, and Track" strategy. Under the personal leadership of the Vice Chief of Staff of the Army, General Peter Chiarelli and refined by Brigadier General Richard Thomas, Assistant Surgeon General for Force Projection, we are fielding a program which some have called "CPR for the brain". Our education and training efforts have led to increased awareness and screening for TBI and have contributed to decreasing the stigma associated with seeking diagnosis or treatment for TBI. TBI training has been integrated into education and training initiatives of all deploying units to increase awareness and education regarding recognition of symptoms as well as emphasize commanders and leaders' responsibilities for ensuring their Soldiers receive prompt medical attention as soon as possible after an injury.

DOD policy changes in June 2010 implemented mandatory event-driven protocols following exposure to potentially concussive events in deployed environments. Events mandating an evaluation include any Service Member in a vehicle associated with a blast event, collision, or rollover; all personnel within close proximity to a blast; or anyone who sustains a direct blow to the head. Additionally, the command may direct a medical evaluation for any suspected concussion under other conditions. All new medics and Physician Assistants at the Army Medical Department Center and School are being trained on their roles in supporting this policy. During my recent visit to Afghanistan with my fellow Surgeons General in February 2011, discussions with Warriors and medical personnel at a number of sites lead me to conclude that these protocols are aggressively endorsed by commanders and are being complied with.

The Army along with the DOD is implementing computerized tracking of these events for the purposes of providing healthcare providers with awareness of an individuals' history of proximity to blast events, allowing for greater visibility of at risk Soldiers during post-deployment health assessment, informing Commanders, and to provide documentation to support Line of Duty investigations for Reserve and Guard members. The program from August to December 2010 has documented 1,472 Soldiers. We are working hard to overcome the technical barriers for complete data input. My fellow Surgeons General and I saw this first hand in our trip to Afghanistan last month. We saw, as well, the complete commitment of all field commanders, small unit leaders, and medical professionals to the implementation of these protocols.

To further the science of brain injury recovery, the Army relies on the U.S. Army Medical Research and Materiel Command's TBI Research Program. The overwhelming generosity of Congress and the DOD's commitment to brain injury research has significantly improved our knowledge of TBI in a rigorous scientific fashion. Currently, there are almost 350 studies funded by DOD to look at all aspects of TBI. The purpose of this program is to coordinate and manage relevant DOD research efforts and programs for the prevention, detection, mitigation and treatment of TBI. Some examples of the current research include medical standards for protective equipment, measures of head impact/blast exposure, a portable diagnostic tool for TBI that can be used in the field, blood tests to detect TBI, medications for TBI treatment, and the evaluation of rehabilitation outcomes. The TBI Research Program leverages both DOD and civilian expertise by encouraging partnerships to solve problems related to TBI. The DOD partners with key organizations and national/international leaders, including the VA, the Defense Centers of Excellence for Psychological Health and TBI, the Defense and Veterans Brain Injury Center, academia, civilian hospitals and the National Football League, to improve our ability to diagnose, treat and care for those affected by TBI.

Similar to our approach to concussive injuries, Army Medicine harvested the lessons of almost a decade of war and has approached the strengthening of our Soldiers and Families' behavioral health and emotional resiliency through a campaign plan to align the various Behavioral Health programs with the human dimension of the ARFORGEN cycle, a process we call the Comprehensive Behavioral Health System of Care (CBHSOC). This program is based on outcome studies that demonstrate the profound value of using the system of multiple touchpoints in assessing and coordinating health and behavioral health for a Soldier and Family. The CBHSOC creates an integrated, coordinated, and synchronized behavioral health service delivery system that will support the total force through all ARFORGEN phases by providing full spectrum behavioral healthcare. We leveraged experiences and outcome studies on deploying, caring for Soldiers in combat, and redeploying these Soldiers in large unit movements to build the CBHSOC. Some have been published, such as the landmark studies on concussive brain injury and PTSD by Charles Hoge, Carl Castro and colleagues or the recent publication of a forerunner program to the CBHSOC in the 3rd Infantry Division by Chris Warner, Ned Appenzeller and their co-workers. These studies will be discussed further later.

The CBHSOC is a system of systems built around the need to support an Army engaged in repeated deployments—often into intense combat—which then returns to home station to restore, reset the formation, and re-establish family and community bonds. The intent is to optimize care and maximize limited behavioral health resources to ensure the highest quality of care to Soldiers and Families, through a multi-year campaign plan.

Under the leadership of Major General Patricia Horoho, the Deputy Surgeon General, the CBHSOC campaign plan has five lines of effort: Standardize Behavioral Health Support Requirements; Synchronize Behavioral Health Programs; Standardize & Resource AMEDD Behavioral Health Support; Access the Effectiveness of the CBHSOC; and Strategic Communications. The CBHSOC campaign plan was published in September 2010, marking the official beginning of incremental expansion across Army installations and the Medical Command. Expansion will be phased, based on the redeployment of Army units, evaluation of programs, and determining the most appropriate programs for our Soldiers and their Families.

Near-term goals of the CBHSOC are implementation of routine behavioral health screening points across ARFORGEN and standardization of screening instruments. Goals also include increased coordination with both internal Army programs like Comprehensive Soldier Fitness, Army Substance Abuse Program, and Military Family Life Consultants. External resources include VA, local and state agencies, and the Defense Centers of Excellence for Psychological Health.

Long-term goals of the CBHSOC are the protection and restoration of the psychological health of our Soldiers and Families and the prevention of adverse psychological and social outcomes like Family violence, DUIs, drug and alcohol addiction, and suicide. This is through the development of a common behavioral health data system; development and implementation of surveillance and data tracking capabilities to coordinate behavioral health clinical efforts; full synchronization of Tele-behavioral health activities; complete integration of the Reserve Components; and the inclusion of other Army Medicine efforts including TBI, patient centered medical home, and pain management. Integral to the success of the CBHSOC is the continuous evaluation of programs, to be conducted by the PHC.

For those who do suffer from PTSD, Army Medicine has made significant gains in the treatment and management of PTSD as well. The DOD and VA jointly developed the three evidenced based Clinical Practice Guidelines for the treatment of PTSD, on which nearly 2,000 behavioral health providers have received training. This training is synchronized with the re-deployment cycles of U.S. Army Brigade Combat Teams, ensuring that providers operating from MTFs that support the Brigade Combat Teams are trained and certified to deliver quality behavioral healthcare to Soldiers exposed to the most intense combat levels. In addition, the U.S. Army Medical Department Center & School, under the leadership of Major General David Rubenstein, collaborates closely with civilian experts in PTSD treatment to validate the content of these training products to ensure the information incorporates emerging scientific discoveries about PTSD and the most effective treatments.

Work by the Army Medical Department and the Military Health System over the past 8 years has taught us to link information gathering and care coordination for any one Soldier or Family across the continuum of this cycle. Our Behavioral Health specialists tell us that the best predictor of future behavior is past behavior, and through the CBHSOC we strive to link the management of issues which Soldiers carry into their deployment with care providers and a plan down-range and the same in reverse.

As mentioned previously, the results of a recent Army study published in January in the American Journal of Psychiatry by Major Chris Warner, Colonel Ned Appenzeller and colleagues report on the success of pre-deployment mental health support and coordination of care that dramatically reduced adverse behavioral health outcomes for over 10,000 Soldiers who received pre-deployment support prior to deployment compared to a like group of over 10,000 Soldiers who were deployed to the same battle space but were unable to receive the pre-deployment behavioral health assessment and care coordination. These results show the Army, as part of its Comprehensive Behavioral Health System of Care Campaign Plan, is moving in the right direction implementing new policies and programs to enhance pre- and post-deployment care coordination for Soldiers. This study demonstrates the ability to bridge the gap between identification through pre-deployment screening, as required by the National Defense Authorization Act for Fiscal Year 2010, Sec. 708 and actively managing and coordinating care for Soldiers with existing behavior health concerns to insure a successful deployment that benefits the Army and continued support to Soldiers and Families.

The results are significant and provide the first direct evidence that a program that combines pre-deployment support and coordination of care that includes primary care managers, unit surgeons and behavioral health providers is effective in preventing adverse behavioral health outcomes for Soldiers. The study results move away from a perception of use of mental health screenings by Army and DOD as a tool to "weed out" Soldiers and service members deemed mentally unfit, to one of use and integration of behavioral health screenings as a routine part of Soldiers' and service members primary care during deployment. Coupled with insights provided by Walter Reed Army Institute of Research (WRAIR) researchers, such as Dr. Charles Hoge and COL Carl Castro about the relationship between concussive injury and PTSD as well as 7 years of annual surveys of BH problems and care in the deployed force through the WRAIR Mental Health Advisory Teams, we are making giants steps forward in prevention, early recognition, and mitigation of the neuropsychological effects of prolonged war on our Soldiers and Families.

Much of the future of Army Medicine will be practiced at the Patient-Centered Medical Home (PCMH). The PCMH is a model of primary care-based health improvement and healthcare services being adopted throughout the Military Health System and in many venues in civilian practice. I commend the Air Force for taking the lead on some PCMH practices. The PCMH will be the principal enabler to improve readiness of the force and continuity of access to tailored patient services. It is a design that the Army will apply to all primary care settings.

Dr. Paul Grundy, Director of Healthcare Transformation at IBM, pointed out that "a smarter health system forges partnerships in order to deliver better care, predict and prevent disease and empower individuals to make smarter choices." In his estimation, the PCMH is "advanced primary care." According to Dr. Grundy the PCMH can build trust between patient and physician, improve the patient experience of care, reduce staff burnout, and hold the line on expenditures.

The Medical Home philosophy concentrates on what a patient requires to remain healthy, to restore optimal health, and when needed, to receive tailored healthcare services. It relies upon building enduring relationships between patient and their provider—doctor, nurse practitioner, physician assistant and others—and a comprehensive and coordinated approach to care between providers and community services. This means much greater continuity of care, with patients seeing the same physician or professional partner 95 percent of the time. The result is more effective healthcare for both the provider and the patient that is based on trust and rapport.

The PCMH integrates the patient into the healthcare 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, or occupational risk. The healthcare team encourages healthy lifestyle behaviors, and success will be measured by how healthy they keep their patients, rather than by how many treatments they provide. The goal is that people will live longer lives with less morbidity, disability and suffering.

Community Based Medical Homes (CBMHs) are part of the Army's implementation of the Patient Centered Medical Home. CBMHs are Army operated primary care clinics located in leased space in the off-post communities in which many of our active duty Families live. These clinics are extensions of the Army Hospital and staffed by government civilians. Active duty Family members receive enrollment priority. This initiative was undertaken to improve access and continuity to healthcare services, including behavioral health, for active duty Family members by expanding capacity and extending MTF services off-post. The Army has grown and consumption of healthcare services is on the rise as a result of the war. These clinics will help Army Medicine improve quality of care and the patient experience; improve

value through standardization and optimization of resources enabling operations at an economic advantage to the DOD; and improve the readiness of our Army and our Army Families. Clinics are placed where Families lacked access to Army primary care services and currently 17 clinics are being developed in 13 markets. Recently clinics supporting Fort Campbell, Fort Sill, Fort Stewart and Fort Bragg have opened and initial feedback has been outstanding.

The CBMHs build upon and are in many ways the culmination of a MEDCOM—wide campaign to closely monitor and reduce barriers to access and continuity; improve clinic productivity through standardization of administrative operations and support; to leverage improved health information management tools like AHLTA; and to incentivize commanders and providers to provide the right kind of care so as to improve individual and community health and outcomes of healthcare delivery in accordance with evidenced-based practices for chronic illness.

We are adopting other methods as well to ensure better outcomes for patient care. At the MEDCOM, we have implemented a performance-based adjustment model (PBAM) to increase hospital and department responsibilities for how our funding is spent in health improvement and the delivery of healthcare services. PBAM creates a justifiable budget by a business planning process that links to outputs, such as volume or complexity of procedures. With the need for greater accountability and transparency, the MEDCOM has used PBAM to create performance measures that are consistent and can be compared across our facilities. We have experienced gains in total output, gains in provider efficiency, and increases in coding accuracy all aimed at improved outcomes of care—a more effective system for our beneficiaries and the Army. Incentives which are built into the program have measurably improved health and compliance with science—or—evidence-based care for chronic disease like diabetes and asthma.

Army Medicine is committed to using evidence-based practices which provide the most effective treatment for the variety of medical issues confronting our patient population and especially those issues caused by the almost 10 years of war such as pain management. An Army at war for almost a decade recognizes it has accumulated significant issues with acute and chronic pain amongst its Soldiers. In August 2009, I chartered the Army Pain Management Task Force to make recommendations for a MEDCOM comprehensive pain management strategy. I appointed Brigadier General Richard Thomasas the Task Force Chairperson. Task Force membership included a variety of medical specialties and disciplines from the Army, as well as representatives from the Navy, Air Force, TRICARE Management Activity, and VA.

The Pain Management Task Force developed 109 recommendations that lead to a comprehensive pain management strategy that is holistic, multidisciplinary, and multimodal in its approach, utilizes state of the art/science modalities and technologies, and provides optimal quality of life for Soldiers and other patients with acute and chronic pain. The Army Medical Command is operationalizing recommendations through the Pain Management Campaign Plan. I am proud to say that Army Medicine was recognized by the American Academy of Pain Medicine with the Presidential Commendation for its impact on pain medicine in the United States.

An important objective of the Pain Management Task Force calls for building a full spectrum of best practices for the continuum of pain care, from acute to chronic, which is based on a foundation of the best available evidence based medicine. This can be accomplished through the adoption of an integrative and interdisciplinary approach to managing pain. Pain management should be handled by integrated care teams that use a biopsychosocial model of care. The standard of care should decrease overreliance on medication driven solutions and create an interdisciplinary approach that encourages collaboration among providers from differing specialties.

The DOD should continue to responsibly explore safe and effective use of advanced and non-traditional approaches to pain management and support efforts to make these modalities covered benefits once they prove safe, effective and cost efficient. One way to achieve an interdisciplinary, multimodal and holistic approach to pain management is by incorporating complementary and alternative therapies—integrative approaches—into an individualized pain management plan of care to include acupuncture, massage therapy, movement therapy, yoga, and other tools in mind-body medicine. To best address the goal of patient-centered care, providers must work in partnership with patients and Families in providing health promotion options while maintaining efficacy and safety standards. This integration needs to be methodical, appropriate, and evaluated throughout the process to ensure the best potential outcomes.

While the Pain Management Task Force has worked to expand the use of non-medication pain management modalities, as combat operations continue, more Sol-

diers are presenting with physical or psychological conditions, or both, which require clinical care, including medication therapy. Consequently, some of them may be treated for multiple conditions with a variety of medications prescribed by several healthcare providers. While the resulting "polypharmacy"—the use of multiple prescription or other medications—can be therapeutic in the treatment of some conditions, in other cases it can unwittingly lead to increased risk to patients. New Army policies and procedures to identify and mitigate polypharmacy have reduced the risk of these factors in garrison and deployed environments.

Polypharmacy is not unique to military medical practice and is also a patient safety issue in the civilian medical community. The risks of polypharmacy include overdose (intentional or accidental); toxic interactions with other medications or alcohol; increased risk of adverse effects of medications; unintended impairment of alertness or functioning that may result in accident and injury; and the development of tolerance, withdrawal, and addiction to potentially habit-forming medications.

U.S. Army Medical Command has issued guidance for enhancing patient safety and reducing risk via the prevention and management of polypharmacy. For example, Soldiers and Commanders are educated to take responsibility for, and active roles in, ensuring effective communication between patients and primary care managers to formulate treatment plans and address potential issues of polypharmacy. Annual training on managing polypharmacy patients is required for clinicians who prescribe psychotropic agents or central nervous system depressants. And through the electronic health record, patient health information, including prescriptions, is shared among providers to increase awareness of those patients with multiple medications.

Evidence-based science makes strong Soldiers and we rely heavily on the U.S. Army Medical Research and Material Command (MRMC). Under the leadership of Major General James Gilman, MRMC manages and executes a robust, ongoing medical research program for the MEDCOM to support the development of new healthcare strategies. I would like to highlight a few research programs that are impacting health and care of our Soldiers today.

The Combat Casualty Care Research Program (CCCRP) reduces the mortality and morbidity resulting from injuries on the battlefield through the development of new life-saving strategies, new surgical techniques, biological and mechanical products, and the timely use of remote physiological monitoring. The CCCRP focuses on leveraging cutting-edge research and knowledge from government and civilian research programs to fill existing and emerging gaps in combat casualty care. This focus provides requirements-driven combat casualty care medical solutions and products for injured Soldiers from self-aid through definitive care, across the full spectrum of military operations.

The mission of the Military Operational Medicine Research Program (MOMRP) is to develop effective countermeasures against stressors and to maximize health, performance, and fitness, protecting the Soldier at home and on the battlefield. MOMRP research helps prevent physical injuries through development of injury prediction models, equipment design specifications and guidelines, health hazard assessment criteria, and strategies to reduce musculoskeletal injuries.

MOMRP researchers develop strategies and advise policy makers to enhance and sustain mental fitness throughout a service member's career. Psychological health problems are the second leading cause of evacuation during prolonged or repeated deployments. MOMRP psychological health and resilience research focuses on prevention, treatment, and recovery of Soldiers and Families behavioral health problems, which are critical to force health and readiness. Current psychological health research topic areas include behavioral health, resiliency building, substance use and related problems, and risk-taking behaviors.

The Clinical and Rehabilitative Medicine Research Program (CRMRP) focuses on definitive and rehabilitative care innovations required to reset our wounded warriors, both in terms of duty performance and quality of life. The Armed Forces Institute of Regenerative Medicine (AFIRM) is an integral part of this program. The AFIRM was designed to speed the delivery of regenerative medicine therapies to treat the most severely injured U.S. service members from around the world but in particular those coming from the theaters of operation in Iraq and Afghanistan. The AFIRM is expected to make major advances in the ability to understand and control cellular responses in wound repair and organ/tissue regeneration and has major research programs in Limb Repair and Salvage, Craniofacial Reconstruction, Burn Repair, Scarless Wound Healing, and Compartment Syndrome.

The AFIRM's success to date is at least in part the result of the program's emphasis on establishing partnerships and collaborations. The AFIRM is a partnership among the U.S. Army, Navy, and Air Force, the Department of Defense, the VA, and the National Institutes of Health. The AFIRM is composed of two independent

research consortia working with the U.S. Army Institute of Surgical Research. One consortium is led by the Wake Forest Institute for Regenerative Medicine and the McGowan Institute for Regenerative Medicine in Pittsburgh while the other is led by Rutgers—the State University of New Jersey and the Cleveland Clinic. Each consortium contains approximately 15 member organizations, which are mostly academic institutions.

MRMC is also the coordinating office for the DOD Blast Injury Research Program. The Blast Injury Research Program is addressing critical medical research gaps for blast-related injuries and is developing partnerships with other DOD and external medical research laboratories to achieve a cutting-edge approach to solving blast injury problems. One of the program's major areas of focus is the improvement of battlefield medical treatment capabilities to mitigate neurotrauma and hemorrhage. Additionally, the program is modernizing military medical research by bringing technology advances and new research concepts into DOD programs.

We created a systematic and integrated approach to better organize and coordinate battlefield care to minimize morbidity and mortality, and optimize the ability to provide essential care required for casualty injuries—the Joint Theater Trauma System (JTTS). JTTS focuses on improving battlefield trauma care through enabling the right patient, at the right place, at the right time, to receive the right care. The components of the JTTS include prevention, pre-hospital integration, education, leadership and communication, quality improvement/performance improvement, research and information systems. The JTTS was modeled after the civilian trauma system principles outlined in the American College of Surgeons Committee on Trauma Resources for Optimal Care.

Effectiveness and efficiency are also enhanced by electronic tools. To support DOD and VA collaboration on treating PTSD, pain, and other healthcare issues, the Electronic Health Record (EHR) should seamlessly transfer patient data between and among partners to improve efficiencies and continuity of care. The DOD and the VA share a significant amount of health information today and no two health organizations in the nation share more non-billable health information than the DOD and VA. The Departments continue to standardize sharing activities and are delivering information technology solutions that significantly improve the secure sharing of appropriate electronic health information. We need to include electronic health information exchange with our civilian partners as well—a health information systems which brings together three intersecting domains—DOD, VA, civilian—for optimal sharing of beneficiary health information and to provide a common operating picture of healthcare delivery. These initiatives enhance healthcare delivery to beneficiaries and improve the continuity of care for those who have served our country. Previously, the burden was on service members to facilitate information sharing; today, we are making the transition between DOD and VA easier for our service members.

The Office of the Surgeon General (OTSG) works closely with Defense Health Information Management System of Health Affairs/TRICARE Management Activity in pursuing additional enhancements and fixes to AHLTA. The OTSG Information Management Division also continues to implement the MEDCOM AHLTA Provider Satisfaction Program, which now provides dictation and data entry software applications, tablet computing hardware, business process management, clinical business intelligence, and clinical systems training and integration to the providers and users of AHLTA. OTSG is taking the EHR lead in designing and pursuing the next generation of the EHR by participating in DOD and Inter-agency projects such as the EHR Way Ahead, the Virtual Lifetime Electronic Record Pilot Project, Nationwide Health Information Network, In-Depth EHR Training, and VA/DOD Sharing Initiatives. We are aligned with the Air Force's COMPASS program in ensuring that our providers and our clinics have the best and most user-friendly EHR.

The Medical Command was reorganized in October 2010, to align regional medical commands (RMCs) with TRICARE regions with the resulting effect of improved readiness and support for the Army's iterative process of providing expeditionary, modular fighting units under the ARFORGEN cycle. We are well on the way to standardizing structure and staffing for RMC headquarters to provide efficiencies and ensure standardized best practices across Army Medicine. Three CONUS-based regional medical commands, down from four, are now aligned with the TRICARE regions to provide healthcare in a seamless way with our TRICARE partners.

In addition to TRICARE alignment, each region will contain an Army Corps headquarters, and health-care assets will be better aligned with beneficiary population of the regions. Each RMC has a deputy commander who is responsible for a readiness cell to coordinate and collaborate with the ARFORGEN cycle. This regional readiness cell will reach out to Reserve Component elements within their areas of responsibility to ensure that all medical and dental services required during the ARFORGEN cycle of the Reserve units are also identified and provided.

In recent years, the Army has transformed how it provides healthcare to its Soldiers, with improvements impacting every aspect of the continuum of care. The Patient Centered Medical Home and the Warrior Transition Command are examples of the Army's strong commitment to adapt and improve its ability to provide the best care possible for our Soldiers and their Families. We have a duty and responsibility to our Soldiers, Families, and retirees. The level of care required does not end when the deployed Soldier returns home; there will be considerable ongoing healthcare costs for many years to support for our wounded, ill, or injured Service members. They need to trust we will be there to manage the health related consequences of over 9 years of war, including behavioral healthcare, post-traumatic stress, burn or disfiguring injuries, chronic pain or loss of limb. We will require ongoing research to establish more effective methodologies for treatment. Army Medicine remains focused on developing partnerships to achieve the aims of the MHS as we work together to provide cost effective care to improve the health of our Soldiers. The goal is to provide the best care and access possible for Army Families and retirees and to ensure optimal readiness for America's fighting forces and their Families.

Last, I would like to join General Casey in expressing support for the military healthcare program changes included in the fiscal year 2012 budget. The changes include modest enrollment fee increases for working-age retirees, pharmacy co-pay adjustments, aligning Defense reimbursements to sole community hospitals to Medicare consistent with current statute, and shifting future Uniformed Services Family Health Plan enrollees into the TRICARE-for-Life/Medicare program established by Congress in the fiscal year 2001 National Defense Authorization Act.

In closing, over the past 40 months as the Army Surgeon General I have had numerous occasions to appear before this subcommittee, meet individually with you and your fellow members and interact with your staff. I have appreciated your tough questions, valuable insight, sage advice and deep commitment to your Army's Soldiers and their Families. Thank you for this opportunity to share Army Medicine with you. I am proud to serve with the Officers, Non-commissioned Officers, the enlisted Soldiers and civilian workforce of Army Medicine. Their dedication makes our Nation strong and our Soldiers and Families healthy and resilient.

Thank you for your continued support of Army Medicine and to our Nation's men and women in uniform.

Army Medicine: Building Value . . . Inspiring Trust

Chairman INOUYE. And now may I call upon Admiral Robinson.

STATEMENT OF VICE ADMIRAL ADAM M. ROBINSON, JR., SURGEON GENERAL, DEPARTMENT OF THE NAVY

Admiral ROBINSON. Good morning.

Chairman Inouye, Vice Chairman Cochran, I am pleased to be with you today, and I want to thank the subcommittee for the tremendous confidence and unwavering support of Navy medicine, particularly as we continue to care for those who go in harm's way, their families, and all beneficiaries.

Force health protection is the bedrock of Navy medicine. It is our duty, our obligation, and our privilege to promote, protect, and restore the health of our sailors and marines. The mission spans the full spectrum of healthcare from optimizing the health and fitness of the force, to maintaining robust disease surveillance and prevention programs, to saving lives on the battlefield. It also involves providing humanitarian assistance and disaster response around the world, and this is no more evident than in our efforts currently underway in Japan following the devastating earthquake and tsunami last month. I, along with my fellow surgeons general, traveled to Afghanistan in February and again witnessed the stellar performance of our dedicated men and women, both Active and Reserve, delivering expeditionary combat casualty care. At the NATO Role 3 Multinational Medical Unit, Navy medicine is currently leading the joint and combined staff to provide the largest medical support in Kandahar. We are working side by side with Army and

Air Force medical personnel, rapidly implementing best practices and employing unique skill sets in support of their demanding mission, leaving no doubt that the historically unprecedented survival rate from the battlefield is the direct result of better trained and equipped personnel, in conjunction with improved systems of treatment and casualty evacuation.

We spend a lot of time discussing what constitutes world class healthcare. There is no doubt in my mind that the trauma care being provided in theater today is truly world class, as are the men and women delivering it. I am pleased to report to you that their morale is high and professionalism is unmatched.

We also had the opportunity to visit our Concussion Restoration Care Center at Camp Leatherneck in Helmand Province. The center, which opened last August, assesses and treats service members with concussion, or mild traumatic brain injury, and musculoskeletal injuries. The goal is safely returning them to duty—to full duty following recovery. The Restoration Center, along with the initiatives like OSCAR, our Operational Stress Control and Readiness Program, where we embed full-time mental health personnel with deployed marines, continues to reflect our priority of positioning our medical personnel with deploying marines—our medical personnel and resources where they are most needed.

Navy medicine has no greater responsibility than caring for our service members, wherever and whenever they need us. We understand that preserving the psychological health of service members and their families is one of the greatest challenges we face today. We also know that nearly a decade of continuous combat operations has resulted in a growing population of service members suffering with traumatic brain injury. We are forging ahead with improved screening, surveillance, treatment, education, and research; however, there is still much we do not yet know about these injuries and their long-term impact on the lives of our service members.

I would specifically highlight the issuance of the directive-type memorandum in June 2010, which has increased line leaders' awareness of potential traumatic brain injury exposure, and, importantly, it mandates post-blast evaluations and removal of blast-exposed warfighters to promote recovery.

We also recognize the importance of collaboration and partnership. Our collective efforts include those coordinated jointly with the other services, the Department of Veterans Affairs, the Centers of Excellence, as well as leading academic and research institutions.

Let me now turn to patient and family centered care. Medical Home Port is Navy medicine's patient-centered medical home model, an important initiative that will significantly impact how we provide care to our beneficiaries. Medical Home Port emphasizes team-based, comprehensive care and focuses on the relationship between the patient, their provider, and the healthcare team. We continue to move forward with the phased implementation of Medical Home Port at our medical centers and family medicine teaching hospitals. An initial response from our patients and our providers is very encouraging.

Finally, I would like to address the proposed Defense Health Program cost efficiencies. Rising healthcare costs within the military

health system continue to present challenges. The Secretary of Defense has articulated that the rate at which healthcare costs are increasing and the relative proportion of the Department's resources devoted to healthcare cannot be sustained. The Department of the Navy fully supports the Secretary's plan to better manage costs moving forward and ensure our beneficiaries have access to the quality care that is the hallmark of military medicine.

In summary, I am proud of the progress we are making, but not satisfied. We continue to see groundbreaking innovations in combat casualty care and remarkable heroics in saving lives. But all of us remain concerned about the cumulative effects of worry, stress, and anxiety on our service members and their families brought about by a decade of conflict. Each day resonates with the sacrifices that our sailors, marines, and their families make quietly and without bravado. It is this commitment, this selfless service, that helps inspire us in Navy medicine. Regardless of the challenges ahead, I am confident that we are well positioned for the future.

As my last cycle of hearings is now coming to a close, as is my Navy career, I would like to thank this subcommittee and the entire Congress for their support of Navy medicine and everything that you have done to make sure that our men and women have the best in every possibility, both on the battlefield, in their recovery, and after they are out of the service.

PREPARED STATEMENT

I appreciate the opportunity to be here today, and I look forward to your questions. Thank you very much.

Chairman INOUYE. Thank you very much, Admiral.

[The statement follows:]

PREPARED STATEMENT OF VICE ADMIRAL ADAM M. ROBINSON, JR.

INTRODUCTION

Chairman Inouye, Vice Chairman Cochran, distinguished Members of the Subcommittee, I am pleased to be with you today to provide an update on Navy Medicine, including some of our accomplishments, challenges and strategic priorities. I want to thank the Committee Members for the tremendous confidence and unwavering support of Navy Medicine, particularly as we continue to care for those who go in harm's way, their families and all beneficiaries.

Navy Medicine delivers world class care, anytime, anywhere. We are forward-deployed and engaged around the world every day, no matter what the environment and regardless of the challenge. The operational tempo of this past year continues to demonstrate that we must be flexible, adaptable and ready to respond globally. We will be tested in our ability to meet our operational and humanitarian assistance requirements, as well as maintain our commitment to provide patient and family centered care to a growing number of beneficiaries. However, I am proud to say that Navy Medicine is responding to these challenges with skill, commitment and compassion.

STRATEGIC ALIGNMENT, INTEGRATION AND EFFICIENCIES

Strategic alignment with the priorities of the Secretary of the Navy, Chief of Naval Operations and Commandant of the Marine Corps is critical to our ability to meet our mission. As a world-wide healthcare system, Navy Medicine is fully engaged in carrying out the core capabilities of the Maritime Strategy and the Cooperative Strategy for the 21st Century Seapower around the globe. Our ongoing efforts, including maintaining warfighter health readiness, conducting humanitarian assistance and disaster relief missions, protecting the health of our beneficiaries, as well as training our future force are critical to our future success.

We also recognize the importance of alignment within the Military Health System (MHS) as evidenced by the adoption of the Quadruple Aim initiative as a primary focus of the MHS Strategic Plan. The Quadruple Aim applies the framework from the Institute for Healthcare Improvement (IHI) and customizes it for the unique demands of military medicine. It targets the MHS and Services' efforts on integral outcomes in the areas of readiness, population health and quality, patient experience and cost. The goal is to develop better outcomes and implement balanced incentives across the MHS.

Within Navy Medicine, we continue to maintain a rigorous strategic planning process. Deliberative planning, constructive self-assessment and alignment at all levels of our organization, have helped create momentum and establish a solid foundation of measurable progress that drives change. It's paying dividends as we are seeing improved and sustained performance in our strategic objectives.

This approach is particularly evident in our approach to managing resources. We are leveraging analytics to target resource decisions. An integral component of our Strategic Plan is providing performance incentives that promote quality and directly link back to workload, readiness and resources. We continue to evolve to a system which integrates requirements, resources and performance goals and promotes patient and family centered care. This transformation properly aligns authority, accountability and financial responsibility with the delivery of quality, cost-effective healthcare that remains patient and family centered.

Aligning incentives helps foster process improvement particularly in the area of quality. Our Lean Six Sigma (LSS) program continues to be highly successful in identifying projects that synchronize with our strategic goals and have system-wide implications for improvement. Examples include reduced cycle time for credentialing providers and decreased waiting times for diagnostic mammography and ultrasound. I am also encouraged by our collaboration with the Johns Hopkins' Applied Physics Laboratory to employ industrial engineering practices to improve clinical processes and help recapture private sector workload.

Navy Medicine continues to work within the MHS to realize cost savings through several other initiatives. We believe that robust promotion of TRICARE Home Delivery Pharmacy Program, implementation of supply chain management standardization for medical/surgical supplies and the full implementation of Patient-Centered Medical Home (PCMH) will be key initiatives that are expected to successfully reduce costs without compromising access and quality of care.

Rising healthcare costs within the MHS continue to present challenges. The Secretary of Defense has articulated that the rate at which healthcare costs are increasing and relative proportion of the Department's resources devoted to healthcare, cannot be sustained. He has been resolute in his commitment to implement systemic efficiencies and specific initiatives which will improve quality and satisfaction while more responsibly managing cost.

The Secretary of the Navy, Chief of Naval Operations and Commandant of the Marine Corps recognize that the MHS is not immune to the pressure of inflation and market forces evident in the healthcare sector. In conjunction with a growing number of eligible beneficiaries, expanded benefits and increased utilization throughout our system, it is incumbent upon us to ensure that we streamline our operations in order to get the best value for our expenditures. We have made progress, but there is more to do. We support the efforts to incentivize TRICARE Home Delivery Pharmacy Program and also to implement modest fee increases, where appropriate, to ensure equity in benefits for our retirees.

The Department of the Navy (DON) fully supports the Secretary's plan to better manage costs moving forward and ensure our beneficiaries have access to the quality care that is the hallmark of military medicine. As the Navy Surgeon General, I appreciate the tremendous commitment of our senior leaders in this critical area and share the imperative in developing a more affordable and sustainable healthcare benefit.

Navy Medicine has worked hard to get best value of every dollar Congress has provided and we will continue to do so. The President's budget for fiscal year 2012 adequately funds Navy Medicine to meet its medical mission for the Navy and Marine Corps. We are, however, facing challenges associated with operating under a potential continuing resolution for the remainder of the year, particularly in the areas of provider contracts and funding for facility special projects.

FORCE HEALTH PROTECTION

Force Health Protection is the bedrock of Navy Medicine. It is what we do and why we exist. It is our duty—our obligation and our privilege—to promote, protect and restore the health of our Sailors and Marines. This mission spans the full spec-

trum of healthcare, from optimizing the health and fitness of the force, to maintaining robust disease surveillance and prevention programs, to saving lives on the battlefield. When Marines and Sailors go into harm's way, Navy Medicine is with them. On any given day, Navy Medicine is underway and forward deployed with the Fleet and Marine Forces, as well as serving as Individual Augmentees (IAs) in support of our global healthcare mission.

Clearly, our focus continues to be combat casualty care in support of Operation Enduring Freedom (OEF). I, along with my fellow Surgeons General, recently returned from the Central Command (CENTCOM) Area of Responsibility (AOR) and again witnessed the stellar performance of our men and women delivering expeditionary combat casualty care. At the NATO Role 3 Multinational Medical Unit, Navy Medicine is currently leading the joint and combined staff to provide the largest medical support in Kandahar with full trauma care to include 3 operating rooms, 12 intensive care beds and 35 ward beds. This state-of-the-art facility is staffed with dedicated and compassionate active and reserve personnel who are truly delivering world-class care. Receiving 70 percent of their patients directly from the point of injury on the battlefield, our doctors, nurses and corpsmen apply the medical lessons learned from 10 years of war to achieve a remarkable 97 percent survival rate for coalition casualties.

The Navy Medicine team is working side-by-side with Army and Air Force medical personnel and coalition forces to deliver outstanding healthcare to U.S. military, coalition forces, contractors, Afghan national army, police and civilians, as well as detainees. The team is rapidly implementing best practices and employing unique skill sets with specialists such as an interventional radiologist, pediatric intensivist, hospitalist and others in support of their demanding mission. I am proud of the manner in which our men and women are responding—leaving no doubt that the historically unprecedented survival rate from battlefield injuries is the direct result of better trained and equipped personnel, in conjunction with improved systems of treatment and casualty evacuation.

Combat casualty care is a continuum which begins with corpsmen in the field with the Marines. We are learning much about battlefield medicine and continue to quickly put practices in place that will save lives. All deploying corpsmen must now complete the Tactical Combat Casualty Care (TCCC) training. TCCC guidelines for burns, hypothermia and fluid resuscitation for first responders have also been updated. This training is based on performing those interventions on the battlefield that address preventable causes of death. In addition, we have expanded the use of Combat Application Tourniquets (CATs) and hemostatic impregnated bandages as well as improving both intravenous therapy and individual first aid kits (IFAKs) and vehicle medical kits (VMKs).

We continue to see success with our Forward Resuscitative Surgical System (FRSS) which allows for stabilization within the "golden hour". The FRSS can perform 18 major operations over the course of 72 hours without being re-supplied. Our ability to send medical teams further forward has improved survivability rates. To this end, we are clearly making tremendous gains in battlefield medicine throughout the continuum of care. Work being conducted by the Joint Theatre Trauma Registry and Joint Combat Casualty Research Teams are enabling us to capture, evaluate and implement clinical practice guidelines and best practices quickly.

HUMANITARIAN ASSISTANCE AND DISASTER RELIEF

Navy Medicine continues its commitment to providing responsive and comprehensive support for Humanitarian Assistance/Disaster Relief (HA/DR) missions around the world. We are often the first responder for HA/DR missions due to the presence of organic medical capabilities with forward deployed Navy assets. Our hospital ships, USNS *Mercy* (T–AH 19) and USNS *Comfort* (T–AH 20) are optimally configured to deploy in support of HCA activities in South America, the Pacific Rim and East Asia.

Navy Medicine not only responds to disasters around the world and at home, we also conduct proactive humanitarian missions in places as far reaching as Africa through Africa Partnership Station to the Pacific Rim through Pacific Partnership and South America through Continuing Promise. *Mercy*'s recent deployment in support of Pacific Partnership 2010, the fifth annual Pacific Fleet proactive humanitarian mission, is strengthening ongoing relationships with host and partner nations in Southeast Asia and Oceania. During the 144-day, six nation mission, we treated 109,754 patients, performed 859 surgeries and engaged in thousands of hours of medical subject matter expert exchanges.

Our hospital ships are executing our Global Maritime Strategy by building the trust and cooperation we need to strengthen our regional alliances and empower

partners around the world. With each successful deployment, we increase our interoperability with host and partner nations, non-governmental organizations and the interagency partners. Today's security missions must include humanitarian assistance and disaster response,

Enduring HA missions such as Pacific Partnership and Continuing Promise, as well other Medical Readiness Education Training Exercises (MEDRETEs) provide valuable training of personnel to conduct future humanitarian support and foreign disaster relief missions. Our readiness was clearly evident by the success of Operation Unified Response (OUR) following the devastating earthquake in Haiti last year. Our personnel were trained and prepared to accomplish this challenging mission.

CONCEPT OF CARE

Patient and family centered care is our core philosophy—the epicenter of everything we do. We are providing comprehensive, compassionate healthcare for all our beneficiaries wherever they may be and whenever they may need it. Patient and family centered care helps ensure patient satisfaction, increased access, coordination of services and quality of care, while recognizing the vital importance of the family. Navy Medicine serves personnel throughout their treatment cycle, and for our Wounded Warriors, we manage every aspect of medicine in their continuum of care to provide a seamless transition from battlefield to bedside to leading productive lives.

Medical Home Port is Navy Medicine's Patient-Centered Medical Home (PCMH) model, an important initiative that will significantly impact how we provide care to our beneficiaries. In alignment with my strategic goal for patient and family centered care, Medical Home Port emphasizes team-based, comprehensive care and focuses on the relationship between the patient, their provider and the healthcare team. The Medical Home Port team is responsible for managing all healthcare for empanelled patients, including specialist referrals when needed. Patients see familiar faces with every visit, assuring continuity of care. Appointments and tests get scheduled promptly and care is delivered face-to-face or when appropriate, using secure electronic communication. PCMH is being implemented by all Services and it is expected to improve population health, patient satisfaction, readiness, and is likely to impact cost in very meaningful ways.

It is important to realize that Medical Home Port is not brick and mortar; but rather a philosophy and commitment as to how you deliver the highest quality care. A critical success factor is leveraging all our providers, and supporting information technology systems, into a cohesive team that will not only provide primary care, but integrate specialty care as well. We continue to move forward with the phased implementation of Medical Home Port at our medical centers and family medicine teaching hospitals, and initial response from our patients is very encouraging.

CARING FOR OUR HEROES, THEIR FAMILIES AND CAREGIVERS

We have no greater responsibility than caring for our service members, wherever and whenever they need us. This responsibility spans from the deckplates and battlefield to our clinics, hospitals and beyond. This commitment to provide healing in body, mind and spirit has never been more important. Our case management programs, both medical and non-medical, play a vital role in the development of Comprehensive Recovery Plans to provide our war-injured service members' optimal outcomes. Case management is the link that connects resources and services for our Wounded Warriors and their families.

Associated with this commitment, we must understand that preserving the psychological health of service members and their families is one of the greatest challenges we face today. We recognize that service members and their families are resilient at baseline, but the long conflict and related deployments challenge this resilience. DON is committed to providing programs that support service members and their families.

The Navy Operational Stress Control program and Marine Corps Combat Operational Stress Control programs are the cornerstones of our approach to early detection of stress injuries in Sailors and Marines and are comprised of line-led programs which focus on leadership's role in monitoring the health of their people; tools leaders may employ when Sailors and Marines are experiencing mild to moderate symptoms; and multidisciplinary expertise (medical, chaplains and other support services) for more affected members.

Navy Medicine's Psychological Health (PH) program supports the prevention, diagnosis, mitigation, treatment and rehabilitation of post-traumatic stress disorder (PTSD) and other mental health conditions, including planning for the seamless

transition of service members throughout the recovery and reintegration process. We have increased the size of the mental health workforce to support the readiness and health needs of the Fleet and Marine Corps throughout the deployment cycle and, during fiscal year 2010, funded 221 clinical and support staff positions at 14 Navy military treatment facilities (MTFs) to help ensure timely access to care.

Stigma remains a barrier; however, Navy and Marine Corps' efforts to decrease stigma have had preliminary success—with increased active leadership support and Operational Stress Control (OSC) training established throughout the Fleet and Marine Forces.

Within the Marine Corps, we continue to see success with the Operational Stress Control and Readiness (OSCAR) program as well as the OSCAR Extender program. OSCAR embeds full-time mental health personnel with deploying Marines and uses existing medical and chaplain personnel as OSCAR Extenders and trained senior and junior Marines as mentors to provide support at all levels to reduce stigma and break down barriers to seeking help. Our priority remains ensuring we have the service and support capabilities for prevention and early intervention available where and when it is needed. OSCAR is allowing us to move forward in this important area.

We recently deployed our third Navy Mobile Mental Health Care Team for a 6-month mission in Afghanistan. The team consists of three mental health clinicians, a research psychologist and an enlisted psychiatry technician. Their primary tool is the Behavioral Health Needs Assessment Survey (BHNAS). The results give an overall assessment of real time force mental health and well-being every 6 months, and can identify potential areas or sub-groups of concern for leaders. It assesses a wide variety of content areas, including mental health outcomes, as well as the risk and protective factors for those outcomes such as combat exposures, deployment-related stressors, positive effects of deployment, morale and unit cohesion. The Mobile Care Team also has a mental health education role and provides training in Psychological First Aid to Sailors in groups and individually. Ultimately, Psychological First Aid gives Sailors a framework to promote resilience in one another.

Our Naval Center for Combat & Operational Stress Control (NCCOSC) is one way we are developing an environment that supports psychologically fit, ready and resilient Navy and Marine Corps forces. The goal is to demystify stress and help Sailors and Marines take care of themselves and their shipmates. NCCOSC continues to make progress in advancing research for the prevention, diagnosis and treatment of combat and operational stress injuries to include PTSD. They are involved in over 64 ongoing scientific projects with 3,525 participants enrolled. NCCOSC has recently developed a pilot program, Psychological Health Pathways, which is designed to ensure that clinical practice guidelines are followed and evidence-based care is practiced and tracked. To date, 1,554 patients have been enrolled into the program with 600,062 points of clinical data gathered. The program involves intensive mental health case management, use of standardized measures, provider training and comprehensive data tracking.

In November 2010, we launched a pilot program, Overcoming Adversity and Stress Injury Support (OASIS) at the Naval Medical Center, San Diego. Developed by Navy Medicine personnel and located onboard the Naval Base Point Loma, California, OASIS is a 10-week residential program designed to provide intensive mental healthcare for service members with combat related mental health symptoms from post-traumatic stress disorder, as well as major depressive disorders, anxiety disorders and substance abuse problems. The program offers a comprehensive approach, focusing on mind and body through various methods including yoga, meditation, spirituality classes, recreation therapy, art therapy, intensive sleep training, daily group therapy, individual psychotherapy, family skills training, medication management and vocational rehabilitation. We will be carefully assessing the efficacy of this pilot program throughout this year.

Associated with our Operational Stress Control efforts, suicide prevention remains a key component. Suicide destroys families and impacts our commands. We are working hard at all levels to build the resilience of our Sailors and Marines and their families, as well as foster a culture of awareness and intervention by the command and shipmates. Our programs are focused on leadership engagement, intervention skills, community building and access to quality treatment. All of us in uniform have a responsibility to care for our shipmates and remain vigilant for signs of stress. A–C–T (Ask—Care—Treat) remains an important framework of response. In 2010, both the Navy and Marine Corps saw reductions in the number of suicides from the prior year, with the Navy seeing a reduction of 17 percent while the Marine Corps realized a 29 percent drop.

We are also committed to improving the psychological health, resiliency and well-being of our family members. When our Sailors and Marines deploy, our families

are their foothold. Family readiness is force readiness and the physical, mental, emotional, spiritual health and fitness of each individual is critical to maintaining an effective fighting force. A vital aspect of caring for our Warriors is also caring for their families and we continue to look for innovative ways to do so.

To meet this growing challenge, Navy Medicine began an unparalleled approach in 2007 called Project FOCUS (Families OverComing Under Stress) to help our families. FOCUS is a family centered resiliency training program based on evidenced-based interventions that enhances understanding, psychological health and developmental outcomes for highly stressed children and families. FOCUS has been adapted for military families facing multiple deployments, combat operational stress, and physical injuries in a family member. It is an 8-week, skill-based, trainer-led intervention that addresses difficulties that families may have when facing the challenges of multiple deployments and parental combat related psychological and physical health problems. It has demonstrated that a strength-based approach to building child and family resiliency skills is well received by service members and their family members. Notably, program participation has resulted in statistically significant increases in family and child positive coping and significant reductions in parent and child distress over time, suggesting longer-term benefits for military family wellness.

Project FOCUS has been highlighted by the Interagency Policy Committee on Military Families Report to the President (October 2010) and has been recognized by the Department of Defense (DOD) as a best practice. Given the success FOCUS has demonstrated thus far, we will continue to devote our efforts to ensuring our service members and their families have access to this program. To date, over 160,000 Service members, families and community support providers have received FOCUS services, across 23 locations CONUS and OCONUS.

Our programs must address the needs of all of our Sailors, Marines and families, including those specifically targeted to the unique needs of reservists and our caregivers. The Reserve Psychological Health Outreach Program (RPHOP) identifies Navy and Marine Corps Reservists and their families who may be at risk for stress injuries and provides outreach, support and resources to assist with issue resolution and psychological resilience. An effective tool at the RPHOP Coordinator's disposal is the Returning Warrior Workshop (RWW), a 2-day weekend program designed specifically to support the reintegration of returning Reservists and their families following mobilization. Some 54 RWWs have been held since 2008 with over 6,000 military personnel, family members and guests attending.

Navy Medicine is also working to enhance the resilience of caregivers to the psychological demands of exposure to trauma, wear and tear, loss, and inner conflict associated with providing clinical care and counseling through the Caregiver Occupational Stress Control (CgOSC) Program. The core objectives are early recognition of distress, breaking the code of silence related to stress reactions and injuries, and engaging caregivers in early help as needed to maintain both mission and personal readiness.

In addition, the Naval Health Research Center (NHRC) produced "The Docs", a 200-page graphic novel, as a communication tool to help our corpsmen with the stresses of combat deployments. "The Docs" is the story of four corpsmen deployed to Iraq. While some events in the novel are specific to Operation Iraqi Freedom (OIF), it is not intended to depict any specific time period or conflict but rather highlight general challenges faced by corpsmen who serve as the "Docs" in a combat zone. It was developed with the intent to instill realistic expectations of possible deployment stressors and to provide examples for corpsmen on helpful techniques for in-theater care of stress injuries. This format was chosen for its value in providing thought-provoking content for discussion in training scenarios and to appeal to the targeted age group.

Nearly a decade of continuous combat operations has resulted in a growing population of service members suffering with Traumatic Brain Injury (TBI), the very common injury of OEF and OIF. The majority of TBI injuries are categorized as mild, or in other words, a concussion. We know more about TBI and are forging ahead with improved surveillance, treatment and research. However, we must recognize that there is still much we do not yet know about these injuries and their long-term impacts on the lives of our service members.

Navy Medicine is committed to ensuring thorough screening for all Sailors and Marines prior to expeditionary deployment, enhancing the delivery of care in theater, and the identification and testing of all at-risk individuals returning from deployment. We are committed to enhancing training initiatives, developing better tools to detect changes related to TBI and sustaining research into better treatment options.

Pre-deployment screening is prescribed using the Automated Neuropsychological Assessment Metrics (ANAM). Testing has expanded to Navy and Marine Corps worldwide, enhancing the ability to establish baseline neurocognitive testing for expeditionary deployers. This baseline test has provided useful comparative data for medical providers in their evaluation, treatment and counseling of individuals who have been concussed in theater.

In-theater screening and treatment has also improved over time. The issuance of the Directive-Type Memorandum (DTM) 09–033 in June 2010 has increased leaders' awareness of potential TBI exposure and mandates post-blast evaluations and removal of blast-exposed warfighters from high risk situations to promote recovery. Deploying medical personnel are trained in administering the Military Acute Concussion Evaluation (MACE), a rapid field assessment to help corpsmen identify possible concussions. Additionally, deploying medical providers receive training on the DTM requirements and in-theater Clinical Practice Guidelines (CPGs) for managing concussions.

In August 2010, the Marine Corps, supported by Navy Medicine, opened the Concussion Restoration Care Center (CRCC) at Camp Leatherneck in Helmand Province to assess and treat service members with concussion or musculoskeletal injuries, with the goal of safely returning as many service members as possible to full duty following recovery of cognitive and physical functioning. The CRCC is supported by an interdisciplinary team including sports medicine, family medicine, mental health, physical therapy and occupational therapy. I am encouraged by the early impact the CRCC is having in theatre by providing treatment to our service members close to the point of injury and returning them to duty upon recovery. We will continue to focus our attention on positioning our personnel and resources where they are most needed.

Post-deployment surveillance for TBI is accomplished through the Post-Deployment Health Assessment (PDHA) and Post-Deployment Health Reassessment (PDHRA), which are required for returning deplorers. Further evaluation, treatment and referrals are provided based on responses to certain TBI-specific questions on the assessments.

TBI research efforts are focused on continuing to refine tools for medical staff to use to detect and treat TBI. Two specific examples are a study of cognitive and physical symptoms in USMC Breacher instructors (who have a high lifetime exposure rate to explosive blasts) and an ongoing surveillance effort with USMC units with the highest identified concussion numbers to determine the best method for identifying service members requiring clinical care. These efforts are coupled with post-deployment ANAM testing for those who were identified as sustaining at least one concussion in theater. Other efforts are underway to identify physical indicators and biomarkers for TBI, such as blood tests, to help in diagnosis and detection. We are also conducting evaluations of various neurocognitive assessment tools to determine if there is a "best" tool for detecting concussion effects in the deployed environment. Our efforts also include those coordinated jointly with the other Services, the Defense and Veterans Brain Injury Center (DVBIC), and the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE).

I am committed to ensuring that we build on the vision advanced by the Members of Congress and the hard work of the dedicated professionals at all the Centers of Excellence, MTFs, research centers and our partners in both the public and private sectors. These Centers of Excellence have become important components of the Military Health System and their work in support of clinical best practices, research, outreach and treatment must continue with unity of effort and our strong support.

Our service members must have access to the best treatment, research and education available for PH and TBI. We continue to see progress as evidenced by the opening of the National Intrepid Center of Excellence (NICoE) onboard the National Naval Medical Center campus. As a leader in advancing state-of-the-art treatment, research, education and training, NICoE serves as an important referral center primarily for service members and their families with complex care needs, as well as a hub for best practices and consultation. NICoE also conducts research, tests new protocols and provides comprehensive training and education to patients, providers and families—all vital to advancing medical science in PH and TBI.

Navy Medicine is also working with the DCoE, its component centers including DVBIC, the Department of Veterans Affairs, research centers, and our partners in both the public and private sectors to support best clinical practices, research and outreach. We continue to see gains in both the treatment and development of support systems for our Wounded Warriors suffering with these injuries; however, we must recognize the challenging and extensive work that remains. Our commitment will be measured in decades and generations and must be undertaken with urgency and compassion.

THE NAVY MEDICINE TEAM

Our people are our most important assets, and their dignity and worth are maintained through an atmosphere of service, professionalism, trust and respect. Navy Medicine is fortunate to have over 63,000 dedicated professionals working to improve and protect the health of Sailors, Marines and their families. Our team includes officers, enlisted personnel, government civilians and contractors working together in support of our demanding mission. I have been privileged to meet many of them in all environments—forward-deployed with the operating forces, in our labs and training facilities, at the bedside in our medical centers and hospitals—and I'm always inspired by their commitment.

We are working diligently to attract, recruit and retain our Navy Medicine personnel. Overall, I remain encouraged with the progress we are making in recruiting and overall manning and we are seeing the successes associated with our incentive programs. In fiscal year 2010, we met our Active Medical Department recruiting goal and attained 90 percent of Reserve Medical Department goal, but there was a notable shortfall in Reserve Medical Corps recruiting at 70 percent. Given the relatively long training pipeline for many of our specialties, we clearly recognize the impact that recruiting shortfalls in prior years, particularly in the Health Professions Scholarship Program (HPSP), can have in meeting specialty requirements today and moving forward. Recruiting direct accession physicians and dentists remains challenging, requiring our scholarship programs to continue recent recruiting successes to meet inventory needs. Retention has improved for most critical wartime specialties, supported by special pay initiatives; however, some remain below our requirements and continue to be closely monitored.

Within the active component Medical Corps, general surgery, family medicine and psychiatry have shortfalls, as does the Dental Corps with general dentistry and oral maxillofacial surgery specialties. We are also experiencing shortfalls for nurse anesthetists, perioperative and critical care nurses, family nurse practitioners, clinical psychologists, social workers and physician assistants.

The reserve component shortages also exist within anesthesiology, neurosurgery, orthopedic surgery, internal medicine, psychiatry, diagnostic radiology, comprehensive dentistry and oral maxillofacial surgery as well as perioperative nursing, anesthesia and mental health nurse practitioners.

We appreciate your outstanding support for special pays and bonus programs to address these shortages. These incentives will continue to be needed for future success in both recruiting and retention. We are working closely with the Chief of Naval Personnel and Commander, Naval Recruiting Command to assess recruiting incentive initiatives and explore opportunities for improvement.

For our civilian personnel within Navy Medicine, we are also coordinating the National Security Personnel System (NSPS) replacement for 32 healthcare occupations to ensure pay parity among healthcare professions. We have been successful in hiring required civilians to support our Sailors and Marines and their families—many of whom directly support our Wounded Warriors. Our success in hiring is in large part due to the hiring and compensation flexibilities that have been granted to the DOD's civilian healthcare community over the past several years.

Our priority remains to maintain the right workforce to deliver the required medical capabilities across the enterprise, while using the appropriate mix of accession, retention, education and training incentives.

I want to also reemphasize the priority we place on diversity. Navy Medicine has continued to emerge as a role model of diversity as we focus on inclusiveness while aligning ethnic and gender representation throughout the ranks to reflect our Nation's population. Not only are we setting examples of a diverse, robust and dedicated healthcare force, but this diversity also reflects the people for whom we provide care. We take great pride in promoting our message that we are the employer of choice for individuals committed to a culturally competent work-life environment; one where our members proudly see themselves represented at all levels of leadership.

For all of us in Navy Medicine, an excerpt from the Navy Ethos articulates well what we do: "We are a team, disciplined and well-prepared, committed to mission accomplishment. We do not waiver in our dedication and accountability to our Shipmates and families."

EXCELLENCE IN RESEARCH AND DEVELOPMENT AND HEALTH EDUCATION

World-class research and development capabilities, in conjunction with outstanding medical education programs, represent the future of our system. Each is a force-multiplier and, along with clinical care, is vital to supporting our health protection mission. The work that our researchers and educators do is having a direct

impact on the treatment we are able to provide our Wounded Warriors, from the battlefield to the bedside. We will shape the future of military medicine through research, education and training.

The overarching mission of our Research and Development program is to conduct health and medical research, development, testing, and evaluation (RDT&E), and surveillance to enhance the operational readiness and performance of DOD personnel worldwide. In parallel, our Clinical Investigation Program activity, located at our teaching MTFs is, to an increasing degree, participating in the translation of appropriate knowledge and products from our RDT&E activity into proof of concept and cutting edge interventions to benefit our Wounded Warriors and our beneficiaries. We are also committed to connecting our Wounded Warriors to approved emerging and advanced diagnostic and therapeutic options within and outside of military medicine while ensuring full compliance with applicable patient safety policies and practices.

Towards this end, we have developed our top five strategic research goals and needs to meet the Chief of Naval Operations and Commandant of the Marine Corps warfighting requirements. These include:

—Traumatic brain injury (TBI) and psychological health treatment and fitness for both operational forces and home-based families.

—Medical systems support for maritime and expeditionary operations to include patient medical support and movement through care levels I and II with emphasis on the United States Marine Corps (USMC) casualty evacuation (CASEVAC) and En Route Care systems to include modeling and simulation for casualty prediction, patient handling, medical logistics, readiness, and command, control, communications and intelligence (C^3I).

—Wound management throughout the continuum of care, to include chemical, molecular, and cellular indicators of optimum time for surgical wound closure, comprehensive rehabilitation; and reset to operational fitness.

—Hearing restoration and protection for operational maritime surface and air support personnel.

—Undersea medicine, diving and submarine medicine, including catastrophe intervention, rescue and survival as well as monitoring and evaluation of environmental challenges and opportunities.

During my travel overseas this past year, including Vietnam, current partnerships and future partnerships possibilities between Navy Medicine and host nation countries were evident. Increasing military medical partnerships are strengthening overall military to military relationships which are the cornerstone of overarching bilateral relations between allies. These engagements are mutually beneficial—not only for the armed forces of both countries, but for world health efforts with emerging allies in support of global health diplomacy.

Graduate Medical Education (GME) is vital to our ability to train our physicians and meet our force health protection mission. Vibrant and successful GME programs continue to be the hallmark of Navy Medicine and I am pleased that despite the challenges presented by a very high operational tempo and past year recruiting shortfalls, our programs remain strong. All of our GME programs eligible for accreditation are accredited and most have the maximum or near maximum accreditation cycle lengths. In addition, our graduates perform very well on their Specialty Boards—significantly exceeding the national pass rate in almost every specialty year after year. The overall pass rate for 2009 was 97 percent. Most importantly, our Navy-trained physicians continue to prove themselves to be exceptionally well prepared to provide care in austere settings from the battlefield to disaster relief missions.

In addition to GME, we are leveraging our inter-service education and training capabilities with the new state-of-the-art Medical Education and Training Campus (METC) in San Antonio, Texas. Now operational, METC represents the largest consolidation of Service training in the history of DOD, and is the world's largest medical training campus. Offering 30 programs and producing 24,000 graduates annually, METC will enable us to train our Sailors, Soldiers and Airmen to meet both unique Service-specific and joint missions. Our corpsmen are vital to saving lives on the battlefield and the training they receive must prepare them for the rigors of this commitment. I am committed to an inter-service education and training system that optimizes the assets and capabilities of all DOD healthcare practitioners yet maintains the unique skills and capabilities that our corpsmen bring to the Navy and Marine Corps—in hospitals, at sea and on the battlefield.

COLLABORATION ENGAGEMENT

Navy Medicine recognizes the importance of leveraging collaborative relationships with the Army and Air Force, as well as the Department of Veterans Affairs (VA), and other Federal and civilian partners. These engagements are essential to improving operational efficiencies, education and training, research and sharing of technology. Our partnerships also help create a culture in which the sharing of best practices is fundamental to how we do business and ultimately helps us provide better care and seamless services and support to our beneficiaries.

The progress we are making with the VA was clearly evident as we officially activated the Captain James A. Lovell Federal Health Care Center in Great Lakes, Illinois—a first-of-its-kind fully integrated partnership that links Naval Health Clinic Great Lakes and the North Chicago VA Medical Center into one healthcare system. We are grateful for all your support in helping us achieve this partnership between the Department of Veterans Affairs, DOD and DON. We are proud to able to provide a full spectrum of healthcare services to recruits, active duty, family members, retirees and veterans in the Nation's first fully integrated VA/Navy facility. We look forward to continuing to work with you as we improve efficiencies, realize successes and implement lessons learned.

Navy Medicine has 52 DOD/VA sharing agreements in place for medical and ancillary services throughout the enterprise as well as 10 Joint Incentive Fund (JIF) projects. When earlier JIF projects ended, they were superseded by sharing agreements. Naval Health Clinic Charleston and the Ralph H. Johnson VA Medical Center celebrated the opening of the new Captain John G. Feder Joint Ambulatory Care Clinic. This newly constructed outpatient clinic located on Joint Base Charleston Weapons Station is a state-of-the-art 188,000 square foot facility that is shared by the VA and the Navy Health Clinic Charleston. This project is another joint initiative such as the Joint Ambulatory Care Center in Pensacola that replaced the former Corry Station Clinic; and another in Key West where the VA's Community Based Outpatient Clinic (CBOC) and the Navy Clinic are co-located, continuing collaboration and providing service at the site of our first VA/DOD Joint Venture.

We are also continuing to work to implement the Integrated Disability Evaluation System (IDES) at our facilities in conjunction with VA. To date, this program has been implemented at 15 of our MTFs. This world-wide expansion, to be completed in fiscal year 2011, follows the DES Pilot program and the decision of the Wounded, Ill and Injured Senior Oversight Council (SOC) Co-chairs (Deputy Secretary of Defense and Deputy Secretary of Veterans Affairs) to move forward to streamline the DOD DES process.

One of our most important projects continues to be the successful transition of the new Walter Reed National Military Medical Center (WRNMMC) onboard the campus of the National Naval Medical Center, Bethesda. This realignment is significant and the Services are working diligently with DOD's lead activity, Joint Task Force Medical—National Capital Region to ensure we remain on track to meet the Base Realignment and Closure (BRAC) deadline of September 15, 2011. Our priority continues to be properly executing this project on schedule without any disruption of services. We also understand the importance of providing a smooth transition for our dedicated personnel—both military and civilian—to the success of WRNMMC. We recognize that these dedicated men and women are critical to our ability to deliver world class care to our Sailors, Marines, their families and all our beneficiaries for whom we are privileged to serve.

THE WAY FORWARD

I am proud of the progress we are making, but not satisfied. We continue to see ground-breaking innovations in combat casualty care and remarkable heroics in saving lives. But all of us remain concerned about the cumulative effects of worry, stress and anxiety on our service members and their families brought about by a decade of conflict. Each day during my tenure as the Navy Surgeon General, we have been a Nation at war. Each day resonates with the sacrifices that our Sailors, Marines and their families make, quietly and without bravado. They go about their business with professionalism, skill, and frankly, ask very little in return. It is this commitment, this selfless service, that helps inspire us in Navy Medicine. Regardless of the challenges ahead, I am confident that we are well-positioned for the future.

I will be retiring from Naval Service later this year and I want to express my thanks for all the support you provide to Navy Medicine and to me throughout my tenure as the Navy Surgeon General.

Chairman INOUYE. And now, may I call upon General Green.

STATEMENT OF LIEUTENANT GENERAL CHARLES B. GREEN, SURGEON GENERAL, DEPARTMENT OF THE AIR FORCE

General GREEN. Good morning.

Chairman Inouye, Senator Cochran, distinguished members of the subcommittee, I truly appreciate the opportunity to meet with you today and represent the men and women of the Air Force Medical Service. 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. And we thank you.

MILITARY HEALTH SYSTEM ACHIEVEMENTS

Military Health System achievements have changed the face of war. We deploy and set up hospitals within 12 hours of arrival anywhere in the world. We move wounded warriors from the battlefield to operating rooms within minutes and have achieved and sustained the 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 their recovery.

We have safely evacuated more than 85,000 patients since October 2001, 11,300 just this last year, many of them critically injured.

The Air Force Medical Service has a simple mantra: "Trusted Care Anywhere." This fits what we do today and will continue to do in years ahead. It means creating a system that can be taken anywhere in the world and be equally effective, whether it is for war or for humanitarian assistance.

Air Combat Command's new Expeditionary Medical System, the Health Response Team, is capable of seeing the first patient within 1 hour of arrival anywhere in the world, and performing surgery within 3 to 5 hours. Our Radiological Assessment Team was in place quickly to assist Japan in measuring the levels of radiation, food and water safety, overall impact on health, and to distribute personal dosimeters for protection of our personnel. Our deployed systems are linked back to American quality care and refuse to compromise on patient safety.

Providing trusted care anywhere requires the Air Force Medical Service to focus on patients and populations. By the end of 2012, the Air Force Patient-Centered Medical Home will provide 1 million of our beneficiaries new continuity of care via single provider-led teams at all Air Force facilities.

Patient-Centered Care builds new possibilities in prevention by linking the patient to a provider team, and both the patient and the provider team to decision support from informatics networks dedicated to improving care. Efficient and effective health teams allow recapture of care in our medical treatment facilities to sustain our currency and offer best value. We will do all in our power to improve the health of our population while working to control the rising costs of healthcare.

The Air Force Medical Service treasures our partnership with OSD, the Army, Navy, VA, civilian and academic partners. We leverage all the tools that you have given us to improve retention and generate new medical knowledge. We will continue to deliver nothing less than world class care to military members and their families, wherever they may serve around the world.

PREPARED STATEMENT

And I stand ready to answer your questions. Thank you.
Chairman INOUYE. All right. Thank you very much.
[The statement follows:]

PREPARED STATEMENT OF LIEUTENANT GENERAL (DR.) CHARLES B. GREEN

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 October 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 healthcare based on trust and rapport for both the patient and the provider.

Air Force Medical Home integrates the patient into the healthcare 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 healthcare 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 $300,000 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 PC^2, 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 fiscal year 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 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 Air Base, Germany, which opened in July. The DTC provides a 2-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 healthcare.

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 4 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 Department of Defense 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, MS 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 fiscal year 2012 and the joint clinic Centers of Excellence in place by fiscal year 2013.

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 healthcare 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 1 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 6 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 de-

signed 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, TX. 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 workforce.

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 healthcare 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 fiscal year 2009 and fiscal year 2010 and were able to graduate 219 and 211 new physicians, respectively, in these years. In fiscal year 2010, 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 healthcare system ensures more immediate success when they enter the workforce. 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 healthcare 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 healthcare 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 Joint Base Andrews, 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 Joint Base Lewis-McChord, Washington and Pope AFB, North Carolina have been effectively realigned as Medical Squadrons. Military treatment facilities at Shaw AFB, South Carolina; Eglin AFB, Florida; Joint Base McGuire, New Jersey; and Joint Base Elmendorf, 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 healthcare 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 Subcommittee for your support in helping us to achieve our mission.

RECRUITING MEDICAL PROFESSIONALS

Chairman INOUYE. General Green, let us start with you.

The subcommittee has been advised that an important aspect of your work is the recruiting of medical professionals, and you need them to carry out the services. But I have been told that it is a challenge because, for example, the Government Accountability Office (GAO) reported that hiring civil servants at the Defense Centers of Excellence for Traumatic Brain Injury took an average of about 4 months. And the nomination of medical officers can take just as long. What are you doing to streamline this effort?

General GREEN. Sir, your information is correct. It can take significant time to bring a fully qualified individual on board. Our major effort in terms of what we as medics have been doing is to shift some of our recruiting for fully qualified and the dollars associated into our scholarship programs. And over the last 3 to 4 years, we have expanded our scholarships through the Health Professional Scholarship Program by nearly 400, from about 1,266 to 1,666. This is not just used for physicians, but also for pharmacists and for psychologists, trying to bring in the right expertise. And although there is a longer trail to get these folks, we now have a more reliable understanding of what is in the pipeline and when we will we have solutions.

With regard to the specific questions regarding hiring civilians, we find frequently that we have to go after contractors rather than using general schedule (GS). It takes a little longer to get GS positions on our books, and so, when we have a more immediate need, we will substitute a contractor until we can get those positions into our books where we can use them. There has been a lot of effort in our A–1 community to try and streamline civilian hiring, and we are making progress. If you would have asked me this same question really within the last 1½ or 2 years, you would not have been talking to me about 4 months; you might have been talking about 6 months and longer. And so, we are making progress in terms of our civilian hiring.

When you talk to the military side and the scroll process in terms of how we get our officers, we continue to work with our A–1 personnel community to try and shorten that process. And when needed for specific expertise, we have been able to come through the process more rapidly. But it remains a process, as defined in law, that is fairly lengthy to ensure we bring the right people when we are bringing them on our books as Federal employees.

MEDICAL PAY SCALES

Chairman INOUYE. Do you find that the pay scale provided is competitive?

General GREEN. I think that we have many special pays available, not just to the military, but also to our GS that does make them competitive. It is on the Active duty side, we certainly have a dynamic ability to move dollars to the specialties that we need and make ourselves competitive. On the civilian side, it is sometimes more difficult, but there are pays associated that do drive for the non-super specialist competitive pay. If you are asking me if I can get in the GS world a competitive salary for a neurosurgeon, the answer is no, and it has to do with what the civilian world is driving in terms of salaries for these folks. But that is not true necessarily for some of the areas where we are the shortest in terms of our flight surgeons and our family practitioners. When you start talking to trauma surgeons, particularly to try and hire them into a GS position, that is more difficult.

And so, from a military perspective, the answer is, we have the authorities we need to offer pay that will retain and recruit new members on the GS side. I think that we are competitive in the primary care specialties, but not as competitive in the sub-specialties.

Chairman INOUYE. All right. Thank you very much. I will be submitting questions, if I may.

General GREEN. Yes, sir, of course.

Chairman INOUYE. Admiral Robinson, when I first visited Afghanistan, I was impressed and surprised to note that the Navy was running the hospital, and it was landlocked.

MEDICAL SERVICES TO DEPLOYED MARINES

Admiral ROBINSON. It still is.

UNIDENTIFIED SPEAKER. We are under the bridge now.

Admiral ROBINSON. We tried to move it to the water, but it did not work.

Chairman INOUYE. How do you provide services to, say, the marines that are usually deployed to forward operating bases? I notice that some of the reports coming in indicate the difficulty involved in evacuating them. Do you have any special techniques?

Admiral ROBINSON. No, sir. I am not sure I understand your question. How do we provide support to forward deployed medical personnel or forward deployed naval personnel?

Chairman INOUYE. Forward deployed marines.

Admiral ROBINSON. Marines, I am sorry. Forward deployed marines have—we have a methodology that includes having with them FRSs, forward resuscitative surgical teams, and also surgical trauma platoons that usually operate with the marines in their forward areas.

The first line of medical defense or the first line of medical operations would be the corpsmen. The corpsmen are there and are going to provide the type of emergency care with tourniquets and with the ABCs, airway, breathing, and circulation control. That is going to be followed by the corpsmen teaching buddy care to the other marines that are in the units that are there. This is very important because very often my corpsmen are also injured and injured in very grave ways. So often, the immediate care that they need has to come from a buddy who has in fact been instructed in the proper utilization and the use of tourniquets.

As the injuries occur and as the word gets out that we have injuries, we then have the FRSs, the forward resuscitative surgical teams, that are forward deployed and can do resuscitative surgery in a very timely fashion. The resuscitative surgery is meant to be lifesaving only—to staunch the bleeding, to meet the immediate needs of the patient to restore circulation, to restore volume, and then to evacuate the patient to a higher level of care, which is usually at a Role 3 facility, such as Kandahar.

Chairman INOUYE. All right. Thank you very much. And I will be submitting more questions, if I may.

Admiral ROBINSON. Yes, sir.

Chairman INOUYE. General, I am constantly amazed at the advancements we have made in medicine, plus other things like body armor and greater armor on our trucks and vehicles. And, for example, I was pleased with some of the advancements made in protecting hearing because of the explosions in the cars. But I am well aware that you are currently working on many other advancements. I will give you an opportunity to brag about it now. What are we doing?

General SCHOOMAKER. Well, sir, I think you have heard my colleagues describe—and you yourself described—some of the things that you have seen improvements in since you were a soldier in the Second World War. And those advances are really—have taken place, as you point out, all the way from protecting soldiers—changing combat tactics on the battlefield—to further protect soldiers and reduce risks, to the development of improved body armor, vehicles, combat goggles, ballistic goggles, hearing protection, better helmets, and the like. In fact, we have a program that is done in a joint environment. In fact, most of what is being described here and what you have alluded to is actually a joint effort, meaning all services are involved in either—even other agencies.

The program to improve body armor, personal protective equipment for the soldier or their vehicles, and aviation equipment is known as the Joint Theater Analysis for Protection of Injury in Combat, the JTAPIC program. And this tracks injuries, both survivable and non-survivable injuries, and then looks at the vehicle, the personal protective equipment, and goes to the next level to develop a better protection, a better vehicle for them. And that has been very successful.

But we have done what Admiral Robinson talked about. We have better trained the individual combatant as to how they can do lifesaving on themselves. We have issued better bandages to the individual soldier, a tourniquet for every soldier, and we train young soldiers to be almost medics, combat lifesavers. So, it is frequent that a combatant who is injured in combat would be first treated by himself or a colleague, and then a medic would appear on the scene, or a corpsmen in the case of the Navy. That corpsman is better trained and that medic is better trained than in past wars.

And then evacuation has improved. We have seen recently in Afghanistan when we visited that the footprint of air evacuation, which is largely through the Army, is very robust. In fact, every casualty in which a aircraft is not launched within 15 minutes of having a request or does not complete the mission within 60 minutes, is briefed all the way up to the top of the Department of De-

fense really, and they have to explain why they could not meet that Golden Hour. And that is generally because of weather or operational, or someone makes a decision—an appropriate clinical decision—to overfly the most immediate, you know, surgical site to go to a better and more definitive care site. That has been very successful.

We have also placed critical care nurses now on the—selected medivac flights and have seen improvements in survival.

A consequence of all of this through the Joint Theater Trauma System is that incrementally we have improved every stage of care of the combatant from the point of injury through the evacuation chain to forward resuscitative care and how surgeons are doing. We are really directing even trauma care for the world at large in the civilian sector, who benefited greatly from and have contributed to our understanding of this.

What we are currently seeing as a consequence of that—I will just make a note of this—is that the survivors of some of these really grievous wounds now are not they themselves very grievously wounded. And we are working in concert with the other services and the VA to better care for a much more complex injury than we have seen in previous conflicts, or even earlier in this conflict.

I hope that addresses your question, sir.

Chairman INOUYE. Yes. I have just one other.

A couple of years ago, I learned at one of these hearings that the man who is deployed out on the front lines has on his body something like 100 pounds of armor and equipment. And so, I took a special effort to weigh what I had to carry, and mine was less than 25 pounds. That included a medical kit and ammunition boots, helmet, my gun. Can we lighten the load?

General SCHOOMAKER. Yes, sir. There is a very active program in the Army, and I think in all the services. The Soldier Program is intended to do exactly what you have talked about, but I think there are limitations to the weight and cube. Every item that goes into the basic load for a combat soldier, right down to the packaging of their meals or the material that goes into their uniforms, is evaluated for its relative contribution for cost and weight.

But you heard Sergeant Giunta, who is our first living recipient of the Medal of Honor, when you honored him here in Congress, mentioned that he used to complain about those ceramic sappy plates and his body armor until he was shot twice and survived it. And he said, I'll never complain about carrying that load again. It is a very delicate balance, and I do not mean to trivialize or minimize what the soldier or the marine, any combatant is carrying. But I think it is an active process of looking at reducing that weight.

Chairman INOUYE. Thank you very much.

Senator Cochran.

Senator COCHRAN. Mr. Chairman, thank you.

Thank you all for being here this morning and helping us with your assessment of the needs for funding of the programs and activities of the U.S. military. We appreciate your careers of service.

I was especially taken with the comments about how in our medical assessment of fitness for duty—I think General Schoomaker made this point—after a person has fulfilled a requirement of serv-

ice of tours of duty on a voluntary basis, and there is a question about fitness or physical impairment caused by service in the military, that there are two really distinct questions that have to be answered when there is a claim for disability. One is an assessment of fitness for duty, which is a military issue, and the other is a medical issue. How do you sort out the differences and what the impacts are in terms of individual claims under our current state of the law? Would you like to take a shot at that first, General Schoomaker?

General SCHOOMAKER. I will, then I would love to hear from General Green, who is actually one of the co-chairs of the Disability Evaluation System for the—a review for the Department of Defense. I do not mean to pass the buck here, but we have been sort of fighting this war for, literally and figuratively, for a very long time, Senator, so I appreciate that question.

The current law and policy that governs the disability adjudication for an individual soldier—I am a solider, so I will use the term soldier, but it extends to sailors, airmen, and marines as well—is a dual system in which the military makes a judgment about any conditions which are unfitting for service, and then makes a decision about the unfitting condition that would lead to separation of that soldier.

Ironically, the termination of the disability that derives from that condition is identical to what the Veterans Administration uses. We actually use the same tables; they were developed in concert. But then the Veterans Administration—the Veterans Benefits Administration—looks at the same soldier and the same constellation of problems, but adjudicates disability on the basis of the whole person concept, in which every individual illness or injury, current or past, can be put into the equation, and comes up with a whole person disability kind of equation.

The two are high disparate. The difficulty we face is that soldiers get direct benefits from the military on the basis for that single unfitting condition. And as benefits have improved, especially—health benefits under the TRICARE program, if you can pass in the military side a critical threshold of 30 percent disability, you are entitled then to the benefits of healthcare for yourself, which follow any military medical disability, but for your family as well. It has become a very, very desirable benefit to have. And soldiers are confused and their families are angered by the fact that we adjudicate for only that one unfitting condition and yet pass to the VA, and they see that, you know, had you been evaluated by a much more—a much larger, more composite system, it might have been, I would have been eligible for a higher degree of benefit from that.

So we have eliminated some of the confusion and miscommunication, and we have accelerated the rate at which soldiers and their families can get VA benefits by this integrative process whereby a single physical exam is conducted by the VA in an adjudication of the total disability. But we still are required under the current state to adjudicate in the military system for the unfitting condition and in the VA system for the total person. We are advocating for the DOD—the Army—to adjudicate for—excuse me, determine unfitness, which is our title X authority and requirement,

but then pass to the VA, which is—are the experts in disability adjudication, the responsibility for doing more comprehensive disability evaluation.

With that, with your permission, sir, I will just pass to General Green.

Senator COCHRAN. Sure.

General Green.

ASSESSING PHYSICAL DISABILITY

General GREEN. Yes, sir. I am the co-chairman with Dr. Karen Guice from the VA on the Recovering Warrior Task Force, which has now had three meetings and basically three site visits. We are still in our discovery phase, if you will, in terms of the differences in approach between the services.

Within the current constraints, we do see—or current laws, basically—we do see some differences as—in terms of each service's approach. But there are similarities, and that is the area where Dr. Schoomaker is talking. Basically, we now are all using a single physical for the assessment of disability. Because we all use the same tables, it makes sense for everyone to use the same physical assessment.

The place where there is some variance is in the service's assessment of ability to continue on active duty. Today once the average soldier, sailor, or airman go through the DES process, the current return to duty, even having gone all the way through the DES, is about—I will use the Air Force's numbers—17 to 20 percent in terms of being a little high. And so, you would think that once the physical is done that we could assess whether that person could stay on Active duty or not and that it would not necessarily go through the remainder of the disability system evaluation. But the way it is currently being run, there are slight differences in terms of each service.

The other thing that happens, as Dr. Schoomaker was outlining, is that the VA looks at a total person for their disability rating. So, whereas—I will use something non-combat related. Whereas your cardiovascular disease may be significant enough to prevent you from being able to stay on Active duty, some of the other things that are rated in terms of the total disability are not necessarily disabling for DOD service, things like flat feet, or a recurrent rash, or mild hearing loss, things that could actually—you could stay on Active duty if you did not have the cardiovascular disease. And so, if we were to move to a system wherein the DOD simply paid for the total disability, there is a significant cost to the Government, whereas the current system basically has DOD paying for that ailment, if you will, that is disabling from further service.

I think that as the task force continues, we will have some recommendations. You folks have been kind enough to give the task force some time to look at this as we kind of check out whether the systems that have been put in place are providing the best service to our recovering warriors. I do not want to speak for the committee because we really are still in discovery phase, but just to reaffirm the things we are seeing confirmed, some of the things that Dr. Schoomaker is talking about.

Senator COCHRAN. Admiral Robinson, do you have any comments you would like to share with the subcommittee on that subject?

Admiral ROBINSON. Sir, I think it has been covered very well. I just would make one comment. Usually General Schoomaker makes a note about the fact that the disability system that we use needs an overhaul since it is about 40 or 50 years old. And I think that actually General Green's committee and a lot of the input that we have given as SGs through the last 3 or 4 years—is getting us there. We are working hard on this.

Senator COCHRAN. Thank you very much.

Thanks, Mr. Chairman.

Chairman INOUYE. Thank you.

Senator Mikulski.

Senator MIKULSKI. Mr. Chairman, and the Surgeon Generals.

First of all, we in Maryland feel very close to military medicine. We are the home of Naval Bethesda, and in a short time, sir, will be the home to Walter Reed Naval Bethesda, and I hope this later this summer, perhaps the subcommittee could go out and take a tour of what is being done there. And I think we would be very proud of it.

We are proud of USU, which is the Military Medical School in Nursing and Public Health, and Battleship *Comfort*—or, I should say, not battleship. It fights other battles, but Hospital Ship *Comfort* and Fort Detrick. So, we feel very close to you.

In terms of our work here today, I am going to pick up on the Dole-Shalala report. And I would like, General, to talk to you because we went through a lot. And I want to just use that as kind of the grid to see progress made and where we are heading, okay?

So, in Dole-Shalala, first of all, remember what happened—the terrible national scandal at Walter Reed. Secretary Gates immediately responded. There was a change in personnel and I think a real commitment to upgrade. And then, our own colleague, Senator Dole, and Secretary Shalala issued this great report.

Now, I am going to focus on issues related to preventing and treating post-traumatic stress disorder and brain injury, strengthening support for the families, and their recommendations to transfer the work with VA–DOD, and the workforce issues at Walter Reed.

The workforce issues, though, I think go well beyond acute care medicine, and I will be raising that with our nurses in a short time.

But, General, let us go to what Dole-Shalala recommended, and I know you might not have the report before you. But it said that we should aggressively treat post-traumatic stress and traumatic brain injury, and yet now we are seeing in that—so, could you tell me where we are in the progress made, how you see it improving, and then tell me why we have such increased rates of suicides and such increased rates of addictions to the very drugs that are supposed to treat post-traumatic stress?

General SCHOOMAKER. Well, ma'am, a complex question with several parts.

I think the last——

Senator MIKULSKI. But it goes to the heart of kind of where we are in this.

General SCHOOMAKER. Yes, ma'am. I do not deny that.

Let me try to address, first, suicides. I think the suicide question is—remains a challenge and is perplexing for all of the services. The Army saw a very disturbing doubling or more of the suicide rate from where it was 6 or 7 years ago in which it was age and employment adjusted and gender adjusted comparison to the public at large, kept by the Centers for Disease Control and Preventive medicine in Atlanta. We went from roughly one-half of a comparable population in the United States to being on par, if not exceeding that.

This is a problem that was tackled by the Vice Chief of Staff of the Army himself, stood up a task force, which has been in operation for almost 2 years now looking very carefully at all the factors. And as it recently——

Senator MIKULSKI. But what are we doing where we are?

General SCHOOMAKER. We have made this a commanders' and a leaders' issue and problem. The factors that go into reducing risks and identifying soldiers and families at risk, and the many factors that lead to our soldiers turning to suicide in desperation—as we have said, a permanent solution to temporary problems that they may suffer——

Senator MIKULSKI. But do you feel that you are on track to cracking this?

General SCHOOMAKER. I think we are making progress, ma'am. We are beginning to see—let me give you a——

Senator MIKULSKI. And this is not meant to be aggressive to you. We have been down this road now for over 4 years.

General SCHOOMAKER. Yes, ma'am, and it is—frankly, it has involved bringing in national leaders in this—the National Institutes for Mental Health for the $50 million Stars Program.

But as a real quick example of this, we got a notice the other day from one of our posts that one of our warriors in transition—that is, one of the soldiers going through an injury and illness recovery—in interacting with the small unit leader, dropped clues that she was in distress, wanted a chronic pain problem solved permanently for her. And when she could not be reached, the NCO leadership reached out to her, actually drove to her home off post. When they could not get in the door or she would not respond, they called the police. The police broke down the door and found her hung in the home, but still alive, got her to the hospital in time. So, I think that is a small example of what we see as——

Senator MIKULSKI. Yes, but, General, that is indeed a poignant problem. And, I mean, that is a very poignant story. I have very limited time here.

General SCHOOMAKER. Yes.

Senator MIKULSKI. So, here are my questions. Let us go at this way. I love hearing stories. Remember me, I am the social worker at the table.

General SCHOOMAKER. Yes, ma'am, I know.

Senator MIKULSKI. So, and I am going to approach it as a social worker. Do you feel you have adequate mental health personnel? And do you feel that they are adequately trained in the warrior

culture? As you know, there is a great gap growing between civilian culture and military culture. Also, from what I understand from other data, that often in the first hour of the first treatment, the military facing this problem walks out and tells the counselor essentially to go to hell because they do not feel they get it, and they are so upset. So, my question is, let us go to adequacy of capacity and adequacy of training. And then we will go to new techniques and approaches, because obviously standard talk therapy and meds, as we know it, are not working. Can you——

General SCHOOMAKER. We are working very actively in finding evidence-based approaches to the treatment of post-traumatic stress disorder, which I think in the main is—can be treated successfully. And we are seeing that.

Suicide, I think, is far more complex. It is not a medical problem. I think this is one of the things that vice has said, it is a larger command problem. Frankly, one-half or more of people who commit suicide have never seen a mental health provider or been identified as having a problem.

We are working very hard——

Senator MIKULSKI. Do you have adequacy of mental health professionals?

General SCHOOMAKER. I think the Nation is facing a problem with mental health professionals——

Senator MIKULSKI. No, do you have it? I am not talking about the Nation.

General SCHOOMAKER. As a microcosm of the Nation, we have problems, especially as——

Senator MIKULSKI. Again, I am not being—I really——

General SCHOOMAKER. We have problems, ma'am.

Senator MIKULSKI. I so admire what you have done and the leadership you have provided. I want to be very clear about that. But do you see my level of frustration? They are calling my office because they need help accessing services, not knowing where to go. So——

General SCHOOMAKER. I think the two things that we face——

Senator MIKULSKI. And what about the tying in the warrior culture?

General SCHOOMAKER. The things that we face most—and, frankly, I think is a subordinate element of this warrior culture issue might be present in some cases, but not universally. Our people do a good job with that. We are working hard to prevent post-traumatic stress by rapid identification of concussion on the battlefield and reducing that. We have got a comprehensive behavioral health system of care now that ties every phase of soldier deployment to each other phase and passes information. That has resulted in remarkable reductions in stress problems.

And what we have residual problems with in the Reserve component who go home to communities where access to care is a problem for all care, but especially behavioral health, and in remote size within the Army where it is tough to compete for civilian employees of any kind. But in some of our places where we have camps, posts, and stations, in the desert in California, for example, it is hard to recruit and retain high-quality people.

Senator MIKULSKI. All right. So, here is what I would like in my limited time. I appreciate that and the challenges. But I would really like to hear, based on the Dole-Shalala recommendations, what, from your—and I mean the group—perspective—on what is the progress made. But the Army assumed primary responsibility for implementing Dole-Shalala. And then also on the adequacy of training.

The other question I have is, we have to—and, Mr. Chairman, with your indulgences—support for the families. You know, when a warrior bears this either permanent wound or permanent impact, it is the spouse or the mother or the family, and it is also the children who bear this often—well, there is a saying in both the civilian and military world, post-traumatic stress is contagious. In other words, if one person has it, the family has it. So, it is not like isolated like cardiovascular disease where you have got it. Maybe the spouse is helping with a better diet and lifestyle. Can you tell me—again, going to Dole-Shalala—where we are in the support for the family?

General SCHOOMAKER. Yes, ma'am. We are working very actively on programs to support families, especially children, but spouses as well. We are reaching out into communities, engaging schools, churches, other community members, to extend the reach of insulation-based services into the communities to highlight that these are families of the military that face great stresses in their lives and identify children who are at risk and spouses who are at risk.

Ma'am, in an earlier meeting several years ago, you challenged me, without any data at the time, to rank order three elements of deployment in terms of their impact on soldiers and families: the frequency of deployment, the length of a deployment——

Senator MIKULSKI. Right.

General SCHOOMAKER [continuing]. The time between deployments we call dwell. And what I told you was we suspect that probably of the three, the most important is the dwell between deployments, and then after that, the length of the deployment, and then the frequency of deployment. We have special operations units that have deployed and individuals that have deployed a dozen times or more. But they are shorter deployments and they have adequate dwell between.

One thing we cannot—we now have good science to document, through surveys on the battlefield and from returning soldiers, that not allowing a soldier and a family to have a minimum of 24 months of dwell between deployments does not allow them to restore their psychological state.

Senator MIKULSKI. That is a good point.

General SCHOOMAKER. And one of the things that I think we need real support from the Congress in is to not—is to allow us to resume a, we call boots on the ground to dwell rate of one to two; that is, 2 years back home for every year that you are in combat. That, I think, will make a significant—have a significant impact on the mental state and the psychological state of both families and soldiers.

Senator MIKULSKI. Well, General Schoomaker, thank you.

Mr. Chairman, you have been indulgent. I could talk all day with this panel. Perhaps you and I could meet and talk over this in more detail, and then take some ideas to the chairman.

Thank you very much.

Chairman INOUYE. Thank you.

Senator MIKULSKI. But, you know, this deployment is a big issue. If we are going to cut the military, then we got to cut—like, we are going to shrink the Marine Corps, you know, the old budget? But if we are going to shrink the Marine Corps, then we should shrink what we ask the Marine Corps to do. And that would go for every military service, so I think we have got to keep this in mind.

Chairman INOUYE. It is a major challenge to all of us here.

Senator MIKULSKI. For every year you are deployed, you need 2 years at home to stay connected to your family to deal with exactly some of these really horrific situations you and I have just discussed.

General SCHOOMAKER. Yes, ma'am. And the Army, in 10 years of war, has never been able to achieve a 2-year dwell. In fact, on average it has been at 1.3 years——

Senator MIKULSKI. Well——

General SCHOOMAKER [continuing]. Of dwell for every year of deployment.

Senator MIKULSKI. Thank you.

Chairman INOUYE. Thank you very much.

Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman.

And I want to recognize the comments of my colleague from Maryland, talking about not only the impact to the individual, to the soldier, to those that are actively serving, but to the health and well-being of the families that are at home and supporting them. So I appreciate, General, your comments and recognition that it is the health of the whole family, not just the soldier, that we need to address here. It is a considerable challenge, but I think when we think about our effectiveness, our ability to recruit, our preparedness, it all has to come together. And I appreciate the discussion here this morning.

Gentlemen, welcome, and thank you all for your service, greatly appreciate it in so many ways.

General Green, it was a pleasure to have the opportunity to meet with you when you were in Alaska to attend the retirement ceremony for a friend of ours, Colonel Powell. At that time, we discussed the efforts to bring Fisher House to Alaska, and that is now a reality. We greatly appreciate that—your efforts and then your support for what Colonel Powell was trying to do, which was to focus on the hometown healing, has been remarkably successful. So we have got some good news to report up north.

My question today, and this is for you, General Green, is regarding the Elmendorf Hospital facility. As you know, it is a joint venture facility with the Air Force and the VA. And recognizing that it truly is joint venture in the sense that we have got the other services involved—Air Force, Army, and also serving our Coast Guard families. So, it clearly is a benefit to the region.

What I want to ask you today is whether or not the Air Force and the VA are in alignment when it comes to meeting the staffing needs there at Elmendorf Hospital.

We have got a situation where within the VA, far too many of our veterans are being sent outside—being sent to Seattle and parts outside the State simply because the services cannot be obtained there, or because the VA says we are going to do it outside, even when the services are available. I had an opportunity to discuss this with Secretary Shinseki at an Approps meeting last week, and he has pledged to me we are going to work to do better in purchasing care for our veterans there.

But what I am trying to determine is whether or not within this joint venture hospital we are truly able to meet the needs, given the strains that we have on capacity within the community, given the issues that we have in meeting the needs for certain specialties. And what I am looking for this morning is an assurance that we can be working to ensure that the joint venture hospital has what it needs—the people—to serve both the active military populations as well as our veteran population.

ELMENDORF HOSPITAL—A JOINT VENTURE FACILITY

General GREEN. Yes, ma'am. Thank you, and I appreciate our luncheon with Eli Powell, too, who is a good friend of mine.

Senator MURKOWSKI. Yeah.

General GREEN. In answer to your question, I think that you will kind of get a sense of the commitment we have to this venture.

The joint venture with the VA at Elmendorf is one of six that the Air Force is now doing with the VA. We have now invested about $7 million in JIF funds just at Elmendorf. We have about $100 million in all of our joint ventures across the world where we are partnered with the VA. My commitment up there has been to basically increase the manpower by about just under 200 positions to try and augment the staffing at Elmendorf to pick up on some of the workload, strongly encouraging further joint ventures with the Indian Health Service, which, as you know, is one of the larger hospitals in the Federal system there. And we have had people working in the Indian health hospital as well as we try to—they are a level 2 trauma hospital now—as we try to maintain skills.

We have also increased the budget up at Elmendorf by about $4 million annually in addition to just adding manpower, and we have seen an output from that of nearly 40 percent increase in surgeries that can be now in Alaska instead of people being sent elsewhere.

My commitment to the joint venture is very solid. I would love to see Elmendorf thrive. We have talked about whether or not we can bring graduate medical education up there. I have worked with some of your community physicians as they look to bring a pediatric residency to see if we can join them in that effort. And we have also talked with the family practice residency up there to see how we can basically partner.

Some of this has to do with how the hospital grows and how long it takes for construction in your State sometimes. The new VA clinic up there has been very successful, and my hope is we can do even more. And my hope is we can do even more. So, you have my

commitment, and I won't speak for the VA, but when I talk with them, they are very committed also to expanding services.

Senator MURKOWSKI. Well, what we would like to do is to be able to identify those areas or perhaps those gaps within the VA system, whether it is in orthopedics, ENT, neurology, wherever that is, and see if in fact there is a—there is the ability within the Air Force to kind of reach in and fill those gaps as we look to how we staff and truly meet the needs of, again, our Active service men and women and our veterans up there. But I appreciate your commitment, and I look forward to working with you on that.

General GREEN. Yes, ma'am. We send you very talented people that I——

Senator MURKOWSKI. Yes, you do.

General GREEN [continuing]. Expect to help me grow that particular area.

Senator MURKOWSKI. We appreciate that as well.

General Schoomaker, this is probably for you as the Army is the one that administers the congressionally directed Medical Research Program. And my question to you this morning is about the research program as it pertains to ALS, or Lou Gehrig's disease, a horrible disease for all—those of us that know of it, but a concern for us in the military as we look to the exceptionally high incidence—incident rate of those who contract ALS, who are our military heroes. It strikes those in the military at approximately twice the rate as the general public.

Back in 2008, ALS, as I understand, was determined to be a presumptive disability by the VA, a service-related disease. And again, those of us who have been in a situation where we know someone with ALS know that this is a condition that moves quickly—5- to 6-year life expectancy from diagnosis, and a terribly, terribly horrific and debilitating disease that cost incredible amounts of money as we provide for that level of care and that level of treatment.

And so, when we look to the statistics, it causes one to wonder, well, what will the impact to our military systems be as we pick up the costs for those that are afflicted with ALS? We are all very cognizant that we are in times of greatly reduced budgets, and some would look at these programs—these congressionally directed medical research programs—as being something that are perhaps nice, but not necessary. So, I would like to hear from you this morning kind of where you are coming from on these congressionally directed medical research programs, more specifically, ALS, whether you think that it is something that should be continued to be funded in terms of the research, and whether or not you think that that research is making a difference in the lives of our service members who have been afflicted.

General SCHOOMAKER. Yes, ma'am. Thanks for that question. And I think you have made exactly the case I would make for these programs.

Congress has been remarkably enlightened and forthcoming with funds for congressionally directed research dollars and for programs which are, as you point out, ma'am, administered through the Medical Research and Materiel Command at Fort Detrick under the congressionally directed medical research program and other congressional special interest programs.

They currently—we have got a very effective, I think, and efficient process by which research dollars and programs are targeted for our review for both scientific credibility and for programmatic integrity; that is, that they will be successfully executed. We have a very good program of soliciting the best investigators from across the country, both inside and outside the military, but largely outside the military, to conduct this. And the programs that they—that are addressed in these include amyotrophic lateral sclerosis that you have talked about, ALS, but also prostate cancer, breast cancer, and a variety of other problems that afflict not only the population at large, but military members and families as soldiers, sailors, airmen, and marines.

We try to make these as appropriate as possible to the military population, but we admit that a lot of these breakthroughs have overflow or application to other neurologic problems. I mean, insights into ALS will give us insights into other problems from an injury or illnesses that afflict soldiers.

Currently, the limit on earmarks is going to threaten about 50 percent of the total research that is done within the Medical Research and Materiel Command.

Senator MURKOWSKI. What do you think that will do to the status of research?

General SCHOOMAKER. Well, I mean, it is going to take down my structure. It is very hard to rebuild the structure that is the people and the programs that administer these programs for the military. You cannot snap your fingers and rebuild them, and so we are going to have to take those down over the next few months and have already started that process.

I am very eager to see the Congress come up with a solution that allows us to keep some of the critical programs because they have been very innovative and been very successful in delivering, you know, insights into new products to improve the lives of people who are suffering from these problems.

Senator MURKOWSKI. Well, it is difficult to hear that we would go backward on our research—go backward on the progress that we have made. And I hate to try to put a dollar on, you know, what it costs to deal with somebody that is afflicted, again, with a disease where, again, you are looking at incidence rates within our military that are twice the number within the general population out there. You would hate to think that somebody would hesitate to join up and become a member of our military because they are concerned that somehow or other they may be afflicted with a disease that they really want to steer clear of.

I recognize that these are difficult budget times, but I also recognize that the advancements that we have made, the investments that we have made in our research and technology, are not something that we want to dial back on. So, I would hope that we could work with you as we try to make more forward progress in this area.

Mr. Chairman, I have yet another question, but I have taken plenty of time this morning. But I will defer to Senator Leahy.

Chairman INOUYE. Thank you very much.

Senator Leahy.

Senator LEAHY. Thank you, Mr. Chairman.

I have found the questions here and answers interesting. You have a panel of three very, very well qualified people to answer them, and I appreciate that.

General Schoomaker, recently 42 Members of Congress joined me in sending a letter to the Army and the Guard Bureau asking them to fund eight States' National Guard outreach programs. The programs are going to expire soon. Now, in full disclosure, one of them is in my own State of Vermont.

But I think when we have heard the questions, especially those of the last two Senators, I would add to their points by saying these programs fill a serious gap in the Guard behavioral health. These programs are kind of like the MRAP, although it was an entirely different thing, but the program seemed like an idea where the Army and the Congress can work together to do the right thing. We did, getting the troops that equipment. Now we are talking about our soldiers and how we take care of them.

You have made great strides, and I listened to what you and Senator Mikulski were saying about suicide prevention in recent years. But last year's doubling of Army Guard suicides shows that the Army falls short when it comes to the needs of the Army Guard and Reserve. They do not have a base. They are not going back to a port or a base where you can have the services within a limited geographical area. A State like Vermont, which has no active duty installations, the Guard uses its outreach programs to reach out to personnel where they live in home towns across the State. That may be a town like the one I live in with 1,500 people; it may be in one with 100 people, or it may be a community like Burlington that has a larger population. And our own adjutant general, Mike Dubie, whom I believe you know, told me that there had been many potential suicides that had been averted by this outreach program.

Now, the funds needed to preserve these programs are less than $10 million for the remainder of the fiscal year. Are these programs going to be funded for this year and for the future?

General SCHOOMAKER. Well, sir, first of all, I want to thank you for the advocacy you showed for the 86th Infantry Brigade Combat Team that did deploy and then redeployed through Fort Drum, and I think illustrated the progress we have made in trying to bring back, redeploy, and then demobilize our Guard and Reserve.

What you have highlighted, and other members of the subcommittee have highlighted, are the problems that are inherent within the operationalization of the Reserves. The—our Guard and Reserve, which was within the Army, conceived of in past times as a strategic reserve ready to get launched one time for a major Nation-threatening, you know, war or conflict has now been, for the last 10 years, integrated fully into the deployment of the Army through an operational Reserve. And in doing that, what we have identified are shortcomings and challenges in providing care for National Guard and Reserve soldiers and families when they get back to their communities.

Senator LEAHY. And providing that care is a little bit different than going back to a base, going back to——

General SCHOOMAKER. Sure. No question.

Senator LEAHY [continuing]. Fort Hood or somewhere else.

General SCHOOMAKER. And the rules that govern access to that care are quite different. I mean, while the soldier is on Active duty, if the soldier incurs an injury or an ailment as a consequence of that deployment or that training to go to deployment, there is no question we have ready access to military units and military healthcare, and our TRICARE network, for that matter. But it does become a challenge when soldiers are redeployed and demobilized and then sent back home where they may face environments. And you are not alone in Vermont in facing this problem.

I am working very closely with the Guard and Reserve. I think one of the major efforts that Major General Rich Stone, who is a mobilized reservist in the South out of Michigan, and a physician in practice, but has left his practice to work with us and orchestrate a program to look at how we can better support the Guard and Reserve. We have been looking for the last couple of years at exactly how we can better care for and reach out to the Guard and Reserve through TRICARE and our other efforts. So, we are looking at the programs that are threatened by the loss of funding, sir.

Senator LEAHY. Well, please look carefully and work with my office. We have had, you know, a redeployment. We talked about the Warrior Transition Program. And I know that there is a pilot program established at Fort Drum which still has some issues to work out. It is far superior than what the 86th Brigade had before, though. And I just would like to see these things around the country because when you have been in Iraq and you have been in Afghanistan, as I have, and you see these people out in the field, you cannot look at the soldiers going in and say, well, that one is a Guard member and—you cannot tell, nor are their duties any different.

And I have one other question, and actually I pass this on to all of you, General, to you, and Admiral Robinson, and General Green. I have long supported improvements in military medical care through information technology and increased use of it. I have supported a military medical decisionmaking tool called CHART. The Office of the Secretary of Defense plans to mandate it for use by the services in pre- and post-deployment healthcare screening. A recent study by an Army doctor in the American Journal of Psychiatry linked deployment screenings to improved mental health outcomes. Are your services going to be using CHART and interface with your readiness systems?

Admiral Robinson, would you like to——

Admiral ROBINSON. Sir, I——

Senator LEAHY [continuing]. Take a swing at that one?

Admiral ROBINSON. I will take a swing at it. I am not familiar with CHART, so I do not know whether we will be using it or not. But I can certainly take this for the record and get back to you.

Senator LEAHY. Would you please?

Admiral ROBINSON. I certainly will do that.

Senator LEAHY. Thank you.

[The information follows:]

An electronic tool to integrate multiple health assessment questionnaires and display results in the DOD electronic health record system would he beneficial. In its current Conn, CHART has multiple shortcomings, and requires major enhancement before it can be considered as an acceptable solution for the Services.

Each of the Services currently possesses operational readiness information systems with an integrated health assessment questionnaire capability. These systems manage each Service's unique readiness requirements and operate in their unique fielding environments. CHART as a health assessment questionnaire tool would duplicate and fragment our ability to assess and monitor readiness of Soldiers, Airmen, Sailors, and Marines. For these reasons, CHART is currently ranked very low in the overall funding priority.

General SCHOOMAKER. Sir, and for the Army, I am not familiar with that as well, but I will—this is a good point for me to make a pitch for this behavioral health system of care that Major General Horoho is taking personal leadership in. It allows us to look at programs like CHART, or any other program, in an objective way and do a head-to-head comparison with our existing systems, and see if it delivers a better outcome. So, I think——

Senator LEAHY. I mean, we all want the same thing. We want the best outcome. And I am just pushing to make sure we have it.

And, General Green? And certainly all three of you please do give me something for the record on this.

General Green.

ELECTRONIC HEALTH RECORDS

General GREEN. Yes, sir. And I will take the question for record on the CHART, specific question.

I would add that we now have almost 5 years of data from our electronic health record. And so, leveraging the data that is in AHLTA and basically linking that with the pharmacy transaction databases as well as the M–2, we are now leveraging informatics to try and get to new levels of decision support that will really change medicine over time. I strongly believe that if we can get better information to the patient so that they make sound decisions, that we can then also get them to the healthcare team which can augment and give them even further information, we will see tremendous change in medicine because we will be able to pinpoint prevention back to the—what is necessary for patient care.

Senator LEAHY. Well, take a look at this one and take a look at any of the DOD directives on it, because there has to be follow-up to make it work, and that is what I am most concerned about. I worry very, very much that some of these brave men and women we have deployed fall off the screen because they are not treated properly. I do not pretend to be knowledgeable on this, but I know when my wife was working as a registered nurse, she saw a lot of these people that should have been helped—that was a different time—should have been helped, could have been helped. And I go to some places where the care is superb, and the person might have committed suicide somewhere else, or might have dropped off the screen somewhere else, or had debilitating illness that could have been corrected and was not. We ask them to put their lives on the line, then—I mean, you know that, and you believe as I do. I think we owe them something when they come back. So, let us see what this is going, let us see what the directives are, and let us see what the implementation might be.

Thank you.

Mr. Chairman, thank you for this hearing.

Chairman INOUYE. All right. Thank you very much.

And, General Schoomaker, Admiral Robinson, General Green, I thank you very much on behalf of the subcommittee. And I wish you well also.

And now we will have the second panel: Major General Patricia Horoho, Chief, Army Nurse Corps, Rear Admiral Elizabeth S. Niemyer, Director of the Navy Nurse Corps, Major General Kimberly Siniscalchi, Assistant Air Force Surgeon General for Nursing Services.

STATEMENT OF MAJOR GENERAL PATRICIA HOROHO, CHIEF, ARMY NURSE CORPS, DEPARTMENT OF THE ARMY

General HOROHO. Good morning, sir.

Chairman Inouye, Vice Chairman Cochran, and distinguished members of the subcommittee, it is an honor to speak before you today on behalf of the nearly 40,000 officer, civilian, and enlisted team members that represent Army nursing. Your continued support has enabled Army nursing in support of Army medicine to provide exceptional care to those who bravely defend and protect our Nation.

It is a privilege to share with you today what is happening across Army nursing.

Our strategic priority, the Patient CareTouch System, was implemented in February of this year at three medical treatment facilities, Madigan, Brooke, and Womack Army Medical Centers, and then this month we began the roll out of the remaining facilities. Army-wide implementation of Patient CareTouch will be complete by December 2011. This system is fully embraced by all medical leaders and is successfully being implemented across Army medicine.

The Patient CareTouch System is comprised of five elements, which we truly believe guide, gauge, and ground patient-centered care delivery. The elements are patient advocacy, enhanced care team communication, clinical capability building, evidence-based practices, and healthy work environments. There are 10 supporting components that enhance these elements.

A key element of the Patient CareTouch System is evidence-based practice, and nursing researchers, embedded in newly formed centers for nursing science and clinical inquiry, translating research into practice to optimize the quality of care provided to our patients.

Army nursing is continuing to answer the call of the combatant commander for critical care nurses who are prepared and dedicated to care delivery in the back of medical evacuation helicopters.

In December 2007, nurses assigned to the Medical Task Force in Iraq leveraged the capabilities of our critical care and emergency nurses. We created and then codified a premier en route care transport program that ensured our wounded, ill, and injured receive the right care at the right time by the right provider. Since last year, we have performed nearly 450 en route care transport missions. This capability directly impacted the 98 percent survival rate for wounded service members in Iraq, and is now the standard across all theaters of operation.

The demand for increased numbers of trauma nurses in both theaters of operation prompted me to make a decision this year to es-

tablish a separate area of concentration for trauma nurses. This required a consolidation of critical care and emergency nursing specialties from which this new specialty, the 66th Tango, was established. This consolidation will provide unparalleled level of trauma nursing capability for military medicine, and it will be the force multiplier in both our fixed and deployed hospitals.

I would like to provide you with an update of several programs that I introduced to you last year.

The Brigadier General Retired Anna May Hayes Clinical Nurse Transition Program continues to prepare our novice nurses to provide patient-centered care. Since 2009, over 520 novice nurses have completed this program, achieving a higher advanced beginner competency. This program continues to exceed the national standard.

Since the inception of the Virtual Leader Academy, we have graduated over 500 officers, non-commissioned officers, and civilians from our courses. This Academy focuses on capability and facilitates lifelong learning.

Army nursing is committed to the education of its advanced practice nurses. To that end, Uniformed Services University has once again proven to be the stalwart partner of Army nursing, as well as to our sister services to ensure the development of the curriculum to tackle the requirements for transition from Masters to DMP Program by 2015.

An area that we have focused our effort pertains to behavioral health. We have refined the clinical capability for the Advanced Practice Army Behavioral Health Nurse Practitioners, a key member of the behavioral health team. We have leveraged their capability toward building resiliency in our deployed service members and their families.

Over the past year, 424 Army nurses deployed with two medical brigades and four combat support hospitals in support of Operation New Dawn and Operation Enduring Freedom. We had the extreme honor of celebrating the successful command tour of two combat support hospital nurse commanders. These nurses were integral in leading healthcare delivery and facilitating medical diplomacy across Iraq.

Army nurses are writing our history with each patient they touch, with each experience they have, and each story that they tell.

On February 2, we celebrated 110 years of proud service to our Nation. We thank you, Mr. Chairman, and Senator Murkowski for introducing Senate Resolution 31 to commemorate this historic occasion.

Mr. Chairman, we also thank you for the very touching, heartfelt video message for the many years of unwavering support of Army and Army nursing.

I continue to envision an Army Nurse Corps of the future that we leave its mark on military nursing and will be a leader of nursing practice reform at the national level. We are committed to leveraging lessons learned from the past, engaging present innovation, and shaping the future of professional nursing. Our priority remains our patients and their families, and our common purpose is to support and maintain a system for health. In order to achieve

this common purpose, we serve with the courage to care, the courage to connect, and the courage to change, so that we may provide the best possible healthcare to those that wear the cloth of our Nation.

PREPARED STATEMENT

On behalf of the entire Army Nurse Corps, serving both home and abroad, I would like to thank each of you for your service to our Nation and your unwavering support.

Thank you.

Chairman INOUYE. General Horoho, thank you very much for you testimony. We appreciate it very much.

[The statement follows:]

PREPARED STATEMENT OF MAJOR GENERAL PATRICIA D. HOROHO

Chairman Inouye, Vice Chairman Cochran and distinguished members of the committee, it is an honor and a great privilege to speak before you today on behalf of the nearly 40,000 Active component, Reserve component and National Guard officers, non-commissioned officers, enlisted and civilians that represent Army Nursing. It has been your continued tremendous support that has enabled Army Nursing, in support of Army Medicine, to provide exceptional care to those who bravely defend and protect our Nation.

PATIENT CARETOUCH SYSTEM

I am pleased to provide you with an update on Army Nursing and to share with you my strategic priority, the Patient CareTouch System. The Patient CareTouch System implementation began on February 7, 2011 at three medical treatment facilities: Madigan Army Medical Center, Brooke Army Medical Center, and Womack Army Medical Center. Seven facilities will begin their roll out this month: Walter Reed Army Medical Center, DeWitt Army Community Hospital, Tripler Army Medical Center, Landstuhl Regional Medical Center, William Beaumont Army Medical Center, Carl Darnall Army Medical Center, and Blanchfield Army Community Hospital. The remaining facilities will join the process in three implementation phases beginning in mid-May. Army-wide implementation at every patient touch point will be completed by December 2011. The Patient CareTouch System spans all care environments where nurses touch patients by ensuring quality care is delivered carefully, compassionately and in accordance with standards for best practice. The Patient CareTouch System is comprised of five elements, which we believe guide, gauge, and ground patient centered care. These elements include: Patient Advocacy, Enhanced Care Team Communication, Clinical Capability Building, Evidence-Based Practices, and Healthy Work Environments. The elements are supported by 10 components that include core values for patient care, care teams, peer feedback, standardized documentation, skill building, talent management, clinical leader development, optimized clinical performance, Centers for Nursing Science and Clinical Inquiry (CNSCI), and shared accountability for quality of patient care delivery.

The Patient CareTouch System provides a sustainable framework for our transition from a healthcare system to a system for health. It cultivates trust by providing a standard by which care can be measured across Army Medicine, and it allows us to look critically at what we do, how we do it, and how we can improve. The Patient CareTouch System ensures that our patients know that we have their best interest at the forefront of all care decisions and it promotes standards, not standardization, for nursing care Army-wide. We found, when we piloted the Patient CareTouch System at Fort Campbell, Kentucky, that we had a positive impact on patient outcomes, patient satisfaction, clinical communication, provider-nursing staff collaboration, and provider satisfaction. We believe these results will be reproducible across Army Medicine and we are using evidence based metrics to benchmark nurse sensitive indicators against national standards. This will validate our firm belief that our patients are receiving world class, high quality nursing care.

OPTIMIZING PATIENT CARE DELIVERY

Evidence based practice is a key element in the Patient CareTouch System and nursing researchers, embedded within newly formed CNSCIs are translating research into practice to optimize the quality of care provided to our patients. The

CNSCIs are promoting enhanced nursing decision support, evidence-based practice and research. Nurse scientists, Clinical Nurse Specialists, and Nurse Methods Analysts comprise the CNSCI. These experts working together are affecting the transition from a "question-to-answer model" to the more valuable "question-to-translation-to-evaluation model." Consolidating nursing support assets who are working on a common sense research priority agenda increases the capacity for evidence-based management and evidence-based practice Army Nursing wide.

Research and evidence-based practice are overarching and core constructs in the Army Nursing Campaign Plan. Army Nursing is transforming from an expert-based practice model to a systems-based care model in order to leverage nursing assets and realize the benefits of knowledge management and research translation. This is critical to improve patient outcomes, safety, healthcare value, and quality. Tenets of a systems-based care model includes system resourcing, healthcare economics, teamwork, cost-benefit considerations, and practice management. Key to success is uniting various types of nursing support experts to better meet the needs of bedside nurses and the nurse leaders who provide and direct the delivery of patient care.

Army Nurse scientists are collaborating in joint, multinational and academic settings to infuse nursing practice with evidence based science. The premier Army Nursing Practice Council (ANPC), established in the fall 2010, is providing the critical connection between nursing science and nursing practice. The ANPC meets monthly to review evidence, data, and science to develop evidence-based nursing tactics, techniques and procedures (TTP) that then become the standards across Army Medicine. Recently published standards include an innovative falls prevention program, structured nursing hourly rounding, and bedside shift reporting. TriService Nurse Research Program (TSNRP) funded studies support several evidence-based nursing TTPs. For example, in the Emergency Room at Bayne Jones Army Community Hospital, Fort Polk, Louisiana, white boards in the patient rooms facilitate real time status updates on medications, procedures, and tests completed to enhance communication between emergency room staff and the patient and family members.

The TSNRP funded an evidence-based practice project titled: "Evaluating Evidence-Based Interventions to Prevent Falls and Pressure Ulcers." This study was the basis for revising clinical practice guidelines for prevention of falls and skin breakdown within the Madigan Army Medical Center. It was also the means by which their CNSCI team introduced patient-centered rounds and monitoring of nurse-sensitive outcomes such as nurse satisfaction, patient satisfaction, and rates of falls and pressure ulcers.

WARRIOR CARE

Enroute care transport is not a new mission for Army Nursing; we have been providing this type of care for over 60 years. In 1943 the first Army nurses formally trained in air evacuation procedures were assigned to secret missions in North Africa, New Guinea, and India. Army nurses cared for patients on helicopter ambulances, transporting over 17,700 U.S. casualties of the Korean War. During the Vietnam war, Army Nurses were aboard helicopters moving almost 900,000 United States and allied sick and wounded Soldiers.

Army Nursing is continuing to answer the call of the combatant commander for critical care nurses who are prepared and dedicated to care delivery in the back of a medical evacuation helicopter. In December 2007, nurses assigned to the medical task force in Iraq leveraged the capabilities of our critical care and emergency nurses and created, then codified, a premier enroute care transport program that ensured our wounded, ill and injured service members received the right care, at the right time, by the right provider. This program directly impacted and sustained the 98 percent survival rate for wounded service members in Iraq.

The Army Nursing Enroute Care Transport Program was so successful in Iraq in decreasing the incidence of hypothermia, accidental endotracheal tube extubation, and prevention of hypovolemic shock in our Wounded Warriors that the program is currently in place in Afghanistan. Army nurses continue to refine and improve the program, maintaining a focus on nursing TTPs for critical care patients transports. I am so proud of our Army nurses who, at the beginning of the war in Iraq, saw a gap in rotor wing critical care patient transport and identified processes to fill the gap. As a result, our enroute care transport program is unparalleled in terms of the quality of nursing care that our combat veteran critical care nurses provide to Wounded Warriors. The quality of care during the strategic evacuation care continuum does not end in the theater of operation. Landstuhl Regional Medical Center's (LRMC) unique TriService Air Evacuation mission processes all casualties through the Deployed Warrior Medical Management Center. The nursing care provided to wounded, ill and injured Warriors and coalition armed forces air evacuated

from Operation Iraqi Freedom, Operation Enduring Freedom, Operation New Dawn and other Overseas Contingency Operations to LRMC significantly contributed to LRMC being awarded the Association of Military Surgeons of the United States (AMSUS) 2010 Facility-based Healthcare (Hospital) Top Federal Hospital for fiscal year 2010. Continuing their high operational tempo, the LRMC's triservice nursing team cared for 11,185 casualties (4,284 inpatient casualties and 6,901 outpatients) in fiscal year 2010.

Nursing staff augmented the Contingency Aeromedical Staging Facility on Ramstein Air Base, enabling continuous casualty flow from LRMC to CONUS medical centers. Receiving casualties from over 500 Air Evacuation flights, LRMC nurses have significantly supported the aeromedical evacuation process. On any given day at LRMC, nursing staff on the medical-surgical units will discharge 10 inpatients and admit 11 new patients, illustrative of the high operational tempo that is commonplace at LRMC.

Nurse researchers like Lieutenant Colonel Betty Garner, are augmenting warrior care efforts by conducting studies designed to produce evidence for new nursing care modalities. Lieutenant Colonel Garner and her team are determining the impact nursing care has on injured Soldiers and their families after a traumatic brain injury (TBI). Understanding the needs of the Wounded Warrior and their families are imperative to improve the quality of life among those affected by TBI.

These examples of Army Nursing's clinical initiatives illustrate an amazing flexibility and agility to ensure that we are responsive to the needs of our wounded, ill, and injured service members. I would like to provide you with an update of several programs that I introduced to you last year, and are key enablers of Army Nursing's strategic initiatives.

CAPABILITY BUILDING

Talent Management

Inherent in clinical capability building is leadership, and in order to best leverage the capabilities of our nursing team, we examined the methods by which we identified, managed, and developed clinical leader talent. The Army Nurse Corps' (ANC) talent management strategy is a mission critical process that ensures the Corps has the right quantity and quality of leaders in place to meet the current and future Army Medical Department missions and priorities. Our strategy covers all aspects of the ANC life cycle, to include aligning the Corps strategic goals with capability requirements and distributing the right talent for the right position at the right time and rank.

We partnered with U.S. Army Accessions Command and implemented precision recruiting to ensure we are recruiting the right capability in order to develop clinical leader talent. In spring 2010, for the first time, our Human Resources Command, Army Nurse Corps Branch executed a formalized capability-based assignment process, placing senior officers in key positions based on their skills, knowledge, and behaviors instead of on availability. In addition, we defined and established a sustained succession plan for key leadership positions in the ANC. Our talent management strategy enables us to assign full spectrum leaders across all care environments in support of the Army Medicine mission.

Leader Academy

Since the inception of our virtual Leader Academy, we have graduated over 500 officers, non-commissioned officers and civilians from our courses. Over the past year we analyzed ways to optimize the Leader Academy to ensure agility in meeting evolving requirements. We have sequenced learning and redesigned a "building block" curriculum to facilitate lifelong learning at all professional development phases. The five core elements of the Patient CareTouch System serve as the foundational framework for the Leader Academy and the key components are threaded throughout the curriculum of all courses offered.

The BG(R) Anna Mae Hays Clinical Nurse Transition Program (CNTP) continues to prepare our novices with good results. Preliminary program evaluation results presented at the 2010 Phyllis J. Verhonick Nursing Research conference indicate that of the four cohorts evaluated, all participants achieved advanced beginner competency at the end of the program. In order to stabilize the program, all director positions are now being filled by competitively selected non-rotating civilians, two of which are Doctoral prepared and the remaining are Master's prepared. A review of current studies revealed that standardized preceptorship programs (preceptor training and tracking) increases nurse transition from academia to practice. As a result of this evidence, the CNTP directors adopted a Preceptor Development Program and established guidelines now being implemented at all transition sites. The

Patient CareTouch System provides a framework for the program and the evidence and science inform the standards by which nurses deliver care across the age spectrum. Patient responses have been favorable, specifically complimenting nurse transition program participants in hospital satisfaction surveys. As we interview new lieutenants in the program, we have found that many, who were planning to leave at the end of their initial service commitment, are instead continuing their careers in the ANC as a result of the enculturation process that is inherent in the CNTP. Retaining new graduate nurses preserves the knowledge, experience and confidence gained during the first year of professional practice and has a positive impact on the quality of patient care.

There has been an array of secondary benefits resulting from the creativity of the nurses participating in the CNTP. At Madigan Army Medical Center, novice nurses developed and implemented a program to track chart audits and produced a training video on "Preventing Patient Falls." At Womack Army Medical Center, novice nurses presented an abstract entitled "Response to Enhance the Quality and Consistency of Shift Reports" at the Karen A. Reider Federal Nursing Research poster session during the AMSUS conference.

PORTFOLIO OF EXPERTISE

We are constantly refining our clinical capabilities to meet the ever-changing complexity of providing care in challenging care environments. As a result of increasing demands for trauma nurses and the complexity of care required in both theaters of operation we made the decision to establish a separate area of concentration consolidating intensive care unit (ICU) and emergency nursing with the educational and clinical focus on combat trauma care. This new area of concentration will provide us a flexible and agile economy of force, while providing an economy of effort for training.

We are re-shaping our ICU and emergency nursing courses into one curriculum focused on acquisition of trauma nursing and critical care competencies. The Army trauma nurse area of concentration will result in assignment flexibility in both our hospitals and deployed combat support hospitals (CSH) and provide an unprecedented level of trauma nursing capability for military medicine. We are also analyzing ways to leverage potent Army medicine force multipliers such as our psychiatric nurse practitioners and psychiatric nurses.

This year, in response to increasing requirements for trauma trained nurse, we expanded our emergency nursing course by adding a second training site at Madigan Army Medical Center and graduated our first class at this location in December 2010. This additional program doubles the number of emergency nurses trained annually and enhances our ability to provide world class care at home and abroad.

Through the efforts of our Perioperative Nurse Consultant, in collaboration with the national perioperative nursing organization, we have added additional sterilization procedures to the curriculum for both our Perioperative Nurse and Operating Room Technician programs. This proactive initiative addresses a national health concern regarding potential infectious disease transmission resulting from improper sterilization processing of surgical scopes. Currently, we are developing a pilot program for the utilization of graduate prepared Perioperative Clinical Nurse Specialists as Perioperative Nurse Case Managers responsible for the coordination of clinical care across the perioperative continuum from preoperative preparation to postanesthesia care. We are closely examining operating room processes, with a focus on the perioperative nurse.

The operating room can be one of the busiest touch points in a facility, and as a result an area that we want to ensure quality and safe care delivery. We believe that a critical examination of an expanded role of the perioperative clinical nurse specialist is needed. This role will concentrate on quality assurance with a focus on patient safety and perioperative arena efficiency to include the operating room and the centralized sterile processing department. This role is unique in that it cannot be replaced by a non-perioperative advanced practice nurse.

Last year I discussed our initiative related to critical care skills for our enlisted licensed practical nurses (LPN). In October, we conducted our first pre-deployment critical care course for enlisted practical nurses from one of our deploying CSH. The Soldiers received didactic instruction and clinical rotations in critical care and burn care at Brooke Army Medical Center and the Institute of Surgical Research. Three enlisted practical nurses from the deploying 115th CSH attended a "critical care skills during deployment" pilot. On average, students demonstrated a 42 percent increase in self-reported skills related to chest tube drainage system set up, cardiac strip interpretations, and patient report/handoff. With the success of this pilot, we are currently developing a pre-deployment LPN course that will prepare deploying

LPN's for the complex trauma missions they will support. Every Army Nurse is a trauma nurse.

During calendar year 2010, Army nurses deployed with two Medical Brigades and four CSHs in support of Operation New Dawn and Operation Enduring Freedom to provide force health protection and combat health support to United States and coalition forces. Two CSHs were commanded by Army nurses—Colonel Barbara Holcomb, Commander of 21st CSH, Iraq and Colonel Judy Lee, Commander of 14th CSH, Iraq—who facilitated healthcare delivery and medical diplomacy.

Major Pamela Atchison, an Army nurse, deployed with Task Force MED East in support of Operation Enduring Freedom, developed the Afghanistan Trauma Mentorship Program for the Afghanistan Theater of Operation. Major Atchison implemented the Afghanistan Trauma Mentorship Program at two Afghanistan civilian hospitals and trained over 500 medical personnel (Physicians, Medics and Nurses) assigned to the Afghanistan National Security Force and Afghanistan National Army. Her contribution to Health Sector Development for Afghanistan, will have a lasting effect for both the civilian and military medical communities throughout the Afghanistan Theater of Operation.

Major Michael Barton developed the United States Forces Afghanistan policies for Infectious Diseases, Needle Stick Injuries, and Surveillance. Major Barton's efforts had a significant impact on the quality of care that U.S. Service Members and Coalition Forces received throughout the Afghanistan Theater of Operation. Major Barton also compiled monthly reports for Task Force Medical commanders throughout the theater, which consisted of information regarding epidemiological investigations and disease non-battle injuries. The report enabled the Task Force Medical commanders to focus on medical readiness issues for both U.S. and Coalition Soldiers.

Colonel William Moran deployed with Task Force (TF) 62 MED as the Patient Safety Officer for the Afghanistan Theater of Operation. He implemented the first ever formal Patient Safety Program in that theater that positively impacted over 1,900 service members, 3 Level III hospitals, and 12 Level II Forward Surgical Teams/Elements. In order to decrease variance in patient safety management, Colonel Moran travelled to each TF 62 MED subordinate units to train 28 Patient Safety Officers and establish unit based patient safety programs. Colonel Moran significantly improved patient safety and the overall delivery of healthcare in theater by establishing an environment of trust, teamwork, and communication based on standards that improved patient safety and prevented adverse events.

Army nurses are contributing significantly to the success of multinational operations and working collaboratively with coalition and Afghan healthcare professionals. I'm very proud of the medical diplomacy efforts, displayed by the nursing leaders in command of the Forward Surgical Teams (FST) in Afghanistan.

Lieutenant Colonel Ruth Timms commanded the 160th FST in support of Operation Enduring Freedom. Her team was embedded within a German NATO Role III hospital and provided direct support to over 11,000 U.S. and Coalition Soldiers that comprised 15 nations. Lieutenant Colonel Timms was an integral proponent for initiating mentorship programs between United States, German, and Afghan providers which is enabling an Afghan Healthcare system fully capable of providing comprehensive healthcare services to the people of Afghanistan.

Captain Roger Beaulieu commanded the 934th FST in support of Operation Enduring Freedom. He and his team cared for over 460 wounded service members, performed over 160 surgeries and improved the medical capabilities of the local national hospital by training four Afghan Surgeons and nearly 100 Afghan medical support personnel.

These Army nurses are writing Army nursing history, and on February 2 of this year, we celebrated 110 years of proud service to our country as a recognized Corps of the United States Army. We thank you, Mr. Chairman, Vice Chairman Cochran and Senator Murkowski for introducing Senate Resolution 31 to commemorate this historic occasion. Chairman Inouye, we also thank you for the very touching, heartfelt video message and for your many years of unwavering support of Army nursing. We marked this day and its meaning by laying a wreath at the Nurse Memorial located in Arlington Cemetery to pay respect to all Army nurses who came before us. We honor them for their service, dedication, and vision.

In the National Capital Area over 500 nurses, active, retired, reserve, and civilian, family and friends of nursing gathered on February 5, 2011 to commemorate this monumental milestone in our rich history. Together, we celebrated "Touching Lives for 110 Years," which really resonated with me and illustrated what I believe is the true essence of Army Nursing. We have been on the battlefield, serving with our fellow Soldiers, throughout our remarkable history and we continue to do so today. Our collective success has been the result of compassion, commitment, and dedication. I am inspired by the pride, enthusiasm, and openness to change that I see

across the ANC in support of Army Medicine and our Nation's missions. My number one priority is the Patient CareTouch System that will serve as the cornerstone to improving the healthcare that provides patient care to our Soldiers and the Families that support them.

I continue to envision an ANC of the future that will leave its mark on military nursing, and will be a leader of nursing practice reform at the national level. Our priority remains our patients and their families, and our common purpose is to support and maintain a system for health. In order to achieve this common purpose, we serve with the courage to care, the courage to connect, and the courage to change so that we may provide the best possible care to those who wear the cloth of our Nation. The ANC is committed to leveraging lessons learned from the past, engaging present innovations, and shaping the future of professional nursing.

On behalf of the entire Army Nurse Corps, serving both at home and abroad, I would like to thank each of you for your unwavering support, and I look forward to continuing to work with you. Thank you.

Chairman INOUYE. Admiral Niemyer.

STATEMENT OF REAR ADMIRAL ELIZABETH S. NIEMYER, DIRECTOR, NAVY NURSE CORPS, DEPARTMENT OF THE NAVY

Admiral NIEMYER. Good morning.

Chairman Inouye, Vice Chairman Cochran, and distinguished members of the subcommittee, thank you for the opportunity to speak today on the state and future vision of the Navy Nurse Corps.

Nowhere is Navy nursing's commitment to the operational forces more evident than in our active engagement in military operations in Southwest Asia, at the Expeditionary Medical Facilities in Kuwait and Kandahar, and with the 1st Marine Logistics Group in Afghanistan. We are clearly essential to our military's medical successes on the front lines of Operation Enduring Freedom.

Nurse practitioners manage the clinical operations at NATO Role 3 in the urgent care clinic and participate in the Shoulder-to-Shoulder Project at Kandahar Regional Military Hospital. In this role, they mentor Afghan nurses in the classroom and in the clinical setting. The promise of enhanced clinical care in the Afghan healthcare system is a vision shared by all those stationed at NATO Role 3.

Navy nurses are also members of embedded training teams and provincial reconstruction teams, collaborating with Coalition partners and offering assistance to military and civilian healthcare providers in Afghanistan.

We played a key role in humanitarian assistance and disaster relief operations in support of Operation Unified Response in Haiti, Pacific Partnership 2010, and Continuing Promise 2010. These operations present a unique opportunity to test our education and clinical skills in rudimentary healthcare environments while strengthening our capability to partner with host nations, U.S. Government agencies, non-governmental agencies, and academic institutions.

Navy nurses continue to support the fleet and expand the services they provide to our sailors and marines at sea. Nurses assigned to aircraft carriers and fleet surgical teams are actively involved in operational missions around the globe and are essential members of shipboard medical teams.

The role of Navy nurses assigned to the Marine Corps continues to expand and diversify. Currently, 18 nurses are directly attached to the Marine Corps serving in clinics and advanced leadership

roles. For the first time in our history, the 2d Marine Expeditionary Fleet surgeon is a nurse.

Today Navy Nurse Corps' active component is manned at 92 percent, and for the fifth consecutive year, we have achieved Navy nursing's active component recruiting goal. The Reserve component is 85.9 percent manned and has reached 48 percent of their fiscal year 2011 recruiting goal. I attribute our recruiting successes to the continued funding and support for our accession and incentive programs, the local recruiting efforts of Navy recruiters, direct involvement of Navy nurses, and the continued positive public perception of service to our country.

Mr. Chairman, I am privileged to provide an update to you and your subcommittee on the progress of our initiative for doctoral preparation of nurse practitioners and nurse anesthetists.

For the past 2 years, we have selected nurses to transition their education programs to a doctorate of nursing practice, either to transition from a master's program to the Doctorate of Nursing practice, or transition from a bachelors program directly to doctoral level work.

Staff members from my office are diligently working on a promotion and schooling plan to maximize opportunities to send newly trained nurse practitioners and nurse anesthetists to study directly for their doctoral education. I am committed to making this education transition the standard for our advanced practice nurses.

We have numerous Navy nursing and joint research and evidence-based projects in progress, and continue to be extremely grateful for your ongoing support of the Tri-Service Nursing Research Program. One study of interest is a collaborative project the Navy is leading that will gather first-person accounts of nurses caring for wounded service members and the memories of the experience from the service members themselves. The knowledge gained about their wounded care journey is essential in order to develop and sustain nursing competencies, and to examine the factors affecting reintegration of the wounded warrior.

Coordination of seamless care is a top priority for the ongoing care of our wounded warriors. This year, we will staff a Navy Nurse Corps officer directly to a newly created position at the VA headquarters. This nurse will work directly with the Federal Recovery Coordinator Program to uncover process issues and craft solutions to streamlined care.

In September 2010, I met with a core group of leaders to formulate my 2011 Navy Nurse Corps Strategic Plan. We identified objectives within five areas of focus: workforce, nursing knowledge, nursing research, strategic partnerships, and information management. I look forward to updating you on Nurse Corps accomplishments on these initiatives in support of Navy medicine.

Being in the military has its challenges, yet it is these challenges that allow Navy nurses to excel both personally and professionally. Our Navy medicine concept of care is patient and family focused, never losing perspective in the care for those wounded, ill, or injured, their families, our retirees and their families, and each other.

PREPARED STATEMENT

Chairman Inouye, thank you for your unwavering support of the commitment to the Navy Nurse Corps, and thank you for providing me this opportunity to speak today. I am honored to represent the total force, Navy Nursing Team, and look forward to continued service as the 23d Director of the Navy Nurse Corps.

Thank you.

Chairman INOUYE. I thank you very much, Admiral.

[The statement follows:]

PREPARED STATEMENT OF REAR ADMIRAL ELIZABETH S. NIEMYER

INTRODUCTION

Good Morning. Chairman Inouye, Vice Chairman Cochran, and distinguished members of the subcommittee, I am Rear Admiral Elizabeth Niemyer, the 23d Director of the Navy Nurse Corps. Thank you for the opportunity to speak today on the state and future vision of the Navy Nurse Corps. I first want to recognize Rear Admiral Karen Flaherty, the 22d Director of the Navy Nurse Corps, who turned over the helm to me this past August, and now serves as the Deputy Surgeon General. I sincerely thank her for her hard work and dedication which provided for a smooth transition for the Nurse Corps.

Dr. Jonathan Woodson, our new Assistant Secretary of Defense for Health Affairs, recently spoke about the well-being of service members at the 2011 Warrior Resiliency Conference. The 2-day conference focused on Total Force Fitness, an initiative by the Joint Chiefs of Staff. Attendees delved into a more holistic approach to the health of service members and their families. Woodson said; "Resiliency is key to the welfare of the modern troop, as extended warfare is now commonplace." He echoed Admiral Michael Mullen, Chairman of the Joint Chiefs of Staff, by saying; "Resiliency training must be incorporated into all levels of leadership and stages of a service member's military career." Navy nurses understand the importance of fostering resiliency in our patients, their families, our staff, and ourselves as we adapt, overcome, and grow stronger in the enormous challenge of supporting healthcare in a variety of contingencies.

Today, I will highlight the accomplishments of the Navy Nurse Corps over the past year and discuss issues facing the Navy Nurse Corps in 2011, as we care for the health of the Force. The total Navy Nurse Corps is comprised of 3,987 Active and Reserve component nurses and almost 2,000 government service civilian nurses. Working together, we are a collegial team of clinicians, patient advocates, mentors, and leaders, who are a caring and compassionate face to those affected by armed conflict, natural disasters and the day-to-day challenges of work, life and family.

I will also tell you about the successes and accomplishments achieved by our Corps since we last presented to you, concluding with a discussion of the future of the Navy Nurse Corps as we forge ahead to advance nursing care, integrate evidence into practice, and elevate nursing at all levels. My strategic focus is on five key areas: Our Workforce, Nursing Knowledge, Research, Strategic Partnerships, and Information Management. It is within these five areas that I will talk about our successes and address our future efforts. However, before discussing these areas of focus, I want to share the many incredible accomplishments of Navy nurses in operational settings with the Fleet and Fleet Marine Forces, as well as review the increasingly important role that Navy nurses play in humanitarian and disaster relief missions.

OPERATIONAL SUPPORT

Nowhere is Navy nursing's commitment to the operational forces more evident than in our active engagement in military operations in southwest Asia at the Expeditionary Medical Facilities in Kuwait and Kandahar, and with the 1st Marine Logistics Group in Afghanistan. Currently there are over 70 Active and 60 Reserve component nurses deployed in a variety of missions in the Central Command Area of Responsibility. At the NATO Role 3 Multinational Medical Unit in Kandahar, Afghanistan, Navy nurses have taken unprecedented leadership positions both in the hospital and in the battle space of southern Afghanistan. We are clearly essential to our military's medical successes on the front lines of Operation Enduring Freedom. For example, nurse practitioners manage the clinical operations of the NATO Role 3 Urgent Care Clinic, responsible for providing urgent, emergent, and non-

emergent healthcare services to 30,000 NATO, coalition, and civilian Afghan personnel residing on the Kandahar Air Field. Navy nurses have taken a lead role in the highly successful enroute care program where specially trained flight nurses are being stationed with outlying Forward Surgical Teams, providing critical care in the air during patient transfers from distant locations to the NATO Role 3. Having flown over 100 flights in 2010, this program has recorded a remarkable 100 percent survival rate. An initiative undertaken by Navy nurses at the NATO Role 3, and one which contributes greatly to our efforts to improve conditions in Afghanistan is their participation in the Afghan National Army Nurse Corps' Shana baShana (Shoulder-to-Shoulder) Project at the Kandahar Regional Military Hospital. In this project, Navy nurses work in concert with a U.S. Air Force mentoring team in a recurring 2-week curriculum where Navy nurses enhance and update the nursing skills of Afghan military nurses in both a classroom and clinical setting. The promise of enhanced clinical care in the Afghan healthcare system is a vision all those stationed at the NATO Role 3 share.

Navy nurses are also members of Embedded Training Teams and Provincial Reconstruction Teams, collaborating with coalition partners and offering assistance to military and civilian healthcare providers in Afghanistan. Let me share with you the experience of one of our nurses, LCDR Zaradhe Yach, who served with the Provincial Reconstruction Team (PRT) at the Forward Operation Base (FOB) Ghazni. This base is located in one of the largest and most dangerous provinces in the Regional Command East. During the first 90 days in country, FOB Ghazni was rocketed by enemy forces over 40 times. During this same timeframe the PRT experienced more than 15 significant activities while conducting mounted combat patrols throughout the province and LCDR Yach was present each time, providing medical assessments and emergency treatments to wounded service members. Patrols were engaged in complex attacks of multiple improvised explosive devices (IEDs), rocket propelled grenades (RPGs), indirect fire, and small arms fires. One IED struck her vehicle, causing catastrophic damage and injuries. The convoy was able to suppress fire and return, while LCDR Yach and her team, along with the Air Force Forward Surgical Team (FST) staff, ensured all injuries were thoroughly evaluated and treated.

During her deployment LCDR Yach facilitated health sector development between coalition partners, meeting multiple times with Afghan leaders. Additionally, she served as a mentor while leading the daily operations of the PRT aid station which provided care for coalition forces, contractors and local interpreters. Under her leadership and guidance, her clinic was able to help over 3,000 patients and distribute over $150,000 in humanitarian aid and medical supplies, greatly enhancing the quality of life of the Afghan people. Her selfless performance of duties in a combat zone resulted in awarding of the Bronze Star Medal by the Secretary of the Army.

Navy nurses played a key role in humanitarian assistance and disaster relief operations in support of Operation Unified Response in Haiti. On January 16, 2010 USNS *Comfort* (T–AH 20) deployed to Haiti within 72 hours notice to provide disaster relief following a magnitude 7.0 earthquake that devastated the Haitian capital and surrounding countryside. The first patient was received on January 19, just 7 days after the disaster. Nearly 200 patients were admitted within the first 40 hours on station, and the inpatient census peaked at 411 patients on January 28. There were a total of 1,002 admissions and 931 surgical procedures conducted during this mission. Seven operating rooms ran 12 hours per day and three ran "around the clock" to accommodate surgical emergencies. For three weeks, *Comfort* was the most advanced and busiest orthopedic trauma center in the world.

Nurses aboard USS *Bataan* (LHD 5) and USS *Carl Vinson* (CVN 70) also made significant contributions to Operation Unified Response. Fleet Surgical Team EIGHT nurses aboard the *Bataan* participated in the care of 97 patients who were evacuated to the ship and assisted in the delivery of a healthy newborn. The sole Ship's Nurse on *Carl Vinson* worked with a small group of medical augmentees in caring for 60 patients admitted to the ship for medical, surgical and post-partum care. The magnitude of the mission brought an unprecedented number and complexity of casualties. Once again, Navy nursing demonstrated its flexibility, commitment, and professionalism in responding to a humanitarian crisis. Mr. Chairman, I am exceedingly proud of this amazing demonstration of how nurses from joint and international military services and non-governmental organizations united together as a global force to support the population of Haiti in their time of need.

Other significant humanitarian operations included the deployments of USNS *Mercy* (T–AH 19) during Pacific Partnership 2010, and USS *Iwo Jima* (LHD 7) for Continuing Promise 2010. In support of these missions, Navy nurses traveled to Vietnam, Cambodia, Indonesia and Timor-Leste, as well as Haiti, Colombia, Guatemala, Nicaragua, Costa Rica, Panama, Suriname and Guyana. These operations pre-

sented a unique opportunity to test our education and clinical skills in rudimentary healthcare environments, while strengthening our capability to partner with host nations, U.S. government agencies and academic institutions, international military medical personnel, regional health ministries, and nongovernmental agencies through medical, dental, and engineering outreach projects

Navy nurses continue to support the Fleet and expand the services they provide to our Sailors and Marines at sea. Nurses assigned to aircraft carriers and Fleet Surgical Teams are actively involved in operational missions around the globe and are essential members of shipboard medical teams. The nurse aboard USS *Harry S. Truman* (CVN 75) deployed with Strike Group 10 and Carrier Air Wing 3 in support of the wars in Afghanistan and Iraq. During this deployment, our nurse provided training to over 5,000 personnel, to include instruction in basic wounds, First Aid, and Basic Cardiac Life Support. Aboard *Iwo Jima*, a certified registered nurse anesthetist (CRNA) from Fleet Surgical Team FOUR assisted in a research study conducted by the Navy Environmental and Preventive Medicine Unit to evaluate occupational exposure to anesthetic gases among operating room personnel at sea. Furthermore, Fleet Surgical Team nurses flew 20 medical evacuation missions from large deck amphibious ships to USNS *Comfort* or various shore-based facilities, configuring rotary wing aircraft to accommodate critically ill or injured patients, and providing life sustaining enroute nursing care under dangerous and austere conditions.

The role of Navy nurses assigned to the Marine Corps continues to expand and diversify. Currently, 18 nurses are directly attached to the Marine Corps, serving in clinics and in advanced leadership roles. For the first time in the history of the Navy Nurse Corps, the Second Marine Expeditionary Fleet Surgeon is a nurse. Battalion nurses provide operational nursing support to the Forward Resuscitative Surgical Systems (FRSS), the Shock Trauma Platoons (STPs), and to enroute care missions. The nurse at the Marine Corps Training and Education Command oversees the training plans and the Readiness Manual for Marine Corps Health Services, while nurses at the Field Medical Training Battalions provide training for all corpsman and officers attached to Marine units in support of operational missions.

Navy nurses remain inherently flexible and capable of supporting multiple missions in many settings and various platforms. I am continually awed by the men and women in the Navy Nurse Corps. They demonstrate daily that they are uniquely suited to answer the call when a medical response is required.

Mr. Chairman, the remainder of my testimony is organized around my five key areas of strategic focus: Our Workforce, Nursing Knowledge, Research, Strategic Partnerships and Information Management.

OUR WORKFORCE

Today's Navy Nurse Corps active component (AC) is manned at 92.0 percent with 2,852 nurses currently serving around the world. For the fifth consecutive year, we have achieved Navy nursing's AC recruiting goal. This is quite an accomplishment only 7 months into the current fiscal year. The reserve component (RC) is 85.9 percent manned with 1,135 nurses in inventory, and has reached 48 percent of their fiscal year 2011 recruiting goal with 5 months remaining this fiscal year. I attribute our recruiting successes to the continued funding support for our accession and incentive programs, the local recruiting activities of Navy Recruiters, direct involvement of Navy nurses, and the continued positive public perception of service to our country.

The top two direct accession programs that favorably impact our recruiting efforts in the Active component include the Nurse Accession Bonus and the Nurse Candidate Program. The Nurse Accession Bonus continues to offer a $20,000 sign-on bonus for a 3-year commitment and $30,000 for a 4-year commitment; and the Nurse Candidate Program, tailored for students who need financial assistance while attending school, provides a $10,000 sign-on bonus and $1,000 monthly stipend. I would like to thank you Mr. Chairman, Vice Chairman Cochran, and all committee members for this ongoing and vital support.

For the RC, a vigorous recruiting plan requires flexible tools to ensure we target high quality officers with appropriate skill sets. Incentive programs have proven to be key to recruiting the correct number of officers with the right skills. It is essential that our critical shortage of registered nurses in the specialties of CRNAs, critical care, medical-surgical, perioperative, and psychiatric nursing as well as mental health nurse practitioners are offered competitive incentives. The new officer affiliation and incentive program available to registered nurses in our critical shortage specialties is favorably impacting our reserve component recruiting efforts this fiscal year. The new incentives offer $10,000–$25,000 per year depending on the specialty

area of practice and service obligation incurred. Loan repayment programs have also proven to be of great value in attracting critical shortage specialties, such as, advanced practice CRNAs and mental health nurse practitioners.

We know that as the economy improves and civilian nursing opportunities expand through the Affordable Care Act we might once again be faced with recruiting and retention challenges. In anticipation of these challenges, we are inviting nursing students and new graduate nurses to participate as American Red Cross volunteers at our hospitals and clinics to enhance exposure to the military. Additionally, we assigned a Nurse Corps fellow to my staff to monitor recruitment and retention, and to ensure that both remain a priority.

The education and training department at Naval Medical Center Portsmouth assists with a monthly recruitment seminar in which Corps representatives speak to prospective nurses and physicians about Navy Medicine. These sessions allow for arranging tours and one-on-one meetings with junior nurses to answer questions about military healthcare. Additionally, nurses aboard aircraft carriers, hospital ships and on Fleet Surgical Teams contribute to the recruiting effort by providing shipboard tours to prospective nurses, dentists, physicians and other healthcare professionals, ultimately enhancing their knowledge of and exposure to operational medicine and shipboard life.

With the ongoing war, we are keenly aware of the need to grow and retain nurses in our critical war-time subspecialties. Though loss rates have improved overall, there remains a gap in the inventory to authorized billets for junior nurses with 5 to 10 years of commissioned service. Key efforts which have positively impacted retention continue to include Registered Nurse Incentive Special Pay (RN–ISP), which targets bonuses to undermanned clinical nursing specialties, and the Health Professional Loan Repayment Program (HPLRP), which offers educational loan repayment up to $40,000 per year. Full-time Duty Under Instruction (DUINS) further supports Navy recruitment and retention objectives by encouraging higher levels of professional knowledge and technical competence. Training requirements are selected on Navy nursing needs for advanced skills in war-time critical subspecialties. Seventy-six applicants were selected for DUINS through the fiscal year 2011 board.

We remain diligent in our efforts to grow and sustain our community of mental health nurses. The Navy Nurse Corps is entering its fourth year of officially recognizing the psychiatric mental health nurse practitioner specialty. Restructuring this manpower shift has not been without its challenges, but we are actively involved in building and expanding the close network of advanced practice psychiatric mental health nurses with their peers outside the mental health arena. We currently have two mental health nurse practitioners assigned to the U.S. Marine Corps at the 1st and 2d Marine Divisions, and a majority of our mental health nurse deployments have been in support of Joint Medical Task Force, Guantanamo Bay, Cuba. Many of our Navy psychiatric mental health nurses remain fully integrated in one collaborative mental healthcare approach and are active members of Wounded, Ill and Injured programs.

NURSING KNOWLEDGE

Care for both service members and their families is the top priority for Navy Nursing, Navy Medicine and the Department of Defense. Nurses are a key component of Family and Patient Centered Care initiatives, and I would like to share with you a few success stories where Navy nurses are leading the charge.

Nurse Case Managers provide services to the Wounded Warrior that span the entire care continuum from point of injury to either return to active duty or medical separation from service. The journey from theatre to stateside care is only the beginning of a long road of recovery for returning Wounded, Ill and Injured warriors who are often facing extensive care and rehabilitation for life-changing physical, psychological and cognitive injuries. The complexity of medical healthcare and military systems is often overwhelming to the Wounded, Ill and Injured service members, thus driving a critical need for someone to coordinate care and support services. Nurse case managers are the "SOS or 1–800" contact for the patient and family throughout the continuum of care. The nurse case managers, along with Navy Safe Harbor and the U.S. Marine Corps Wounded Warrior Regiment, bring a more holistic approach to transition of the Wounded, Ill and Injured into the Veterans Affairs (VA) or civilian care by addressing the medical and the non-medical needs concurrently. This collaboration is important to reducing stress and confusion during transition. I am proud to report that our Clinical Case Management Program has been recognized nationally by being awarded the 2010 Platinum Award for the Best Military Case Management Program. This award was presented by the Case Management Society of America and was featured in their journal, Case In Point in May

2010. Case management is at the heart of ensuring the development of comprehensive plans of care and ensuring smooth transitions for all Wounded, Ill and Injured service members and their families.

In support of the Navy's efforts to develop resilience in Sailors, Marines, families and commands, we have detailed a senior mental health nurse to the Chief of Naval Personnel to implement the Navy's Operational Stress Control (OSC) program. This comprehensive effort is line-owned and led, integrating policies and initiatives under one overarching umbrella. The program is designed to build resilience and to increase the acceptance of seeking help for stress-related injuries through education, training and communication. Twenty-three modules of formal curriculum have been developed and are being taught at key nodes in a Sailor's career—from boot camp to the Naval War College, with more than 206,000 receiving training to date. We are working hard to develop a culture that rewards preventive actions and recognizes that seeking help is a sign of strength. Navy nurses are uniquely qualified to function in this non-traditional role where the focus is on building resilience and prevention vice treating injury or illness.

During the past year we completed a nurse led Navy Medicine assessment of caregiver occupational stress. Not surprisingly, the study found evidence of caregiver occupational stress. The study also identified that meaningful work, good training, and engaged clinical leaders all contribute to building caregiver resilience. Our future efforts will continue to invest in strategies that enhance resilience and performance while identifying and mitigating expected caregiver demands.

Clinical excellence is the cornerstone of Navy Nursing. An innovative program titled "The Immersion in Critical Care and Emergency Nursing" (ICE) program at Naval Medical Center Portsmouth has been designed to train and sustain skills essential to our critical wartime specialties. This three-part program, consists first of prerequisite training with introductory courses and modules available to and within the Military treatment facility (MTF). The second phase is the Simulation/Skills Lab which targets skills review and specific patient scenarios for high risk situations encountered by the nurse. The final phase involves a practicum with time spent delivering hands-on patient care, focused on specific areas of the specialty. The first nurses to attend this program are just weeks into their deployment rotation at the Expeditionary Medical Facility in Kuwait, so feedback has not been obtained post-deployment. However, we anticipate that ICE will be of great value in introducing nurses to critical care and emergency nursing situations prior to future deployments.

To promote clinical excellence for families of Sailors and Marines we are preparing nurses for unexpected emergencies both stateside and overseas. This year our nurses participated in Mobile Obstetric Emergencies Simulator training at Madigan Army Medical Center, Fort Lewis, along with health providers from all branches of the armed forces. Additionally, we joined in community outreach by partnering with Baby Connections, a care-giver and infant learning/play group facilitated by the local county health department, providing information to caregivers regarding development, infant care, breastfeeding, and dental care for newborns to 3 year olds. Navy nurses serve as members of breastfeeding coalitions and have established lactation consultant presence in hospitals, clinics, and at fleet commands, all in support of initiatives to meet the Healthy People 2020 goals. Nurses are involved in numerous programs which support family centered care, including the Happiest Baby on the Block and parent-infant bonding programs. Family centered care is the foundation of our care delivery model in all treatment facilities.

Nurse Corps officers are actively involved in mentoring baccalaureate and master's students at universities throughout Navy Medicine. Naval Medical Center Portsmouth identified the need for a Nurse Education Coordinator who has the responsibility of coordinating the activities for over 30 local and distance learning schools of nursing from the licensed practical nurse-level to the facilitation of graduate-level clinical experiences. We realize that community involvement with the future nursing workforce is key to both our recruiting and retention efforts as well as to creating a multi-talented, diverse workforce. We are committed to providing high quality clinical experiences to students whenever possible.

For the third year, I am pleased to tell you that funding has allowed us to continue support of the Graduate Program for Federal Civilian Registered Nurses (GPFCRN). We recognize the challenges associated with recruitment and retention of civilian nurses for Federal service positions, and continue to see this program as a way to cultivate clinical expertise and future nursing leaders from our civilian workforce by offering graduate nursing education. In the fall we will select another five nurses to attend programs across the country to develop skills as a clinical nurse specialist. After graduation, they will continue their Federal service, directing expert clinical nursing practice across the enterprise.

Navy nurses are at the forefront of Navy Medicine leadership. There are currently eight Nurse Corps Officers serving as commanding officers. In addition, nurses are encouraged to assume leadership positions as associate directors and directors, sometimes in non-traditional nursing roles. Our operational nurses also serve in key leadership roles while underway. This year, the first Nurse Corps Officer held the position of Deputy Commander for the Joint Medical Group with the Joint Task Force Guantanamo, Guantanamo Bay, Cuba. Leaders in executive medicine positions showcase the versatility of our Corps and pave the path for an expanded role for future Nurse Corps leaders.

This year, 22 nurses aboard aircraft carriers and amphibious ships earned the Surface Warfare Medical Department Officer qualification. This qualification is earned by Medical Department officers who attain extensive shipboard knowledge and experience outside of the medical professions. This includes knowledge of engineering systems, navigation methods, communication and weapon systems and offensive and defensive capabilities. The qualification requires knowledge of watch standing responsibilities on the Bridge and in the Combat Information Center and culminates with a final qualifying oral board. Nurses also earn and wear the Fleet Marine Force (FMF) Qualified Officer Insignia. The FMF insignia is earned by Navy officers assigned to the Fleet Marine Force, and it clearly makes a statement that the wearer is a key member of the Marine Corps team. Earning this designation requires serving for 1 year in a Marine Corps command, passing an arduous written test, completing the Marine physical fitness test, and passing an oral board conducted by FMF qualified officers. To date, we have 56 nurses holding this qualification, from our junior lieutenant junior grades officers, to officers holding the rank of captain.

Nurses are not just caregivers, but are a vital part of our organizational structure as mentors to junior officers and our enlisted personnel. Navy-wide, nurses are seen leading Junior Officer Career Development seminars, speaking at local high schools, health fairs, and community colleges. We are actively involved with Navy Nurse Corps students at our Reserve Officer Training Corps (NROTC) programs, frequently attending activities to support and mentor students during their time in school. These experiences are mutually beneficial, providing opportunities for junior nurses to be involved within our community by establishing and maintaining professional relationships, and allowing junior nurses and nurse candidates to seek guidance from senior nurses.

Deployed nurses also serve as mentors and educators for other officers and enlisted personnel. One Navy Nurse recently returned from a 6-month deployment as an individual augmentee in Camp Bastion, Helmand Province, Afghanistan. He was an integral part of the Emergency/Trauma Department where they provided direct patient care to 4,000 combat and non-combat injured patients, delivering over 3,600 units of blood products. During his deployment, this officer conducted TeamSTEPPS® Essential training to the Emergency Department. The Department of Defense, in collaboration with the Agency for Healthcare Research and Quality (AHRQ), developed the TeamSTEPPS® program to serve as a powerful, evidence-based teamwork system to improve communication and teamwork skills. I am proud this energetic Navy Nurse took this training to the deck plate, recognizing that we demand excellence in healthcare quality even at our most remote locations. It is this type of engaged leadership that is the hallmark of Navy Nursing.

Mr. Chairman, I am privileged to provide an update to you and your Committee on the progress of the Navy Nurse Corps initiative for doctoral preparation of our nurse practitioners and nurse anesthetists. As you recall, the 2009 National Defense Authorization Act (Senate Report 111–74, page 275) provided direction from this committee, describing your support of graduate nursing education through our Duty Under Instruction (DUINS) program for training nurse practitioners. The Committee directed the Service Surgeons General, in coordination with the Nurse Corps Chiefs, to provide a report outlining a critical analysis of emerging trends in graduate nurse practitioner education, with an emphasis on the consideration of replacing Master's in Nursing preparation with a Doctorate of Nursing Practice degree program. We submitted that Report to Congress in March 2009, and I am pleased to tell you we immediately identified top performers who were completing their Masters degrees, selecting them to add additional time onto their schooling to complete their Doctorate of Nursing Practice. This past November, we selected seven additional nurses to either transition their Master's program to a Doctorate of Nursing Practice, or to pursue education which will take them from their Bachelor's nursing degree directly into doctoral level work, bypassing the Masters degree. Staff members from my office are diligently working on a promotion and schooling plan to send newly trained nurse practitioners and nurse anesthetists to study directly for their doctoral education.

NURSING RESEARCH

The National Institute of Health (NIH), through The National Institute of Nursing Research (NINR), defines nursing research as the development of knowledge to build a scientific foundation for clinical nursing practice, prevent disease and disability, manage and eliminate symptoms caused by illness, and enhance end-of-life and palliative care. We have numerous Navy Nursing and joint research and evidence-based projects in process, and continue to be extremely grateful for your ongoing support of the TriService Nursing Research Program. Research projects are currently being conducted by active and reserve component nurses on clinical topics such as; heat illness, hemorrhagic shock, development of Navy-wide evidence-based guidelines for wound care management and pressure ulcers, ultrasound guided and peripheral nerve stimulation techniques, catheter removal and motor function recovery, the role of nursing in implementation of a Patient Centered Medical Home (PCMH) in MTFs, virtual reality for stress inoculation, clinical knowledge development and continuity of care for injured service members, competency and work environments of perioperative nurses, moral distress, and nurse-managed clinics.

One study of interest is a collaborative project Navy is leading which includes nurse researchers from the Army, Air Force and the VA. The purpose of this study is to gather first person experience-near accounts of experiential learning of military and civilian nurses caring for wounded service members, along with first person accounts of service members' memories of all levels of care and transitions from the combat zone to rehabilitation. The knowledge gained about their wounded care journey is essential in order to develop and sustain nursing competencies, and to examine the acute and rehabilitative factors affecting reintegration of the wounded warrior. This study also has critical utility for optimal functioning of service members returning to the United States, transitioning into the military and Veterans Affairs healthcare systems, and for developing training programs with military healthcare personnel who work with service members in acute and rehabilitation healthcare settings. Preliminary data analysis is underway. Nurses have shared their expertise and knowledge, and lessons learned are being formulated to improve patient care throughout the Department of Defense and VA healthcare systems.

Nurse researchers are also actively conducting research to explore retention of recalled reservists, psychometric evaluation of a triage decisionmaking, and construction of learning experiences using clinical simulations. Without your initial support of the TriService Nursing Research Program in the early 1990's this would have been a very difficult task to achieve. Ongoing support of military nursing research as a unique and distinct entity is vital to the advancement of this important niche of science to our Nation.

STRATEGIC PARTNERSHIPS

A collaborative approach between Services and Federal agencies has never been more important than it is today. Navy nurses, find themselves serving as individual augmentees (IAs) with sister Services, working in Federal healthcare facilities such as the James Lovell Federal Health Care Center in Great Lakes, supporting academia in facilities such as the Uniformed Services University Graduate School of Nursing and serving in Joint Commands.

The Captain James A. Lovell Federal Health Care Center (FHCC) is the Nation's first fully integrated medical facility between the VA and DOD. Established on October 1, 2010, the facility integrates all medical care into a Federal healthcare center with a single combined VA and Navy mission, serving military members, Veterans, military family members and retirees. Integrating many "types" of nurses has been rewarding, and had very few challenges. Combining the strengths of active duty, DOD, VA nurses and contract nurses, we have formed one orientation nursing program, increased the venues for active duty nurses to obtain their clinical sustainment hours, and combined forces for one Executive Committee of the Nursing staff, with Navy and VA Nursing Executives as equal co-chairs.

Coordination of seamless care is a top priority for the ongoing care of our Wounded Warriors. I am pleased to tell you about a joint initiative between the Deputy Secretary of Veterans Affairs and the Deputy Secretary of Defense to staff a Navy Nurse Corps officer directly to a newly created position at the VA Headquarters in Washington, DC. This nurse will work directly with the Federal Recovery Coordinator Program to uncover process issues and craft solutions to streamline care. The nurse will serve as a vital link between the Veterans Affairs Federal Recovery Coordination Program and the MTFs to assist severely Wounded, Ill and Injured patients and their family members in the complex coordination of their care throughout the rehabilitation continuum. I look forward to providing additional information to you next year on this important role.

Our nurses in Guam have joined their civilian counterparts from Guam Memorial Hospital and Air Force nurses from Anderson Air Force Base to share their skills and experiences. Navy nurses provide the Trauma Nursing Core Course both for providers and instructors. This course has been instrumental in building the confidence and honing assessment skills of nurses who normally do not work in an Emergency Department setting. Naval Hospital Guam also included Joint Medical Attendant Transport Team (JMATT) members in their Emergency Department, allowing them to receive this training at no-cost.

The nurses in the Primary Care Clinic at Naval Health Clinic Corpus Christi (NHCCC) collaborated with our Air Force Nursing counterparts at Wilford Hall Medical Center Diabetes Center of Excellence in San Antonio regarding Diabetes Education. The staff at Wilford Hall Medical Center routinely travels to Naval Health Clinic Corpus Christi to provide monthly diabetic education classes to our patients. In addition, they provide "train the trainer" sessions so our staff can assume the role as the trainer. Naval Health Clinic Corpus Christi also established a collaborative relationship with Brooke Army Medical Center for supplementary clinical experiences.

Naval Hospital Pensacola maintains a Memorandum of Understanding with the local trauma center, allowing collaboration for training and clinical sustainment in critical care, pediatrics, neonatal, and high risk obstetrics. Additionally, the civilian community nurses provide trainers for our specialty neonatal course that prepares staff in the care of high acuity newborns needing transfer to a higher level of care. Recognizing that our nurses must be operationally prepared for deployment, but may have limited inpatient nursing care exposure while working in the clinic environment similar arrangements with inpatient facilities have been made in Hawaii at Tripler Army Medical Center and Newport, Rhode Island with the Providence Veteran's Hospital. We remain grateful to the Army, Air Force, Veterans Affairs and civilian facilities for these partnerships.

Our RC nurses routinely participate in joint initiatives. Through their reserve commands, Nurse Corps Officers take part in joint training exercises with the Coast Guard, Seabee forces through Naval Mobile Construction Battalions, and Air Force and Army medical teams. Our Operational Hospital Support Units have agreements with Veterans Affairs Medical Centers in several States to provide real time patient treatment both for nurses and hospital corpsmen during drill weekends. This not only supports their continued training and clinical sustainment requirements, but provides additional resources for the VA facility.

I am excited to tell you about our annual "Host Nation Symposium" event at Naval Hospital Rota, Spain, where healthcare providers in the community and military gather to share education and best practices between the two unique healthcare systems. It also provides an opportunity for members of Navy Medicine to meet their counterparts and build camaraderie. We are also partnering with the head of the Spanish Nurse Corps in Rota to allow newly graduated Spanish military nurses to work in our facility. Their graduates spend approximately 2 weeks at our hospital shadowing fellow American nurses. In turn, select military nurses then travel to a trauma course hosted in Madrid. Both the Commanding Officer and Surgeon General from Spain are very optimistic, seeing this exchange as an opportunity to provide diverse experiences and better understand the diverse cultures and healthcare needs of our allies.

INFORMATION MANAGEMENT

The sharing and quick dissemination of news, resources and announcements is a top priority of the Navy Nurse Corps. From a needs assessment, we know that nurses want rapid and easy online access to information which can be accessed at work whether in a traditional or deployed environment. Navy Knowledge Online serves as one platform for that capability and we are working to maximize its utility while we leverage other means of communication.

Last year we reported the launch of the active duty Nurse Corps Career Planning Guide, a web-based mentoring tool for nurses at each stage of their career. Informally the feedback received has been overwhelmingly positive. Within the past several months we deployed similar Career Planning Guides for Reserve Nurse Corps Officers and Government Service Civilian nurses on Navy Knowledge Online. Both groups play a critical role in contributing to the Nurse Corps and Navy Medicine as we meet our peace and wartime missions. As "One Team," our civilian nurses work with our military staff, providing continuity, experience, and enabling our military nurses to deploy in support of our warriors in the field. Navy Nursing is committed to providing all of our nurses the opportunities to enhance their understanding of operational medicine, grow professionally, and give them the tools to be

leaders in Navy Medicine. The web-based Career Planning Guides (active, reserve and government service) provide a "point and click" list of resources to maximize career opportunities and knowledge for all nurses commensurate with rank and time in service. For example, under "Operational Support," information on Navy War College Distant Learning Courses are provided, plus numerous links, and articles to enhance their operational skills & knowledge. To help nurses grow professionally, all the Bureau of Medicine and Surgery training and reimbursement opportunities are placed in a "one stop" shop. Finally, civilian nurses serve in leadership positions as directors, department heads and division officers. Our Civilian Career Planning Guide gives them comprehensive information and links to help them manage their military and civilian workforce, and grow as a leader in Navy Medicine. We are able to meet our mission requirements because of our dedicated civilian nurses, and it is an honor to work with them side-by-side in today's Navy Medicine. We will formally evaluate all three Career Planning guides and will to continue to adjust information based on feedback from the end users.

FUTURE DIRECTION

In September 2010, I met with a core group of leaders to formulate my 2011 Navy Nurse Corps Strategic Plan. Included in the discussions were Specialty Leaders representing over 70 percent of all Nurse Corps officers; headquarters staff; junior officers from Navy Medicine East, West, and the National Capital Region; and the Army Deputy Commander for Nursing Services from the National Naval Medical Center. During this 2-day offsite meeting, five key goals were identified and Team Champions named. Since then, the Strategic Goal teams—comprised of nurses from around the world—have collaborated on projects to meet identified objectives within the five areas of focus: Workforce (maximizing human capital), Nursing Knowledge, Nursing Research, Strategic Partnerships, and Information Management. I recently had my first quarterly update, and I am confident the teams are on track to make solid recommendations for action. I look forward to my next report when I can share with you the accomplishments of Navy nurses throughout 2011 and update you on their initiatives in support of Navy Medicine.

CONCLUSION

Navy Nurse Corps officers are healers of mind, body and spirit; ambassadors of hope; respected nursing professionals and commissioned officers. Being in the military has its challenges, yet it is these challenges that allow Navy nurses to excel both personally and professionally. Mr. Chairman, Vice Chairman Cochran, and distinguished members of the subcommittee, thank you for providing me this opportunity to share the state and future direction of the Navy Nurse Corps and our continuing efforts to meet Navy Medicine's mission. Our Navy Medicine concept of care will remain patient and family focused; never losing perspective in the care for those wounded, ill, or injured, their families, our retirees and their families, and each other. I am honored to be here today to represent the Navy nursing team, and I look forward to continuing to serve as the 23d Director of the Navy Nurse Corps.

Chairman INOUYE. And now may I call upon General Siniscalchi. General.

STATEMENT OF KIMBERLY SINISCALCHI, ASSISTANT SURGEON GENERAL FOR NURSING SERVICES, DEPARTMENT OF THE AIR FORCE

General SINISCALCHI. Mr. Chairman, Mr. Vice Chairman, and esteemed members of this subcommittee, it is my distinct honor and privilege to once again represent over 18,000 men and women of the Air Force Nurse Corps and share our successes and challenges as we execute our strategic plan for global operations, force development, force management, and patient-centered care.

AEROMEDICAL CREWS SAVE LIVES

Across the globe, our Aeromedical Evacuation and Critical Care Air Transport Teams continue to be a vital link in saving lives.

In 2010, our Aeromedical Evacuation crews accomplished 26,000 patient movements on over 1,800 missions. David Brown, from the

Washington Post, reported on an Army sergeant from California who was critically injured in Afghanistan in October 2010. In his article, Brown stated, "In any U.S. hospital, Sergeant Solorzano would be considered too sick to put on an elevator and take to the CT-scan suite. Now, he's about to fly across half of Asia and most of Europe. The U.S. military's ability to take a critically ill soldier on the equivalent of a 7-hour elevator ride epitomizes an essential feature of the doctrine for treating war wounds in the 21st century: Keep the patient moving."

Members of Congress, thank you for passing Resolution 1605 recognizing airmen who perform our aeromedical evacuation mission.

Recently, I was afforded the opportunity to meet my nursing colleague, Brigadier General Rahimi Razia of the Afghanistan National Army. She expressed appreciation for the many contributions our senior mentors and training teams are making to advance nursing. They are helping her create a fundamental nursing education program and a scope of practice.

NURSE TRANSITION PROGRAMS

Our outstanding success could not be possible without investing in our future. We completely transformed our nurse transition program for new graduates into four strategically located centers of excellence in an effort to broaden clinical training. Tampa General Hospital was recently approved as our newest site, and a training affiliation agreement was signed in February. This site will complement our other three sites at Scottsdale, Arizona, University of Cincinnati, Ohio, and San Antonio Military Health System, Texas. We also created a Phase 2 component enabling us to advance the National Council of State Boards of Nursing Transition to Practice Model. Our pilot program at the 59th Medical Wing in San Antonio is leading the charge to deliberately develop our Nurse Transition Program graduates through a comprehensive, 9-month mentoring program.

The American Association of Colleges of Nursing declared entry for advanced practice nurses to be at the doctorate level by 2015. Mr. Chairman, sir, your support of this initiative has been instrumental in our progression from masters to doctorate at the Uniformed Services University of the Health Sciences. We are preparing to send students to this program in 2012 and have three students starting the civilian programs in 2011.

ADVANCED IN MEDICAL TRAINING

We continue to advance enlisted training. A ribbon-cutting was held in May 2010 at the new Medical Education and Training Campus in San Antonio, where all services will train their new enlisted medical personnel. This state-of-the-art training platform will graduate technicians in 15 different specialties to support the Department of Defense mission and optimize our interoperability across services.

As we are developing our airmen, we are also developing our civilians. In January 2011, we conducted our first Nurse Civilian Developmental Board. This inaugural event served as a benchmark to create a civilian force development model that aligns with our officer and enlisted programs.

Our goal of force management is to design and resource our nurse corps to sustain a world-class healthcare force. In 2010, we achieved 102 percent of our recruiting goal. Consistent with the line of the Air Force initiative to meet end strength requirements, our recruiting goals were reduced in 2011. However, we continue to work with the Office of Manpower Personnel and Services to ensure we maintain a robust recruiting program to preserve our quality force.

Our Nurse Enlisted Commissioning Program creates a legacy career path in Air Force nursing. In 2010, 45 enlisted graduates were commissioned into the Nurse Corps. As we enter our third year of the Incentive Special Pay Program, we are seeing positive impacts on professional satisfaction and retention.

We recognize the value of keeping clinical experts at the bedside, table side, and litter side. We developed a clinical track for master clinicians and researchers through the rank of colonel to foster a higher level of excellence within our nursing practice. One of our critical care master clinicians, Colonel McNeil, is currently deployed to Afghanistan and is making a significant difference in trauma and critical care outcomes.

As we aim to provide better health, better care, best value, we are committed to the family health initiative, the Air Force's Pathway to Patient-Centered Medical Home. Our advanced practice nurses, clinical nurses, and technicians are positively impacting access, quality of care, patient outcomes, disease management, and case management. Within our patient-centered care philosophy is the need to address resiliency and mental health of our airmen and families. Last year, I reported that a mental health nurse course was being developed at Travis Air Force Base in California. I am pleased to announce our first students started in February.

The psychiatric Mental Health Nurse Practitioner Program at the Uniformed Services University of the Health Sciences is one of the few in the country that includes psychopharmacology and addresses behavioral techniques specific to the unique needs of our military population. We currently have four students enrolled in this program and four to start this summer.

PREPARED STATEMENT

Mr. Chairman and distinguished members of the subcommittee, it is an honor to represent such a dedicated, strong nurse corps. Your continued support as we execute our priorities to advance military nursing is greatly appreciated. Our wounded and their families deserve nothing less than educated, skilled nurses and technicians who have mastered the art of caring. It is through the medic's touch, compassion, and professionalism that we answer our Nation's call to care for those who served yesterday, today, and will serve tomorrow.

Thank you, and I welcome your questions.

Chairman INOUYE. All right. Thank you very much, General.

[The statement follows:]

PREPARED STATEMENT OF MAJOR GENERAL KIMBERLY A. SINISCALCHI

Mr. Chairman, and distinguished members of the committee, it is again my honor to represent the over 18,000 members of our Total Nursing Force (TNF). Together,

with my senior advisors, Brigadier General Catherine Lutz of the Air National Guard (ANG), and Colonel Lisa Naftzger-Kang of the Air Force Reserve Command (AFRC), along with my Aerospace Medical Service Career Field Manager, Chief Master Sergeant Joseph Potts, we thank you for your continued support of our many endeavors to advance military nursing. It is a privilege to report on this year's achievements and future strategies.

We are a total force nursing team delivering evidence-based, patient-centered care to meet global requirements. We have developed four strategic priorities in consonance with those of the Secretary and the Chief of Staff of the Air Force. They are: (1) Global Operations, (2) Force Development, (3) Force Management, and (4) Patient-Centered Care. These priorities are built on a foundation of education, training and research. This testimony will reflect our successes and challenges as we strive to execute our strategic priorities.

GLOBAL OPERATIONS

For over two decades, our TNF has been supporting humanitarian missions and contingency operations that span the globe. We recognize that our mission effectiveness is contingent upon medics who are equipped, trained, and proficient at implementing Air Force capabilities across the full spectrum of operational environments. Air Force medics are truly expeditionary, and frequent deployments are a part of our culture. The nature of our current operating environment has reshaped the Air Force Medical Service (AFMS) and our Corps. Together we have experienced amazing success in the global environment.

At a flight nurse and technician graduation ceremony at Brooks City Base in San Antonio, Texas on January 29, 2011, the guest speaker, Army Master Sergeant Todd Nelson, gave a poignant talk to our new flight crews. Sergeant Nelson was the personal recipient of aeromedical care after being injured by an Improvised Explosive Device blast during a convoy in Afghanistan. The explosion and shrapnel caused massive head and facial injuries; he was in grave status from the beginning. After receiving initial life-saving surgeries, Sergeant Nelson started his journey home, his condition still life-threatening. Despite the severity of his injuries, Sergeant Nelson remembers the aeromedical team as "a phenomenal team of flight nurses and technicians who did not see me as a statistic, but as someone for whom they would do everything to ensure I survived and got home to my family. They didn't just see me as another patient, but as a person." In his closing comments to the class, he concluded, "for those of you who are starting out and who will be caring for warriors such as myself, I thank you. It is because of you that I am standing here today. It is not only I who thank you, but my wife and my children for enabling me to continue to be a part of this family and their lives."

Aeromedical Evacuation (AE) Crews and Critical Care Air Transport Teams (CCATT) remain busy. In 2010, our Total Force Flight Nurses and Technicians accomplished 26,000 patient movements on over 1,800 missions globally; approximately 11,500 of these patients originated in Central Command. Nearly 10 percent of these missions were for critically injured or ill patients who required a CCATT. While the number of patients has not drastically changed, there has been a shift of casualties from Iraq to Afghanistan. Battle injuries in Iraq have decreased but patients continue to require evacuation for medical illnesses and non-battle related injuries. We continue to see many polytrauma and critically injured patients originating in Afghanistan. Over 1,100 medics deploy each year supporting the AE mission.

Validating this success, a major research study from the Tri-Service Nursing Research Program was concluded this year. This study evaluated the care of over 2,500 critically ill and injured casualties as they moved through the continuum of care from the battlefield to home. As published in the July–September 2010 quarterly journal for the American Association of Critical-Care Nurses, Colonel Elizabeth Bridges, U.S. Air Force Reserves (USAFR), reported that despite having higher acuity than civilian trauma patients, and undergoing a 7,000 mile transport in less than 7 days, the outcomes for critically injured combat casualties are equal to, or better than, outcomes for patients in the most sophisticated trauma systems in the United States. Additionally, the results of this study, along with research which has validated operational nursing competencies, has the potential to standardize and advance evidence-based practices for nurses in all Services, and to ensure training is focused on the highest priority areas including blast injuries, head trauma, shock, amputations, pain management, and patient transport.

David Brown from The Washington Post reported in November 2010 on Army Sergeant Diego Solorzano, who was injured in Afghanistan, "In any U.S. hospital, Solorzano would be considered too sick to put on an elevator and take to the CT-

scan suite. Now he's about to fly across half of Asia and most of Europe . . . the U.S. military's ability—not to mention its willingness—to take a critically ill soldier on the equivalent of a 7-hour elevator ride epitomizes an essential feature of the doctrine for treating war wounds in the 21st century: Keep the patient moving." Despite the noise, vibration, temperature extremes, and pressure changes, AE and CCATT have truly been the critical link providing world-class care across the continuum from the battlefield to the United States.

On September 28, 2010, members of the U.S. House of Representatives unanimously passed a resolution honoring the Airmen who support and perform AE. House Resolution 1605 recognizes the service of the medical crews and aircrews in helping our Wounded Warriors make an expeditious and safe trip home to the United States, commending the personnel of the Air Force for their commitment to the well-being of all our service men and women who help to guarantee wounded service men and women are quickly reunited with their families and given the best medical care. During a press release, Congressman Mike Thompson stated "These men and women put their lives on the line on a regular basis to protect their fellow Americans." The ability to rapidly move patients from point of injury, to initial intervention, and then on through the system to the United States in 3 days or less for definitive care continues to sustain the lowest mortality rate of any war in United States history.

While our AE crews and CCATT members are the most visible members of our AE system, it is the men and women in our Patient Movement Requirements Centers who work behind the scenes to coordinate all patient movements. Be it a tactical or strategic transport, patient movement requests are validated at the requirements center and then passed through an AE Control Team to match patients to AE crews, air crews, and aircraft. Personnel in these centers have knowledge in both the challenges of AE and an understanding of clinical pathologies. They use this combined knowledge to facilitate patient movement in the most timely and efficient manner possible. These individuals are integral to the extraordinary patient outcomes we are experiencing.

Within the Pacific Theater, we constantly battle the tyranny of distance to meet patient movement requests. Our Theater Patient Movement Requirements—Pacific created a Joint-Medical Attendant Transport Team (JMATT) Training Program to augment our AE system. These multi-service medical attendants move critically ill or injured patients within and across the Pacific Command Theater of Operations. Since 2008, 98 Joint Department of Defense, Hawaii's Disaster Medical Assist Team, and international medics from Australia, India, Indonesia and Singapore have been trained to move high-acuity patients to augment our AE system. This permits us to optimize critical care resources for expedited patient movement.

In addition to the over 100 AE flyers in the combat environment, over 1,300 nursing personnel support ground missions to include theater taskings such as trauma hospitals, provincial reconstruction and teaching teams, and forward-deployed and convoy medical missions. Working side-by-side with our sister Services and Coalition Partners enables us to integrate into the Joint environment and support our Secretary and the Chief of Staff's priorities to partner to win today's fight.

Captain Denise Ross, who is currently deployed to Kandahar, Afghanistan, is a member of an Air Force multidisciplinary Medical Embedded Training Team (METT) which enables Afghan National Security Force nurses to train within their own hospitals using their own personnel and equipment resources. This program empowers the staff to problem solve using available resources. The development of this internal reliance is leading the creation of a self-sustaining program in order to ensure its continued success after North Atlantic Treaty Organization forces are no longer required.

During a recent visit to Afghanistan, Brigadier General Rahimi Razia, Chief Nurse of the Afghanistan National Army, expressed her deepest appreciation for the contributions the METTs and our Senior Military Mentors have made to advance nursing for the Afghan National Army. These teams are assisting General Razia in developing a sustainable, 1 year basic nursing education program, and defining a fundamental scope of practice. This elemental program is essential to the evolution of nursing practice in Afghanistan. As we transition to an advisory role in Iraq and support ongoing operations in Afghanistan, we continue to educate and mentor the local national healthcare providers as they evolve their own healthcare system.

Building partnerships is all about developing trust-based relationships in the global environment. Across the globe our medics collaborate with our Joint colleagues and National partners to advance the practice of nursing. Under the direction of Colonel Elizabeth Bridges, USAFR, the Defense Institute of Medical Operations initiated a new international trauma course. The course, which is the first of its kind, was developed to advance trauma nursing in developing nations. Addi-

tionally, the course focuses on the leadership role of nurses in developing trauma systems and in responding to disasters. Since May, the course has been presented to over 120 nurses from five nations, including Estonia, Latvia, Lithuania, Pakistan, and Nigeria, with a future course to be presented in Iraq. Feedback from the participants and the host nations has been positive, as exemplified by the feedback from Brigadier General Raiz, Commandant of the Pakistani Military Academy, who had glowing praise for the Trauma Nursing and First Responder courses. With regards to the nursing course, he stated that 45 nurses have already returned to their home stations and are teaching other nurses using the course materials provided by the team.

Another exciting area within this global spectrum is our International Health Specialist Program. This program is comprised of Total Force officers and enlisted members who focus on capacity building efforts and forging medical partnerships through humanitarian, civic assistance, and disaster response. One such example is Operation Pacific Angel in the Philippines, which is aimed at improving military-civilian cooperation. During this operation in February 2010, the medical teams treated nearly 2,000 Filipino patients. This program assists Philippine officials to build capacity within their cities, focusing on basic life support, infectious disease prevention and treatments, disaster readiness, and public health.

This year, officials from the United States and Republic of the Philippines co-hosted the 4th annual Asia-Pacific Military Nursing Symposium in Manila, Republic of the Philippines for more than 200 nurses from 13 countries. This annual conference ignites the spirit of collaboration to focus on nursing education, career development, global pandemic preparedness, and disaster management. Through this unique symposium, participants learn about each other's healthcare systems, infection control practices, and nursing services. Colonel Narbada Thapa, the head delegate from the Nepalese Armed Forces, commented on the opportunity to build relationships and acquire knowledge on nursing from many armed forces from around the world, making the symposium a memorable event for all.

FORCE DEVELOPMENT

Our outstanding success in mission support could not be possible without a solid investment in developing our nursing force. Grounded in education, training and research, we are generating new knowledge and advancing evidence-based care necessary to enhance interoperability in nursing operations. Stepping into the future, we are preparing our Total Nursing Force to meet emerging challenges as we develop globally minded medics capable of providing world-class healthcare on the strategic battlefields of today and tomorrow.

Our Nurse Transition Program (NTP) continues to be an integral component in developing our new nurses. We graduated 212 nurses in fiscal year 2010 from eight military and two civilian locations. In December 2010, we graduated the third class from Scottsdale Healtcare System in Arizona. This outstanding civilian program has produced 56 nurses since its inception. As a Magnet facility, Scottsdale Healthcare System is one of only 382 hospitals recognized world-wide for nursing excellence. This program provides complex clinical training under a preceptor-led transition model for new graduates. Under the supervision of Lieutenant Colonel Deedra Zabokrtsky, NTP Course Director—Scottsdale, our new nurses are clinically prepared and gaining the confidence to take on their own clinical practice. Program excellence can be noted in a diary entry from one NTP student who had just begun her week in Obstetrics (OB). This student was assigned a patient who was failing to progress in labor and was informed that a cesarean section was believed inevitable. Based on current research, she decided to take an evidence-based approach as encouraged by her preceptor. Garnering support from her fellow nurses and agreement from her patient to try a new approach, a unique plan of care was initiated, to include rotation of the patient's position every 15–30 minutes. The final result: a vaginal birth of a beautiful baby boy. As the student stated, "This situation has affected the way I will educate my OB patients in the future . . . the best we can do as nurses is make sure our patients are well informed . . . this is true for all areas of nursing." This exemplar highlights the critical thinking and sound, evidence-based nursing practice needed from today's nurses.

Due to the resounding success of this military-civilian collaboration, we decided to consolidate resources and create four NTP Centers of Excellence. A civilian Magnet facility, Tampa General Hospital, Florida, was recently approved as one of these sites and the training agreement was signed February 24, 2011. The remaining three Centers of Excellence will be in Scottsdale, Arizona; San Antonio, Texas; and Cincinnati, Ohio; and will provide our new nurses with the experiences so crucial to their professional development.

Our Nurse Enlisted Commissioning Program (NECP) continues to be a balanced source of nurse accessions as we "grow our own" from our highly trained enlisted medics. In fiscal year 2010 we enrolled 46, students nearing our goal of 50 students per year. The graduates from this program are commissioned as Second Lieutenants and will continue their active duty service in the Nurse Corps.

As we strive to create full-spectrum leaders and nursing professionals, our recently launched Project Lieutenant is designed to improve skills and reinforce training with increased oversight and mentoring during our new nurses' first year. Over the years, the National Council of State Boards of Nursing (NCSBN) has researched the issues of education, training, and retention of novice nurses and found that the inability of new nurses to properly transition from student into a new practice can have grave consequences. The NCSBN reported that approximately 25 percent of new nurses leave a position within their first year of practice. The increased turnover, consequently, has a potentially negative effect on patient safety and healthcare outcomes. The NCSBN's Transition to Practice Model provides a way to empower and formalize the journey of newly licensed nurses from education to practice. Project Lieutenant is our pilot program to support our nurses' successful completion of the nurse residency program and transition into new clinical practice areas. Established at the 59th Medical Wing, Joint Base San Antonio, Texas, Project Lieutenant is leading the charge to deliberately develop our newly graduated NTP nurses through a comprehensive 9 month mentoring program. The deliberate development of the novice nurse is in step with the NCBSN's model and will be replicated at several sites to ensure consistent quality of patient care and address the concerns of the new nurse, ultimately promoting public safety and positive patient outcomes.

As we aim to improve upon positive patient outcomes, we are committed to serving our Wounded Warriors. As we enter our 10th year of intensive combat operations, we are not only faced with the challenge of caring for those with physiological wounds but also those with psychological wounds as well. As Secretary Gates stated, there is "no higher priority in the Department of Defense, apart from the war itself, than taking care of our men and women in uniform who have been wounded, who have both visible and unseen wounds." The National Defense Authorization Act 2010, Section 714, directed an increase in the number of active duty mental health personnel and, to meet the Secretary's priority of taking care of our Airmen and families, we are launching a program to develop mental health nursing professionals from within our Corps. Our pilot class started at Travis Air Force Base, California, on February 14, 2011, and our next class is set to begin in June 2011, projecting eight graduates this year.

The Uniformed Services University of Health Sciences (USUHS) Graduate School of Nursing recently stood up a Psychiatric Mental Health Nurse Practitioner Program (PMH–NP). This new program has graduated two Air Force advance-practice nurses, with two Air Force students currently enrolled and four more students planned for 2011. The PMH–NP is one of the few programs in the country that includes psycho-pharmacology and addresses behavioral techniques specifically designed for clinical care of the military population. The program also has specific training in the logistics of delivering healthcare in military populations and education in Compassion Fatigue/Resiliency to decrease the risk of mental health issues and burnout.

We also recognize our unique role in supporting the AE System within the AFMS. In 2009, we developed an Air Force Institute of Technology Master's degree in Flight Nursing with a concentration in Disaster Preparedness. This program was developed in partnership with Wright State University, the Miami Valley College of Nursing, Dayton, Ohio, and the Health and National Center for Medical Readiness Tactical Laboratory. Additionally, a disaster training facility, called Calamityville, is being created and may be incorporated into civilian and military training programs. Our first student started the flight nurse graduate program in July of 2010 and another student is programmed to begin this summer. Upon graduation, these individuals will have been educated in emergency and disaster preparedness and they will be eligible to take the Adult Health Clinical Nurse Specialist and American Nurse Credentialing Center certification exams. This expertise will be invaluable to our current and future operational environment.

A major movement in advanced practice nursing education was stimulated by the American Association of Colleges of Nursing (AACN) as they voted to move the current level of educational preparation from the master's level to the doctorate level by 2015. To maintain professional standards and remain competitive for high quality students amongst military advanced practice nurses, Senator Inouye addressed Congress in December to recognize the need to make this transition at USUHS. Along with our sister Service nursing colleagues, we are working with USUHS to develop the curriculum for a Doctorate of Nursing Practice (DNP) with a transition

plan to meet this goal. By 2015, all students entering the nurse practitioner career path will graduate with a DNP. This entry level to advanced practice will apply also to direct advanced practice nurse accessions. The Health Professions Education Requirements Board (HPERB) allocated nine DNP positions for an August 2011 start. Four of the candidates will go from a master's to doctorate level and five will progress from the baccalaureate level to the doctoral level to meet the new requirement.

In addition to our DNP programs, we continue to bolster our evidence-based care through investment in nurse researchers. We recently developed a nursing research fellowship and the first candidate began in August 2010. This 1 year pre-doctoral research fellowship focuses on clinical and operational sustainment platforms. The intent of this program is for the fellow to develop a foundation in nursing research and ultimately pursue a Ph.D. Following the fellowship, they will be assigned to work in Plans and Programs within the Human Performance Wing of the Air Force Research Laboratory. This direction also reflects the National Research Council of the National Academies recommendation that those planning for careers with a heavy concentration in research have doctoral preparation.

Major Candy Wilson and Major Jennifer Hatzfeld both received their Ph.D.s in Nursing Science through the Air Force Institute of Technology civilian institution program. The Air Force's investment in doctorally prepared researchers equipped these nurses to deploy as integral members of the Joint Combat Care Research Team with the clinical and scientific expertise needed to make a difference for our Wounded Warriors. The research and statistic expertise of these nurses in conjunction with their clinical expertise was pivotal in projecting the medical resources needed for casualties during the surge in combat operations and assisting the Afghan government in evaluating the effect of a Strong Food program supported by the U.S. Agency for International Development. The investment in military nurse education is critical for improving the lives of deployed U.S. military members, coalition partners, and host nationals.

With a goal to advance cutting-edge, evidence-based nursing practice, we have further developed the clinical career track for Master Clinicians and Master Researchers through the rank of Colonel. Master Clinicians are board certified nursing experts with a minimum preparation of a master's degree and at least 10 years of clinical experience in their professional specialty. They serve as the functional expert and mentor to junior nurses. Our Master Researchers are Ph.D. prepared and have demonstrated sustained excellence in the research arena. Both of these highly respected positions facilitate critical thinking and research skills, and foster the highest level of excellence in care across our healthcare system. We currently have eight Master Clinicians and three Master Researchers within designated medical and research facilities.

In addition to training our newest nurses, we have realized the efficiencies in Joint training for our enlisted medical technicians as well. Teaming with our Joint partners, a ribbon cutting ceremony was held in May 2010 at the new Joint Service Medical Education and Training Campus (METC). This training campus will grow to be home to nearly 8,000 students with an operating staff and faculty of over 1,400 civilian and Joint military personnel. In March 2011 a Memorandum of Agreement and Board of Governers Charter was signed by all three service Surgeon Generals. Creating this state-of-the-art training platform will produce technicians in 15 different specialties to support the DOD mission and optimize our interoperability amongst the next generation of medics in the ever-growing Joint environment.

An ongoing effort in the development of our enlisted members is the transition of our Independent Medical Technicians (IDMTs) and Aerospace Medical Technicians (4NOs) to certified paramedics. This advancement will continue to decrease our reliance on contract emergency response systems and with an end goal of 700 paramedics. In 2010 we certified 46 paramedics, bringing our total over 200. To enhance the tremendous capability of our IDMTs, our goal is to reach 100 percent within this constrained career field over the next 5 years.

We believe this advancement in the development of our medics will eliminate the stove pipe that has limited career opportunities within the IDMT specialty field and over the long run enhance career progression for these highly qualified medics. Additionally, our IDMTs are eligible for the selective reenlistment bonus which has aided in the recruitment and retention of these highly valuable assets. Our IDMTs are enlisted professionals who serve as physician extenders and force multipliers and who are capable of providing medical care, often in isolated locations. Senior Master Sergeant Patrick McEneany, who is just one of these valued medics, deployed for 7 months as an IDMT to Iraq with a Joint Special Operations task force. As a provider in a remote location, he supervised an urgent care medical clinic, serving a camp of 1,200 individuals. His accomplishments during this deployment in-

cluded the resuscitation and stabilization of combat traumas and emergencies and the treatment of 1,500 ill and injured patients. Additionally, he evaluated multiple Combat Search and Rescue exercises at forward operating bases to validate the care for Special Operations Pararescuemen. For his efforts, Sergeant McEneany was awarded the Bronze Star.

Further opportunities to maximize the potential of our Airman and grow the next generation of Noncommissioned Officers are available through the Air Force Institute of Technology (AFIT) for certain key enlisted specialties. To date, we have three such positions identified; one in education and training at the Air Force Medical Operations Agency, another within our Modeling and Simulation program at Air Education and Training Command, and the third within the research cell at Wilford Hall Medical Center. Our most recent addition to the research cell is Senior Master Sergeant Robert Corrigan, who just arrived to Wilford Hall Medical Center.

Just as we are developing our Airmen, the development of our civilians is critical to our overall mission success. We are establishing a career path from novice to expert and offering deliberate, balanced, and responsive career opportunities for our civilians. Just as the career path for our military nurses and medics, this career path will focus on the right experience, training, and education, at the right time. In January 2011, we conducted our first Civilian Developmental Board at the Air Force Personnel Center. The goal of this board is to present the opportunity to our civilian nurses for deliberate development and vectoring from the Force Development team, similar to the feedback given to their military counterparts. During this inaugural event, Level I and Level II Civilian Nurse Supervisors volunteered their records for this formal review and career counseling opportunity. This program will be a benchmark for the AFMS as we continue to expand this vectoring process across all of our Corps.

FORCE MANAGEMENT

The goal of Force Management is to design, develop, and resource the Air Force Nurse Corps to sustain a world-class healthcare force in support of our National Security Strategy and align our inventory and requirements by specialty and grade. We must have the right number of people to accomplish the mission. In fiscal year 2010, we recruited 170 fully qualified nurses and selected 126 new nursing graduates exceeding our recruiting goal of 290. In line with initiatives to decrease Air Force end-strength, Nurse Corps recruiting service goals were reduced in 2011. As we face force shaping initiatives, it is critical that we continue to develop programs that provide the clinical ability essential to the sustainment of our nursing force.

In fiscal year 2008, the long-needed increase in colonel authorizations for the Nurse Corps created a deficit to the grade ceiling. With current personnel and year-group sizes, filling the authorized grades at the senior level remains challenging. In an effort to resolve the persistent grade level imbalances, nursing leadership has been working closely with the Office of Deputy Chief of Staff, Manpower, Personnel and Services to develop options, to include the possibility of the Defense Officer Personnel Management Act relief. This scenario would allow the colonel grade ceiling to reach allowable guidelines by 2016. The Nurse Corps is continuing to pursue the optimal solution in keeping with the Chief of Staff of the Air Force's direction. These critical Nurse Corps positions are not affected by current Air Force efforts to reduce its endstrength to authorized levels.

In light of the significant limitations placed on direct accessions, it is imperative that we focus on the retention of our experienced nurses. As we enter our third year of the Incentive Special Pay (ISP) program, we continue to see the positive impact this program has on enhancing the professional satisfaction and retention of our experienced clinical experts. This program, which incentivizes clinical excellence at the bedside, tableside and litter-side, is crucial in maintaining the needed staffing in career fields that are critically manned.

Another incentive for our nursing force is the Health Professions Loan Repayment Program targeted at those specialties with identified shortages. Health professionals who qualify for the program are eligible for up to $40,000 of school loan repayment in exchange for an extended service agreement. In 2010, 53 nurses elected to use this opportunity for financial relief in paying back school loans.

With Chief Master Sergeant Joseph Potts leading our enlisted force, he is pleased to report success in securing a Selective Reenlistment Bonus (SRB) for the 4N enlisted career field fiscal year 2010. As mentioned, our IDMTs, along with medical technicians in several other critically manned career fields such as the surgical subspecialties, Ear Nose and Throat, urology and orthopedics, are eligible for this bonus. The SRB allows us to focus our resources in areas where we can best retain medics in our critically needed specialties.

The Graduate School of Nursing (GSN) at USUHS continues to provide cutting-edge academic programs to prepare nurses with military unique clinical and research skills in support of delivery of patient care during peace, war, disaster, and other contingencies. The GSN helps to ensure the Services meet essential mission requirements and has a history of rapidly responding to Service needs that is not possible in civilian institutions. For example, the GSN established the Perioperative Clinical Nurse Specialist and Psychiatric Mental Health Nurse Practitioner Program; as well as focusing research and evidence-based practice initiatives on pain management, traumatic brain injury, and the care of deployed and Wounded Warriors.

PATIENT CENTERED CARE

As we mold our nursing force today, we are shaping our capabilities for tomorrow's fight. Our success will be measured continuously through conscious and deliberate planning and development. We strive to establish leadership and professional development opportunities to meet current and future Joint and Air Force requirements while building trust through continuity and patient centered care. "Trusted Care Anywhere" is the mantra of the Air Force Medical Service. Understanding the value of patient-centered care, the AFMS is focusing on "Better Health, Better Care, Best Value" through the Family Health Initiative.

Across the globe, our healthcare teams are focused on building patient-centered platforms able to perform the full scope of medical and preventive care to our patients at home and abroad. We are committed to the execution of the Family Health Initiative (FHI), the Air Force's pathway to Patient-Centered Medical Home, which provides continuity of care, team work and fosters improved communication; all maximizing patient outcomes. Our Disease Managers and Clinical Case Managers (CCMs) play an integral part in this process. At several locations, our telephone consults have decreased by 21 percent from 2009, and our network referrals to an Urgent Care Clinic have decreased by 50 percent since the FHI was started. This decrease in urgent care referrals has saved over $174,000 for Joint Base Elmendorf Richardson in Alaska. As well, a set of performance measures developed by the National Committee for Quality Assurance, Healthcare Effectiveness Data and Information Set (HEDIS), is used to measure clinical outcomes since FHI inception. The HEDIS results demonstrated an overall improvement in diabetic screening results and reporting. F.E. Warren Air Force Base, Wyoming reports patient satisfaction is at an all time high of 96 percent for 2010. Additionally, many other sites are reporting similar experiences as a result of this modification in how we care for our DOD beneficiaries.

Alongside our Disease Managers, our CCMs are helping patients receive safe, timely, cost-effective healthcare. The Air Force has 113 CCMs and in fiscal year 2010 there were 47,000 CCM encounters, a 50 percent increase over fiscal year 2009. Additionally, 4,000 of these encounters were with Wounded Warriors, a 100 percent increase over fiscal year 2009. Based on Air Force Audit projections, CCMs have generated over $300,000 in savings compared to fiscal year 2009. The CCM is integral to patient care coordination and the FHI, ensuring our patients see the right provider, at the right time, and at the right place. The goal of the Medical Home Model is to strengthen the partnership between the patient and the healthcare team, and continue to look at ways to provide timely, cost-effective care while focusing on patient safety, and decreasing variance at every point of healthcare delivery.

Patient safety remains paramount. For AE, the rate of patient safety incident reports was less than 5 percent of patient moves. Of note, most of these events were near-miss, meaning the event was prevented and never reached the patient. To strengthen our Patient Safety Program, Air Mobility Command has created an Aeromedical Evacuation Patient Safety Course modeled on the principles of the Department of Defense's Patient Safety Program. Ms. Lyn Bell, a retired Lieutenant Colonel flight nurse and Chief, Aeromedical Evacuation Patient Safety, taught the first class in December 2010. She trained 17 safety monitors from 10 total force agencies including AE Squadrons, the Patient Movement Requirements Center and Staging Facilities. This new program focuses on accurately capturing and documenting actual and potential patient safety concerns. It teaches units how to incorporate patient safety into their training scenarios and prepare the units for the high operations tempo in the combat theater. With these continued efforts, we hope to further enhance our culture that protects patients and advances process improvements.

Beginning November 2010 through June 2011, the Air Force Medical Operations Agency (AFMOA), in conjunction with the DOD, is implementing the Patient Safety

Reporting (PSR) System in Air Force military treatment facilities worldwide. The PSR provides staff with a simple process for reporting patient safety events using DOD standard taxonomies, which enhance consistency and timely event reviews. The PSR event data will be analyzed for trends and assist in identifying targets for process improvement, both at Air Force and DOD levels.

A final note on patient safety: We have initiated a 1 year fellowship in Patient Safety incorporating all areas within the AFMS, to include the clinical, logistical, financial, and environment aspects of care. This fellowship includes education on patient safety event reporting, sentinel and adverse events, root cause analysis, proactive risk assessment, and risk management. The fellow will also become knowledgeable in patient safety database systems and strategic communication to allow them to engage with Air Force and DOD leadership.

We also recognize our responsibility in caring for victims of sexual assault within our military healthcare system. Medical treatment facilities team with installation Sexual Assault Response Coordinators to deliver care to victims via coordination with Victim Advocates and Medical Specialists. To ensure the integrity of forensic evidence and guarantee access to care, most sexual assault exams are done off-base via a memorandum of understanding with local treatment facilities. In the deployed environment, seven of eight medical treatment facilities perform exams on-site while one location uses a co-located Army hospital. Upgraded First Responder training has been implemented to increase training efficiency; over 6,000 medics completed First Responder Training in fiscal year 2010.

At the root of patient care is nursing research yielding evidence based practices. In fiscal year 2010, the Tri-Service Nursing Research Program (TSNRP) awarded 18 research grants, including five awards totaling $1,015,045 to Air Force nurse scientists. These investigators are now studying military unique and military relevant topics such as positive emotion gratitude, the resilience of active duty Air Force enlisted personnel, and military medics' insight into providing women's health services in a deployed setting.

Under Colonel Marla De Jong's leadership, and for the first time in its history, TSNRP offered research grant awards to nurses at all stages of their careers—from novice nurse clinician to expert nurse scientist. The Military Clinician-Initiated Research Award is targeted to nurse clinicians who are well-positioned to identify clinically important research questions and conduct research to answer these questions under the guidance of a mentor. The Graduate Evidence-Based Practice Award is intended for DNP students who will implement the principles of evidence-based practice and translate research evidence into clinical practice, policy, and/or military doctrine. It is critical that funded researchers disseminate the results of their studies so that leaders, educators, and clinicians can apply findings to practice, policy, education, and military doctrine as appropriate. This grant will enhance this dissemination and uptake of evidence.

This year, Air Force nurses authored more than 10 peer-reviewed publications and delivered numerous presentations at nursing and medical conferences. Also in 2010, the TSNRP's Battlefield and Disaster Nursing Pocket Guide and clinical practice guidelines were established as the primary performance criteria for the Air Force Nurse Corps readiness skills verification program. The integration of these evidence-based recommendations will ensure that all nurses are prepared and provide the highest quality, state-of-the-art care under operational conditions.

We are also leveraging data gained from the Joint Theater Trauma Registry to create innovative solutions for the battlefields of tomorrow, today. In summer of 2011, in collaboration with our Joint and Coalition Partners, we are establishing an enroute critical care patient movement system to augment our existing tactical transport. Once wounded, a patient is transferred as quickly as possible to a forward surgical team, normally within 1 hour. These patients may undergo life-saving damage control resuscitation and surgery.

Most often these patients are then transferred via helicopter to a trauma center where their wounds can be treated more extensively by medical specialists. These seriously and critically injured patients receive en-route care by an Emergency Medical Technician with basic or intermediate clinical skills or a facility must provide an attendant to accompany the patient. This latter option limits the availability of these skilled clinicians who may be needed for other incoming patients.

Neither solution was considered optimal in terms of ensuring clinicians with the right skill sets are available while not reducing the availability of care providers. As a result, of these challenges, the Air Force developed Tactical Critical Care Evacuation Team, or TCCET, to augment these inter-hospital transfers. The current TCCET composition consists of two certified registered nurse anesthetists and an emergency room physician. This team possesses advanced clinical skills to support ventilated patients as well as patients who are hemodynamically unstable. The

team can function as a whole or each provider can perform separately to meet the patient or mission needs. The TCCET will augment the Army flight medic, or Air Force pararescuemen on missions, and will also be able to support AE missions or augment the CCATT, if needed.

Prior to deployment, these providers will hone their critical care skills by attending our Centers for Sustainment of Trauma and Readiness Skills (CSTARS) program at University of Cincinnati, Ohio. They will attend the Joint Enroute Care Course at Fort Rucker, Alabama to become familiar with rotary wing operations. The team will carry backpack sized equipment packs to support most critical care patients, to include pediatric patients. By inserting this higher level of specialized care at the earliest juncture in the injury spectrum, we hope to improve overall outcomes for the Wounded Warrior.

In the area of skills sustainment, our partnerships with high volume civilian trauma centers continue to thrive. Our CSTARS platforms provide invaluable opportunities to hone war-readiness skills. In 2010, 907 doctors, nurses, and medical technicians completed vital training at one of these three centers located in Baltimore, Maryland; Cincinnati, Ohio; and St. Louis, Missouri. Another example of our skills sustainment initiatives lies within the 88th Medical Group at Wright Patterson AFB, Ohio. The Medical Group stood up a state-of-the-art Human Patient Simulation Center for providing realistic training opportunities for healthcare personnel in 2009 with completion of the center in 2010.

The Center has incorporated simulation into various training courses including Advanced Cardiac Life Support, Pediatric Advanced Life Support, and the Neonatal Resuscitation Programs as well as the Aerospace Medical Service Apprentice Phase II and III program, and the Nurse Transition Program. The Simulation Center also initiated monthly Mock Code drills using human patient simulators and implemented Team Strategies and Tools to Enhance Performance and Patient Safety (TEAMSTEPPS) into simulation training scenarios. This center is also the primary pediatric simulation site for military and civilian medical students attending the region's Dayton Area Graduate Medical Education Consortium.

Because of their efforts, the 88th Medical Group won the Air Force Modeling and Simulation Annual Innovative Program Team Award for their live training via a remote presence robot on the care of burn casualties. The team connects via laptop with a robot at Brooke Army Medical Center's burn unit during interventional patient care, and an on-site facilitator describes the treatment procedure in real time. The program was coordinated through the Army Institute of Surgical Research.

Within our patient-centered care philosophy is the recognition of the need to address the resiliency of our Airmen and families as well as to care for the caregiver. As an experienced critical care nurse, Lieutenant Colonel Mary Carlisle thought she could handle anything on deployment to Iraq. But the casualties she saw daily took a toll on her psychological health. When Colonel Carlisle returned home, her war wounds were invisible. She became increasingly lost in sorrow, becoming absorbed and distracted by thinking "What if?" and "Why?" She sought solace at the National Mall in Washington, DC, studying the faces of the Vietnam Women's Memorial monument, identifying with each of the women depicted in the monument. During her 2010 Memorial Day speech at the Vietnam War Memorial she reflected how she was, during different times of her deployment, each one of those women. She states "I was the woman kneeling, looking down, defeated, holding the helmet that will never be worn again. I was the woman cradling the Wounded Warrior, fighting with everything I had to save his life. And, I was the woman gazing skyward; grasping the arm of my colleague, anticipating whatever was to come."

Colonel Carlisle found the courage to seek help for her wounds and hidden trauma. She further states "now I am at peace knowing I—we—did the best we could, and the fallen angels were not lost in vain, and America's freedom still reigns." Colonel Carlisle became a spokeswoman for nurses and other medical personnel with post-traumatic stress or other war-related adjustment issues. Instead of being rebuked by her upper command for openly talking about her experiences, Colonel Carlisle is praised for her efforts to encourage other troubled nurses and medical technicians to see help. Colonel Carlisle helps to show our Airmen that she is a senior officer who has experienced the same feelings they may be having and they should feel comfortable talking about their experiences and feelings. We are changing our culture to promote the building of resilience, facilitate recovery, and support reintegration of returning Service members.

WAY AHEAD

The United States Air Force Nurse Corps consistently achieves excellence in all that we do. The use of professional clinical judgment in delivering evidence-based

care is essential in enabling our Airman and their families to improve, maintain, or recover health, and achieve the best possible quality of life. By partnering with our civilian institutions, Joint, and Coalition partners we are building the next generation of care and capability. As we step into the 21st century, we are forging our future by addressing our stressors, embracing our professional diversity, and fortifying our Total Nursing Force with education, training and research.

Mr. Chairman, and distinguished members of the Subcommittee, it is an honor to be here with you today and represent a dedicated, strong Total Nursing Force. Our Wounded Warriors and their families deserve nothing less than educated and skilled nurses and technicians who have mastered the art of caring. It is through the medic's character, compassion and touch that we answer our nations call to care for those who served yesterday, today and tomorrow.

Chairman INOUYE. And now, if I may, I was in the Army about 69 years ago. That is a long time ago. And at that time, the highest-ranking nurse, I believe, was a colonel—one colonel. And in the hospital that I spent 2 months in Italy, the highest-ranking nurse was a major. The theater commander of the nurse corps was a lieutenant colonel. In the hospital in Atlantic City and Michigan, the highest-ranking nurse was a lieutenant colonel.

As we all know, in 2003, we made nurses two stars. Now I have been told that the Secretary of Defense has come up with efficiencies, and he recommends a reduction from two stars to one star.

I would just like to have your views, General Horoho.

General HOROHO. Yes, sir.

First, sir, I would like to thank you very much for the support because I would not be sitting here as a two-star general without your support. So, thank you.

We used the launching of the rank of two star to actually leader develop across all of our corps across Army medicine. We have right now nurses that are commanding at the level 2 command within the theaters of operation. We also have them commanding across Army medicine. We have nurses that have strategic input into decisionmaking at the strategic level, and so we now have I think a very competitive field for our nurses to be able to be competitive for branch materiel one star and then also at the two-star level.

Chairman INOUYE. So, you are not in favor of the Department's recommendation?

General HOROHO. Sir, I will support the Secretary of Defense and his efficiencies, and I——

Chairman INOUYE. You are a good soldier.

General HOROHO [continuing]. Am very, very grateful for the rank of two star. Thank you.

Chairman INOUYE. Well, I will make certain you keep your two stars. I think it is about time we recognize the value of nurses. When I was in the hospital, other than the time spent on the operating table, in the wards I saw the doctor about once a week, nurses 24 hours per day. She is the one who provided minor surgery, all the medicine, all the care. But she was a second lieutenant. I think it is about time we recognize their value, and I think if a man gets two stars for commanding 10,000 troops, I think a nurse should get two stars for commanding 18,000 troops.

Senator MIKULSKI. Hear hear.

Chairman INOUYE. That is how I get my votes.

Does the Navy support——

Admiral NIEMYER. Well, sir, I want to extend our grateful appreciation for the support you have provided to military nurses. It has enabled us to achieve both civilian nursing and military medicine respect commensurate with the rank of a two star, and the scope of responsibility of a two star as well.

I have had the unique opportunity of being able to be selected as a one star and work in a very challenging joint position, which I believe enabled me to better lead the Nurse Corps today. We are extremely grateful, and I, too, would not be sitting here as a two star without your support and this subcommittee's support.

Thank you.

Chairman INOUYE. General, does the Air Force support two stars or one star?

MILITARY NURSING LEADERSHIP

General SINISCALCHI. Sir, military nurses will continue to provide the best patient care possible and will continue to lead at whatever rank we are asked to lead at. But having served as a two star, and I thank you for your continued advocacy for military nursing and for the support that military nursing received in 2003, to have the leadership position raised to a two star. And when you look at our scope of leadership and our scope of responsibility and for the Air Force having to include our total force Active, Guard, Reserve, officer, enlisted, and civilian, we are close to 19,000. And to provide policy and directives for a total nursing force of that size, the two star rank has served us very well. And it is commensurate given our total nursing force engagement in global operations. But we will continue to support whatever decision is made, sir. Thank you.

Chairman INOUYE. Today's war has much trauma, brain injuries, multiple amputations, and it is a bloody war, much more severe than World War II. Are the nurses getting specialized training for this type of service?

General HOROHO. Mr. Chairman, we are looking at the Joint Trauma Tracking Registry System to get lessons learned, and we have changed, over these last several years, our training platform in the area of trauma nursing. We also made a decision with—over the last couple of years that every single nurse needs to be a trauma nurse. It is at our core competency. So, we have the combat trauma tactical course that our medics focus on. Everyone who deploys gets trauma training prior to their deployment, whether that is in San Antonio or it is in Florida at the University of Miami. And then we are constantly refining and looking out at what is occurring in the civilian sector, which is part of what develops our Virtual Leader Academy, is that we looked at competencies and capabilities, and we redesigned all of our training programs to better support the complexity of the wounds that we are seeing in this war.

Chairman INOUYE. Before I call upon Senator Cochran, listening to our two ladies, I could not help but think about the trauma that families have to go through. For example, today a spouse can call her husband in Afghanistan every day——

General HOROHO. Yes, sir.

Chairman INOUYE [continuing]. On a telephone that is not censored. Every evening she can watch CNN or whatever it is and see her husband's unit in action, and she has to sweat it out until the next day, and she does not hear from him. And you wonder why someone gets stress disorders. In my time, I made a telephone call before I left Hawaii. The next telephone call I made to Hawaii was 3 years later on my way home. The letters that I wrote to my family were all censored. All I could say was the food is terrific, Italy is a wonderful place, I love France and Paris—nothing about action or injuries.

I can understand why there are more suicides today. I can imagine coming back, getting together with your family and 6 months later have to ship off again. That is not the way to serve. We will have to do something about this.

What are the nurses thinking about stress disorder and suicides?

MENTAL HEALTH ISSUES

General HOROHO. I will let you, and then we will just kind of go down the line.

Admiral NIEMYER. Thank you, Senator.

The issue of families and our service members with post-traumatic stress and mental health is a concern for all of us. We have tried to build resilience programs, not just for the service members themselves, but for our families as well. I know we have FOCUS, which is Families Overcoming Under Stress for our Navy personnel and Marine Corps personnel, and use that as a training platform to discuss those issues proactively. The goal currently is to build resilience and strengthen our soldiers, sailors, airmen, and marines, as well as each other. And that is just one type of program that we are using to address the families.

We have also looked at building stigma reducing portals for our service members and their families to access mental health. An area where mental health psychiatric nurse practitioners are making a difference, as well as all of our mental health personnel, is to embed them in primary care areas where they are accessible to those that need them in an attempt to ward off and address those issues before they become problematic. Any one suicide is one too many, so building that resilience and looking proactively is one of the ways that we are trying to address that.

General HOROHO. Mr. Chairman and the subcommittee, part of what we learned over the last 10 years of supporting a Nation at war is that we cannot just treat the warrior, that we absolutely have to treat the family. And where social networking came in, which you mentioned, is that because of that, it connects the home to the battlefield, and all of the stressors that are at home are felt by the soldiers, and sailors, airmen, and marines, and Coast Guards that are deployed, as well as what is going on in theater is also known by the families.

A couple of things that we have done: We have implemented in nursing as part of all of this—we have implemented the Comprehensive Behavioral System of Care, which has five touch points. And we evaluate 100 percent, so to try to reduce the stigma, it is mandatory from our privates to our general officers to be evaluated by either a psychologist, a psychiatrist, a psych nurse practitioner,

or a social worker, and then primary care that are trained in behavior health. That evaluation then allows us to get them help as soon as possible if it is needed. We have also embedded our behavior health into primary care because what we found is a lot of our patients come in for healthcare, and it is a low back pain or maybe a headache when it really is something that has to do with stress or anxiety. Then when they are in the deployed theater and we have our nurses as part of the combat support teams, 100 percent are evaluated prior to them redeploying back. That information of whether they are high risk, moderate, or a low risk is then sent back to the installation that is going to receive them. And we have behavior health and nursing as part of that team. When we talk behavior health, it is the entire complement from our medics, our nurses, psychiatrists, psychologists, and social workers, so when I use that, that is the team that I am talking about. They evaluate at each one of those touch points.

We also found that we needed to leverage virtual behavior health when we talked about how difficult it is to be able to get a—national shortage of resources—how do we get that? So we leveraged virtual behavioral health, and we have over hired, and we have platforms in Europe as well as at Fort Louis, Washington, Walter Reed, and Brooke Army Medical Center, and then Eisenhower. And we use those electrons to be able to get healthcare to those that are needed. And when we marry the family up, what we are testing right now is using virtual behavior health and counseling of a family of children and the wife with a service member that is deployed to be able to keep continuity of care and look at trying to reduce the stressors of healthcare if we can deal with those issues now instead of delaying that till they redeploy back.

And then on the children's side, we are also working, and actually all of our services are working with us and Department of Defense, to embed behavior health into the school system so that we can help with the young children that are stressed because of either multiple deployments of their parents. And so that is part of our school-based programs that we are using as pilots across, and we are starting to see whether or not that impacts by being proactive.

Thank you, sir.

Chairman INOUYE. Thank you very much.

General.

TIERED-BASED MODEL OF RESILIENCY

General SINISCALCHI. Sir, it is a very stressful time for our military members and their families. But what we are finding is that prevention is key, and it has to start from the very beginning and continue throughout their entire professional career.

We are looking at a tiered-based model of resiliency that incorporates multi-dimensions of human wellness from the physical to the social to the psychological and the spiritual. And our tier-based resiliency model begins from the beginning, whether it be in basic military training, technical training, and officer training. And we instill a culture of resiliency, recognizing signs and symptoms of post-traumatic stress, de-stigmatizing behavioral care, and encour-

aging our military members, their families, to seek behavioral health when necessary.

And as we continue throughout the professional career, we look at multiple points throughout the career to introduce training, whether it be through professional military education or through leadership training. And then as we identify groups that are at high risk for post-traumatic stress, for depression, for suicide, then the training and the education is tailored to them and their families to help minimize and help to moderate their risk.

We have used a Mortuary Affairs Model from Dover Air Force Base that has incorporated strength-based training and resiliency, and we incorporated that model throughout our different levels of command-based resiliency programs.

We have targeted pre- and post-deployment training, and while in theater, those individuals who have been serving outside the wire or have been exposed to multiple trauma, then as they pass through Germany, they go through our Deployment Transition Center, and that helps to prepare them as they go back to their families and to their bases. And it better enables them to reintegrate and rejuvenate as they come back from deployment.

We have reached out to our senior leaders, who have deployed and have experienced post-traumatic stress. And we have two of our senior leader nurse officers—critical care nurses, Lieutenant Colonel Mary Carlisle and Lieutenant Colonel Blackledge. And they came back from multiple deployments and recognized that they were experiencing signs of post-traumatic stress. And in our effort to incorporate behavioral health into our family home model and to de-stigmatize behavioral health, both of these senior nurses sought behavioral healthcare, and then decided to take their message forward. And they have produced videos in multiple forums. They have shared their experiences that not only they went through individually, but what their families also went through when it came to post-traumatic stress.

We recently had a nursing conference last week in Dallas, and Lieutenant Colonel Blackledge came and shared her message to close to 500 nurses and technicians. And we also had a social worker on site who met in small groups with our nurses and technicians recently coming back from deployment who experienced post-traumatic stress.

I think the best approach that we can take is the tiered model for resiliency, targeting those groups that are at high risk, de-stigmatizing mental health, encouraging all of our members to openly communicate when they are recognizing signs of stress, to focus pre-deployment, during deployment, and post-deployment, and then looking at success stories out there, which have been the Mortuary Affairs Group at Dover, and then emulating programs that they have put in place.

Chairman INOUYE. Thank you very much.

General SINISCALCHI. Thank you, sir.

Chairman INOUYE. Senator Cochran.

Senator COCHRAN. Mr. Chairman, I have been impressed with the comments that I have read and the testimony that you prepared for our subcommittee before the hearing. And we thank you for that. I was particularly impressed with the training programs,

and I was looking at the Air Force experience as defined in your testimony that you prepared, General Siniscalchi.

We appreciate the fact that it does not just happen on instinct or spontaneous judgment, but a lot of people spend a lot of time drawing on their experiences and presenting it to others who would be confronted with long flight times coming back from combat areas, critically injured soldiers and sailors who have to have special care and treatment. And the scope and involvement of so many people in the success of these operations is really quite awesome. I cannot imagine any military force in the world being able to come close to what our military, and particularly the Nursing Corps in all of our services, have done to help make it such a successful and caring, lifesaving experience for many men and women.

Do you have any comments about that, and is there funding available in the request for funding that will continue these programs and help support what you have designed as the best that you know, the state of the art?

FUNDING TO SUPPORT AN INCENTIVE SPECIAL PAY PROGRAM

General SINISCALCHI. Sir, funding is available. Our Incentive Special Pay Program, first and foremost, is helping us to retain our clinical experts. So, being able to have funding to support an Incentive Special Pay Program is helping us to retain seasoned clinicians.

Our strength in the care that we are to provide and to have the successes that we—that you have just mentioned comes through our ability to build partnerships. As we continue to partner with our sister services in critical care training, as we continue to partner with academic institutions for our nurse transition program, we currently have partnerships at Baltimore, at St. Louis, University of Cincinnati for our C-Stars, our critical skills sustainment training. We have, again, academic partnerships and partnerships with civilian trauma centers that allow us to send our nurses into their facilities for sustained training. So our goal is to ensure that if we do not have robust training platforms within our military treatment facilities, that we establish robust partnerships with our sister services, with academic institutions, academic—or civilian trauma centers, and the VA so that we have a ready force with sustainment training, that we have platforms in place for going out the door so they can hone their critical care and trauma skills, so that we can continue to provide the care that we provide. But we do that through training affiliation agreements and robust partnerships.

Senator COCHRAN. Thank you.

Mr. Chairman, thank you.

Chairman INOUYE. Thank you.

Senator Mikulski.

Senator MIKULSKI. Mr. Chairman.

First of all, I would like to say to the entire nursing leadership of all the services, we just want to thank you for what you do every day. Every day in every way, you do high tech and high touch patient-centered healthcare, and I just want you to know I think all the Members of the Congress, they do not thank you every week—we cannot thank you enough for what you do.

And, Admiral Niemyer, I understand you are a graduate of the University of Maryland. Is that right?

Admiral NIEMYER. Yes, ma'am. I am in your State. I am a home grown Annapolis girl.

Senator MIKULSKI. I know. I have got the accent, you know. We both have the same accent, and I graduated from the University of Maryland School of Social Work.

NAVAL BETHESDA—WALTER REED NURSE STAFFING

Admiral NIEMYER. Yes, ma'am, I saw that.

Senator MIKULSKI. I think we were a couple of yearbooks away from each other, but nevertheless, we were at the downtown campus.

I have two questions, one related to acute care, and then the other to this more chronic behavioral post-deployment care.

Admiral, we are going to be opening a Naval Bethesda Walter Reed, and my question is, number one, as we gear up, first of all, who is going to actually be in charge of the nursing clinical services? It is an unusual governance mechanism. We are looking forward to it. I am really excited about it. And, perhaps, General, you could help. Who is going to be in charge? And then the second question: Do you feel that as we are gearing up, that there will be adequacy for both nursing care as well as the very important Allied Health Services?

Admiral NIEMYER. Yes, ma'am. The current Director of Nursing Services at the now National Naval Medical Center, soon to be Walter Reed Military Medical Center, is Colonel Ellen Forster, she is an Army colonel. The nurses there, and at Fort Belvoir and Walter Reed, have blended nicely to create an executive nursing staff to work together. So, to answer your question, the governance and who is in charge of the nurses at Bethesda, it will be Colonel Ellen Forster. I believe she is here in the room today as well.

Senator MIKULSKI. Is she here? Could she hold up her hand? Well, we are glad to see you, and we will be out to see you.

Tell me about adequacy. Thank you.

Admiral NIEMYER. In terms of adequacy, from my understanding, yes. As we move the patients over, we have the nursing staff and the facility support to take care of the patients there. So, in terms of adequacy, I do not see any issues in bringing our patients and combining our patient force there.

Senator MIKULSKI. General.

General HOROHO. Ma'am, one of the things is looking a little bit broader than Walter Reed Military Medical Center is actually looking at Belvoir, because both Belvoir and Walter Reed are Tri-Service-based hospitals, and looking at an integrated healthcare system. And so, with that, one of the things that we did on the nursing side is we have already sent Army, Navy, and Air Force nurses to Champion training to support the Patient CareTouch System, to really look at providing one standard of nursing care, decreasing variance, and really focusing on the patient being in the center, and improving the health of the patient and their family members. So, I think adequacy of training is going to be just fine, and I actually think it may be expanded as we learn from each of our services

what we offer the best in a large beneficiary population in the National Capital Area.

Senator MIKULSKI. First of all, that is so heartening to hear. I go back, again, to the awful times of Walter Reed in 2007. And now we are looking ahead, and part of the looking ahead was not only the immediate treatment of acute care, which I think everybody says is actually stunning, stunning in the annals of medicine, military or civilian. It is truly stunning in battlefield to back home.

But I want to hear, if I could just for a minute, this Patient CareTouch System, because I think that was what I was trying to get at with General Schoomaker. It says patient advocacy, enhanced care team communication, clinical capacity, and evidence-based, which we want, and healthy environment. Could you describe for me, from the patient standpoint, what does that mean, because we hear touch tones, benchmarks, yadda yadda.

General HOROHO. Yes, ma'am. If I can back up first and just explain how we even came to develop the Patient CareTouch System. We actually looked across Army, Navy, and Air Force, and looked at what were the common elements of high-performing systems. We also then looked across the civilian sector to see the magnet hospitals and what did they have in common. And then we realized that there was not one system out there that put all of those elements together. So we developed that and we piloted it at Fort Campbell, Kentucky. And what we found is that we actually had an increase in patient satisfaction. We had an increase in communication between our clinicians and the ancillary staff and the physicians. We had patient involvement with the family members and positive feedback. We had a decrease in left without being seen in our emergency rooms. We had a decrease in medical errors. We had an increase in critical lab value reporting. So, all of our nurse-centric and nurse-sensitive measures we saw very positive outcomes. So, after we piloted that for about 9 months and made some adjustments is when we then developed the training program to support that.

And the Patient CareTouch System, what it does is it actually focuses on having the patient in the center of every touch point—every place, whether it is in the ambulatory arena or whether it is inpatient, that we make sure that the patient is involved in decisionmaking. We do hourly nursing rounds. We actually use white boards to communicate so that if family members come in, instead of the patient having to say, this is what the physician just told me, this is what the nurse just did, these are the reports we are waiting for, we take that burden off of our patient, and it is the clinical team working together, better communicating that information.

We also identified data mechanisms and data that we wanted to track that really led to positive outcomes in healthcare, because we needed to be able to say what is the value of nurses providing patient care, whether it is inpatient or outpatient? And how do I know, as the Chief of the Army Nurse Corps, whether or not we are making improvements in patient care? So, we have a database now that looks at the health of our patients, that the head nurse or the clinical officer in charge can look at their patient and see how they are doing in patient care performance. That is rolled up

to the Deputy Commander of Nursing, and then I across the Corps can then look at the health of our patients.

We also added a peer review, so if you look at our officer evaluation——

Senator MIKULSKI. My time is going to run out.

General HOROHO. I am sorry.

Senator MIKULSKI. But that is the evaluation.

General HOROHO. There is a lot. There is a lot——

Senator MIKULSKI. I am going to stick to—well, what I would appreciate, because the chairman has been generous with my time, though I know he is very passionate about this because it is the follow through. As nurses, social workers, we say this. It is not only when they are in the ER or the OR, it is the rest of the R; it is rehabilitation, it is follow through, it is the management of chronic pain, etc.

What I would like is a white paper actually, or any color—a paper describing really what it is and what it does, and perhaps some casing samples, I think in case examples, which I think you do, too, in addition to this epidemiology and all you are looking at. So, I really would follow this through because I think you are on to something, and I think you are on to exactly what I am on to, that you need a patient advocate and all the way through inside. So, let us work together.

[The information follows:]

A top to bottom review of Army Nursing revealed that high quality care was being delivered but that it varied from facility to facility. The variability challenged patients, their families, and the nurses providing care. Notable in this review was the impact that the high technology environment had on patient care and a shift from those things that are considered unique to the art of nursing.

The Patient CaringTouch System was developed in order to optimize care delivery. A pilot program was conducted at Blanchfield Army Medical Center in 2008 and this pilot revealed performance improvement across multiple dimensions within 6 months of implementation, and suggested that broad implementation of the Patient CaringTouch System can create real value for Army Medicine. The following areas showed statistically significant improvement: (1) Decreased medication errors, (2) decreased risk management events, (3) decreased left without being seen from the emergency department, (4) increased pain reassessment, (5) increased critical lab reporting, (6) increased nurse retention and intent to stay

The Patient CaringTouch System is what Army Nursing (AN) believes and values about the profession of nursing, delineates AN professional practice, articulates a capability-building and talent management strategy to ensure the right quantity and quality of AN leaders, and describes how AN delivers evidence-based care in accordance with best practice standards across care environments.

Senator MURKOWSKI. I worked with your predecessors on the nursing shortage. We want to continue that. And we have a real champion in Senator Inouye. We all—we are all in love with Senator Inouye. And—but we want to thank you again for your service and look forward to working with you.

General HOROHO. Thank you.

Admiral NIEMYER. Thank you, Senator.

Chairman INOUYE. Thank you very much.

Senator Murkowski.

SEXUAL ASSAULT

Senator MURKOWSKI. Thank you, Mr. Chairman. And I appreciate the time that the subcommittee has given to this very important testimony here today. Thank you all again for your service.

I want to ask a question this morning about military sexual trauma. The fact that the three of you, this panel, is all female has nothing to do with my question. I had actually hoped to ask it to panel one, but I ran out of time. So, but it is equally applicable from the nursing perspective as well.

As you are aware, the Women's Veterans Health Care Improvement Act put these new responsibilities on the VA to care for our discharged members of the armed forces who are suffering from military sexual trauma. The question to you all is, are we doing enough within the military medicine field here to identify, to treat these cases of military sexual trauma at the time that the service member has been victimized, or is this going to be a situation where the treatment for these individuals will be at the end when the service member is now part of the VA system and then discharged? And then, in addition to answering that question, if you will, are we doing okay, I guess, in terms of maintaining the records that we will need in determining the incidence of military sexual trauma and the outcomes in treating these victims? Is the process set up to work, and then, again, are we tending to the situation at the time that the sexual trauma has occurred, or are we waiting until this individual is part of the VA system? So, if you could just very quickly—and I recognize that this is an issue of time here this afternoon, but this is a very important issue, I think, as we know within all branches of our service right now. And I will throw it out to anyone who wants to start.

Admiral NIEMYER. I would be happy to just make a comment. I think the issue is so much broader than the medical parts, and although I cannot speak directly to your question about the records at this point, I would be happy to provide that back as a Navy response.

The issue is so much broader than medical, and even today, I read this morning a white paper on sexual trauma. We have not progressed where we need to be. It is still a prevalent issue, and despite much of the training that we have done and the focus, it still remains an issue.

That being said, I think we are doing a great deal in the military today with our line leadership to highlight this very prevalent issue and to focus on decoupling the alcohol incidence that at times accompanies sexual assault. We have a zero tolerance in the Navy, and I know for the other services as well.

So, I can speak on the broad sense and would be happy to provide a more detailed medical response on that. But like suicide, any assault, and any particularly when it is our own folks, it is something that we clearly have zero tolerance for.

Senator MURKOWSKI. Oh, I would welcome a follow-up from you from the Navy's perspective if I could.

Admiral NIEMYER. Yes, ma'am.

[The information follows:]

Senator, Navy Medicine has taken an active role in supporting victims of sexual assault through the provision of medical care and the ability to support legal action by the completion of a sexual assault forensic examination when a victim presents to our facilities after an assault. Specific Navy Bureau of Medicine and Surgery (BUMED) initiatives include the establishment of a training program on the sexual assault forensic examination for medical providers stationed at overseas (OCONUS) commands. Not all of our medical treatment facilities (MTFs) within the United

States offer in-house forensic evidence exams after an assault, but great care has been taken to establish Memorandums of Understanding (MOUs) at high-quality civilian facilities to meet this need. In addition, BUMED has initiated a study with the Center for Naval Analysis to gain understanding why some victims are choosing not to seek medical care or have a forensic examination at the time the assault occurs. Interventions will be initiated based on the finding of the study.

The incidence and tracking of sexual assaults is reported via two sources. Naval Criminal Investigative Services reports and tracks unrestricted cases and the Sexual Assault Response Coordinators monitor and track the cases for victims who choose a restricted report. The challenge of accurate record keeping in the Navy is two pronged. First is the issue of under reported data. As many victims of sexual assault, both in the military and our society in general, continue to be concerned with the stigma associated with the crime and the fear of privacy breaches. Second, and specific to Navy Medicine, is the electronic medical record. Currently the required documentation for the forensic medical exam is Defense Form 2911 (per the DOD–I 6495.02). This form is not in electronic format but requires a scanned entry to be maintained in the electronic medical record, which is happening.

Navy Medicine has an important and specialized role in caring for sexual assault victims. Our care for sexual assault victims encompasses the full scope of medical and psychological care with a priority on care that includes access to personnel trained to perform forensic examinations and psychological care aimed at providing the means to resume a healthy lifestyle. We realize that sexual assault affects more than just our Sailors and Marines. Sexual assault erodes unit cohesion, denigrates Navy core values and can adversely affect fleet readiness and retention. We allow victims of sexual assault the right to choose the option for care that is best for them, allowing them time to regain control of normal life functions. Our leaders are highly encouraged to use Sexual Assault Awareness Month to further educate sailors about the Navy sexual assault prevention and response program to include the role of medical personnel. Posters, educational leadership guides and other materials are readily available for download to assist in providing quality educational programs, encouraging an emphasis on a climate that values responsible behavior and active intervention. Navy Medicine, along with all Navy leaders stands ready to meet the challenge of eliminating sexual assault from our ranks.

Senator MURKOWSKI. General.

General HOROHO. Ma'am, we started about 2 years ago with Secretary Geren of having a campaign to increase awareness, that it really was an affront to our warrior ethos, whether it is a female being assaulted, or if it is a male being assaulted. So we looked at it with both demographics.

I believe we have enough trained counselors to provide that level of care. Part of it, though, is creating that safe environment for people to feel comfortable coming forward, which is what you are talking about, the early intervention. And I think that is a work in progress, to be perfectly honest.

We have also worked very closely with the VA. We have a midwife, Colonel Carol Hage, who actually works at the Office of the Surgeon General that has established a partnership with the VA to look at women's health issues, and this is one piece of that, because the demographics of the VA have changed, and then the impact of deployment with behavioral health and other issues, we wanted to make sure that we had the right programs in place to support. So we are evolving as time goes on.

Senator MURKOWSKI. Are you satisfied with the records that are being kept at this point, or do you know?

General HOROHO. Ma'am, if they come in and it gets into our electronic health record, then absolutely it is being documented and it is being kept in the system. And then we have got a lot of work that is being done right now with DOD partnering with the VA so that we have one electronic health record sharing that information.

So, I think once it is in the system, it is absolutely in the system and is being maintained.

INCIDENCE OF SEXUAL ASSAULT IN THE MILITARY

Senator MURKOWSKI. We've got to get in the system.

General HOROHO. Yes, ma'am.

Senator MURKOWSKI. General.

General SINISCALCHI. Thank you, ma'am, for your question. And we all are concerned about the incidence of sexual assault in the military.

In 2004, General Casey McLean from the Air Force was charged to stand up a task force, and did a remarkable amount of work to advance training and prevention regarding sexual assault. As a result of the work done by the group that she led, we moved to restricted and unrestricted reporting of sexual assault. There had been numerous years from this initial task force where the Air Force focused on various training programs, various approaches to reduce sexual assault, and ways to advance treatment when sexual assault did occur, and then focusing on restricted and unrestricted reporting.

Now in 2010, there was a Gallup survey that the Air Force did to establish a baseline looking at the incidence of sexual assault. When the results of that Gallup survey came out, there was a Sexual Assault Prevention Council that was stood up, and I was asked to represent the medical—surgeon general—on this council. So, this group of senior leaders did a very in-depth analysis of this Gallup survey, the result. And what we found was that once a sexual assault occurs, that across 100 percent of our military treatment facilities within the United States, overseas, and at deployed locations, that we have the appropriate response teams in place, whether they be sexual assault forensic examiners, sexual assault trained nurses, or sexual assault examiners, that they are either within the facilities or that we have memorandums of understanding established with a civilian facility to provide that level of response.

And so, the response to a sexual assault, we have made tremendous strides. When it occurs, the care—the immediate care—we found that one of our longest treatment lines to response was at one of our overseas locations, and that treatment was still under 2 hours. We have really made great strides in treating sexual assault.

However, what the Gallup report showed is that there still is significant improvement that needs to be made when it comes to prevention and training. Our working group is now looking at ways to enhance training and areas that were identified focused on leadership. We are looking at training programs, whether they be through, you know, modular training, distance learning programs, face-to-face training, to enhance awareness and sexual assault training, and then put better programs in place that focus on prevention.

Senator MURKOWSKI. Well, I appreciate what you have provided me. If there is any follow-up that you can offer, I would be interested in that as well. I often wonder whether the same stigma that attaches to just the need for services for behavioral health might

also attach when it comes to issues as they relate to sexual trauma, sexual harassment, because that is also part of what we deal with within the definition of military sexual trauma. And it is something that as we think then as to the treatments beyond, again, it is not just the physical, but it is as we deal with those mental health issues that may last for considerable periods of time. So, this is an issue that I appreciate your attention to and to the surgeon generals that I know are all still here. I thank you for that. But any efforts that we can make to improve this is greatly appreciated.

With that, I thank the chairman and the vice chairman.

Chairman INOUYE. Thank you very much.

ADDITIONAL COMMITTEE QUESTIONS

General Schoomaker, Admiral Robinson, General Green, General Horoho, Admiral Niemyer, and General Siniscalchi, thank you very much for your testimony, and, above all, thank you for your service to our Nation.

[The following questions were not asked at the hearing, but were submitted to the Department of response subsequent to the hearing:]

QUESTIONS SUBMITTED TO LIEUTENANT GENERAL ERIC B. SCHOOMAKER AND MAJOR GENERAL PATRICIA HOROHO

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

SOURCES OF HELP FOR SERVICEMEMBERS AND THEIR FAMILIES

Question. General Schoomaker, are there efforts within the Department of Defense and amongst the Surgeons General to coordinate their approach on access to psychological healthcare needs and work towards one dedicated DOD Web site and phone line for all services?

Answer. The Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) is the Department of Defense (DOD) effort to coordinate psychological healthcare needs for servicemembers and their families across all services. The DCoE was established to assess, validate, and oversee prevention while facilitating the resilience, recovery and reintegration of servicemembers and their families needing help with psychological health and traumatic brain injury. The DCoE Web site (www.dcoe.health.mil) has a wealth of information to include information on the 24/7 outreach center. This center can be reached via phone at 866–966–1020, email at resources@dcoeoutreach.org, or via live chat.

Military One Source is a single virtual portal to behavioral health (BH) care to meet the needs of all servicemembers and their families, including Guard and Reserve, regardless of activation status. This DOD level resource serves as an extension of installation services to improve access to BH care while reducing stigma.

PSYCHOLOGICAL HEALTH

Question. General Schoomaker, there has been an effort to expand psychological treatment options across the Army healthcare system. How is the Army providing expanded access to these services, both for soldiers and their families?

Answer. In the past year the Army implemented the Comprehensive Behavioral Health System of Care Campaign Plan. This initiative is nested under the Army Campaign Plan for Health Promotion, Risk Reduction and Suicide Prevention. The Comprehensive Behavioral Health System of Care is intended to further standardize and optimize the vast array of behavioral health policies and procedures across the Medical Command to ensure seamless continuity of care to better identify, prevent, treat and track behavioral health issues that affect soldiers and families during every phase of the Army Force Generation cycle.

The U.S. Army Medical Command currently supports over 90 behavioral health programs. The "Virtual Behavioral Health program for Redeploying Soldiers" (VBH) was established to maximize behavioral health assets and modern communications technology to provide uniform contact with all redeploying soldiers. VBH is meant to provide a positive experience for soldiers, so that they are more likely to seek

behavioral health assistance in the future if needed. Additionally, the Army is enhancing behavioral health services provided to its Family members through Child, Adolescent and Family Assistance Centers and the School Behavioral Health Programs.

In theater there has been a robust Combat and Operational Stress Control presence since the beginning of the war, with deployed behavioral health assets supporting both Operation Enduring Freedom and Operation New Dawn. Beginning in fiscal year 2012, the Army will increase behavioral health teams assigned to all its brigade size operational units. The increase will provide two behavioral health providers and two behavioral health technicians assigned to every Brigade Combat Team, Support Brigade and Sustainment Brigade in the Active, Reserve and National Guard Army inventory. The process will be complete by fiscal year 2017 and increase the total available uniformed behavioral health force by over 1,000 additional personnel.

PATIENT CENTERED MEDICAL HOMES

Question. General Schoomaker, the Army's new community-based medical homes are located off-post in communities in order to provide increased capacity for primary care. How is the Army expanding this program and when will it be available service-wide?

Answer. By the end of fiscal year 2011 the Army will have opened 17 Community Based Medical Homes (CBMHs) in 11 markets. Two additional CBMHs will open in early 2012 bringing the total to 19 clinics in 13 markets and complete phase 1 of the project. Phase 1 focused on meeting the primary care needs of our active duty family members. Once our CBMHs are proven to achieve desired results (improved access, satisfaction and health, and reduced utilization and cost), the Army plans to expand our community based presence. Phase 2 of the project will move some primary care services off-post to generate on-post space for specialty services and Warrior care. By doing so we will be able to better leverage our advanced on-post medical infrastructure, consolidate on-post services, and achieve the advantages of CBMHs. Phase 2 will begin in late 2012. Phase 3 of the project will explore opening additional services such as physical therapy, obstetrics, pediatrics, imaging, and refill pharmacy in community-based settings to generate positive value for DOD. Phase 3 planning will begin in late 2011 with clinic expansion possible by 2013.

RECRUITMENT AND RETENTION

Question. General Horoho, as the United States enters our tenth year of intensive combat operations, nurses have been heavily engaged in both wartime and humanitarian missions. How has the deployment tempo of nurses serving in critical nursing career fields affected the ability of the Army to recruit and retain nurses in these particular high demand fields?

Answer. Six month deployments were initiated in summer of 2008 which has had a positive effect on improving and maintaining the resiliency among Army critical care nurses. These deployments are better for the nurses and their Families. The critical care nurses as a group are very resilient and the majority do well post-deployment. In fiscal year 2010, the Army was able to recruit 642 nurses, meeting 105 percent of its active duty need and 94 percent for the reserve. This includes some precision recruiting of experienced critical care nurses.

NURSING RESEARCH

Question. General Horoho, I understand that the Army Nurse Corps has realigned nursing research assets, has embraced evidence based practice, and is an active participant in the TriService Nursing Research Program. How has this impacted nursing research opportunities in the Army?

Answer. Army Nursing follows the American Nurses Association research participation guidelines that it is the expectation that nurses at every level participate in research activities appropriate to their educational preparation. Every nurse is involved in Evidence Based Practice (EBP) of which, research is one component.

We are building a culture in all nurses at all levels that evidence drives practice. The goal is to have a core group of champions at all levels to sustain the application of research and use of evidence. EBP is built into curriculum at every level for Army professional nursing courses. This includes EBP and research lectures to the Clinical Transition Program, hospital or facility orientation, all specialty courses (Intensive Care Unit, Perioperative) and preceptor training. Army nursing has the support of Tri-Service Nursing Research Program in EBP and research grant camps.

NURSING ISSUES

Question. General Horoho, are Army military treatment facilities staffed to the actual patient load or to the number of beds?

Answer. The Army staffs to nursing care hours, the same as both the civilian community and Veterans Administration, using a research-based workload management system which adjusts for complexity of patient care and type of nursing care provider required.

Question. General Horoho, nurses working in patient care areas often voice concerns that there are not enough nurses performing patient care duties. What is the ratio of Army nurses delivering traditional hands on nursing care to those conducting research, performing administrative duties or involved in functions that are not directly involved in the delivery of patient care?

Answer. The ratio of nurses delivering direct patient care vs. research and administrative duties is approximately 5:1 or 83 percent.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

MEDICAL COMMUNITY

Question. General Schoomaker, when the Army made the decision to "Grow the Force," did it factor the size of its medical community into its billet needs? Was military construction for medical facilities factored into this process?

Answer. Yes, the U.S. Army Medical Command (MEDCOM) participates in the Total Army Analysis (TAA) which is a phased force structure analysis process. Furthermore, MEDCOM employed a multi-factorial process in determining specific needs to support Grow the Army that included population changes, access to care challenges, network availability, the inability to hire civilian staff, medical treatment facility productivity and new operational requirements. Military construction of medical facilities was factored into the process.

Question. How has the Army evaluated the capacity of its medical community against the current and future structure?

Answer. The Army evaluates capacity annually using the enrollment capacity model (ECM). Inputs to the ECM are current and expected force structure, productivity benchmarks, and expert clinical input. The ECM allows the Army to project needed or unused capacity for all Army military treatment facilities to meet the needs of its beneficiaries.

MENTAL HEALTH

Question. Does the Army have enough mental health providers to meet soldier and family member needs?

Answer. While the Army has increased its behavioral health inventory by 90 percent since 2007, we still do not have enough providers and continue to work toward hiring more. As of February 2011, the Army had 4,998 behavioral healthcare providers. The current estimated active component Army behavioral health requirement is 6,107 providers, which represents an unmet requirement of 1,109 providers.

Question. If there is a gap in mental health providers, what efforts are being taken to get more providers in the system?

Answer. The Army is using numerous mechanisms to recruit and retain both civilian and uniformed behavioral health (BH) providers including bonuses, scholarships, and an expansion in training programs. The U.S. Army Medical Command has increased funding for scholarships and bonuses to support expansion of our provider inventory and provided centrally funded reimbursement of recruiting, relocation, and retention bonuses for civilian BH providers to enhance recruitment of potential candidates and retention of staff. The Army expanded the use of the Active Duty Health Professions Loan Repayment Program and offers a $20,000 accessions bonus for Medical and Dental Corps health professions scholarship applicants; has allowed recruitment of legal non-resident healthcare personnel to fill critical shortages; used a one-time Critical Skills Retention Bonus (CSRB) for social workers and BH nurses and the Army Medicine CSRB for clinical psychologists; and implemented an officer accessions pilot program that allows older healthcare providers to enter the Army, serve 2 years, and return to their communities.

Additionally, in partnership with Fayetteville State University, MEDCOM developed a Masters of Social Work program which graduated 19 in the first class in 2009. The program has a current capacity of 30 candidates. This program is fully funded by the Army with all graduates incurring a 62 month service obligation. To improve the accession of Clinical Psychologists, MEDCOM increased the number of

Health Professions Scholarship Allocations dedicated to Clinical Psychology and the number of seats available in the Clinical Psychology Internship Program.

Question. What programs are being undertaken to address the mental health needs of spouses and dependent children?

Answer. The Army has an extensive array of behavioral health (BH) services and resources that have long been available to address the strain on military Families. These services include but are not limited to routine BH care, Chaplains, Military One Source, Comprehensive Soldier Fitness, Psychological School Programs and Army Community Service (ACS), Family Assistance for Maintaining Excellence (FAME), and the Warrior Resiliency Program (WRP). New initiatives include the Comprehensive Behavioral Health System of Care Campaign (CBHSOC) and our Child and Family programs available through the Child, Adolescent and Family Behavioral Health Office (CAF–BHO).

The CAF–BHO is the lead office within the Army Medical Command (MEDCOM) for integrating and coordinating Child and Family BH programs. CAF–BHO promotes optimal military readiness and wellness in Army Children and Families through the Child and Family Assistance Centers (CAFAC), School Behavioral Health (SBH) and Medical Home BH support. Plans are being considered to implement CAFACs and SBHs across the Army to meet the goals of the Army's CBHSOC Plan.

CAFACs provide cost-effective, comprehensive, integrated BH system of care to support military Children, their Families, and the Army Community throughout the Army Force Generation (ARFORGEN) and Family Life Cycle. CAFACs focus on coordinating, integrating, and synchronizing available BH and related services on an installation, and filling identified service gaps. The programs use a Public Health Model continuum of care, focusing on prevention and early intervention to promote wellness and resilience, and providing a higher level of BH care when needed.

SBH programs provide cost-effective, comprehensive BH services to support military children, their families, and the Army community in schools. The overarching goal is to facilitate access to care by embedding BH within the school setting, and to provide state of the art prevention, evaluation, and treatment through standardization of SBH services and programs. Services are directed at improving student academic achievement, maximizing wellness and resilience of Army children and families, and ultimately promoting optimal military readiness.

ALTERNATIVE TREATMENT

Question. What efforts are being taken to provide for alternate sources of pain management? Has the Army looked at civilian best practices? What are their plans for incorporating them?

Answer. The U.S. Army Medical Command (MEDCOM) Comprehensive Pain Management Campaign Plan (CPMCP) is a phased effort that has been working to standardize pain care across MEDCOM, establish interdisciplinary pain centers in each Regional Medical Command, de-emphasizing medication-only treatment of pain, address the challenge of poly-pharmacy with improved oversight of those on multiple medications, and improve access to non-medication pain treatments—complementary and alternative medicine (such as acupuncture, massage therapy, and movement therapies such as yoga.

Expanding the availability of non-medication approaches for pain management has been an area of special emphasis and careful execution. The Army has continued to reach out to civilian experts who have had experience and success in incorporating integrative medicine into their medical practices and healthcare systems. Clinical practice and research initiatives with Samuelli Institute and Bravewell Collaborative are two examples of the MEDCOM's ongoing collaboration with civilian experts.

MEDCOM has also been developing a model for MEDCOM/Veterans Affairs/civilian academic medicine pain management consortiums. These collaborative efforts have been developed to share clinical expertise, best practices, and education/training opportunities across these organizations. The first of these consortiums is located in the Seattle, Washington area and involves Madigan Army Medical Center, Puget Sound Veterans Affairs Hospital, and University of Washington Center for Pain Relief.

TASK FORCE TREATMENT

Question. I am concerned about the increasing amputation rates among servicemembers and understand there was a task force recently established with experts in trauma, orthopedic surgery, wound patterns and analysis and rehabilitation specialists.

What is the status of this task force?

What best practices have been identified with treating these casualties?

What do these trends mean for future combat care?

Is there any applicability to civilian trauma care? Has the Army looked at public-private ventures to create more training opportunities for state-side medical personnel?

Have any additional methods been identified to prevent, protect and reduce the impact of these injuries?

Answer. The Dismounted Complex Blast Injury Task Force was established in early February 2011 and recently completed an analysis of trauma data that addresses many of these concerns. The Task Force report is nearly complete and will include recommendations on the best clinical practices to care for these soldiers and their families from the point of injury and throughout the evacuation, care, and rehabilitation continuum. The report will also include recommendations for future combat care and protection of our Warriors, and strategies for the mitigation of injury severity.

These injuries represent the extreme of combat injuries, and go far beyond the most severe injuries ever encountered in civilian trauma. Our surgeons and rehabilitation experts have the most current experience in these uncommon injuries. Where we rely upon civilian expertise and cooperation is in the area of regenerative medicine approaches, skin and muscle reconstruction and associated rehabilitation.

MEDICAL TRAINING

Question. The Army is producing medics with a wealth of experience in a variety of medical specialties like trauma care. Has there been any effort to align training programs with civilian training requirements? If no, then why not?

Answer. The Army aligns training programs with civilian training requirements in areas where civilian requirements match military medicine mission. Applying civilian trauma care principles without adapting them to the tactical environment is not only frequently ineffective but may lead to more casualties. In October 2001, evidence based research drove the Army to incorporate the National Registry of Emergency Medical Technicians—Basic (EMT–B) as the necessary baseline for all students of the U.S. Army Combat Medic course. This program emphasizes increased trauma training by incorporating a standardized, externally validated civilian curriculum into the Army's program. National certification is a Combat Medic (68W) graduation and sustainment requirement. The basic skills of the Combat Medic overlap with competencies of the EMT–B; however, the Combat Medic has been trained to be more uniquely skilled and capable of providing advanced combat casualty care. Care in combat is focused not just on injuries suffered by the soldier but on the tactical situation surrounding the event. The Department of Combat Medic Training holds annual curriculum committee meetings to assess training needs, considering civilian training requirements, evidence-based research, and lessons learned.

ACQUISITION COMMUNITY INTERACTION

Question. How well does your medical community interact with your acquisition community? As different injuries are identified as prevalent within your service, what are the procedures to work with the acquisition community to acquire equipment, tools, or clothing to limit or prevent these injuries?

Answer. The U.S. Army Medical Department (AMEDD) is fully integrated with the Acquisition community under the DOD 5000 process which governs and implements policies of the defense acquisition system. The U.S. AMEDD Center and School serves as the Combat Developer defining requirements and the U.S. Army Medical Research and Materiel Command (USAMRMC) serves as the Materiel Developer providing materiel solutions. The Commanding General, USAMRMC, serves as the Deputy for Medical Systems to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT)). In this role the Commanding General, USAMRMC, is the senior medical officer providing information to the ASA(ALT) regarding medical acquisition initiatives and the medical implications of non-medical acquisition initiatives.

There are multiple ways that the needs identified on the battlefield are incorporated into the acquisition process to include working with the Rapid Equipping Force, the Army Materiel Command's Forward Area Support Team—which is deployed in Theater and includes at least one medical representative, the Combatant Command Technology Assessment and Requirements Analysis, the other services, and the operational needs statement process to name a few. In each initiative mentioned above, personnel closely affiliated with the acquisition community are inti-

mately involved with every step of the process from capturing the Warfighter's requirements, through fielding a potential solution. Each of these initiatives complements the traditional acquisition process and allows the AMEDD to respond to Warfighter identified needs in a timely and controlled fashion. The Army utilizes the Joint Theater Trauma Registry to analyze the types and trends of injuries and the causes to inform the developers on improving operational approaches and materiel solutions.

QUESTIONS SUBMITTED BY SENATOR TIM JOHNSON

ELECTRONIC HEALTH RECORD

Question. Secretary Gates and Secretary Shinseki recently announced that the Department of Defense and the Department of Veterans Affairs will develop a joint electronic health record. On April 1, 2011, the Department of Veterans Affairs also announced that it will form an open architecture community around the VA's electronic health record, VISTA. Are these the same thing or will each Department still keep its own version of VISTA and AHLTA?

Answer. Yes, these are the same. Secretary Gates and Secretary Shinseki met in March and agreed to a joint electronic health record called iEHR (integrated electronic health record) that will replace VISTA and AHLTA.

Question. Do the Departments envision the joint electronic health record replacing VISTA and AHLTA?

Answer. Yes, Secretary Gates and Secretary Shinseki met in March and agreed to a joint electronic health record called iEHR (integrated electronic health record) that will replace VISTA and AHLTA.

Question. When will the Departments release details and a comprehensive plan forward on the joint electronic health record?

Answer. The two Departments will meet over the coming months to develop a comprehensive implementation plan. Once complete, we envision the plan and details will be released by the Departments.

QUESTIONS SUBMITTED TO VICE ADMIRAL ADAM M. ROBINSON, JR.

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

SOURCES OF HELP FOR SERVICEMEMBERS AND THEIR FAMILIES

Question. Each service has taken a different approach to address the psychological health needs of their service members and their families. In addition, the Department of Defense and the Tricare contractors have also instituted programs to help provide this type of care. Rather than streamlining those services, new Web sites and phone lines are created. On top of those efforts, the private sector, the Department of Veteran's Affairs, and non-profits are all trying to address these issues. This is all well intended but more often than not it is challenging for servicemembers and family members to guide their way through a maze of avenues to seek for sources to help.

On one Navy pamphlet to combat operational stress there are 16 different Web sites and phone numbers and on another there eight. Each one has very little information associated with them, forcing the individual to access each Web site to decipher if that meets their needs. One Air Force pamphlet has 13 and on one Army pamphlet there are 19. People seeking help should not have to go through a maze like this.

Admiral Robinson, as I mentioned in my opening statement it can be quite confusing for a servicemember who is seeking help to deal with combat stress or other psychological health needs. On one Navy pamphlet provided to me there is a list of 16 different Web sites or phone numbers for sources of help. It takes so much to get someone to seek the help they need, we don't want to discourage them by making it difficult to find the appropriate help. Could you explain how you are attempting to consolidate these efforts and make the process less confusing for those that need it?

Answer. The Navy is committed to fostering a culture that promotes resilience and wellness, and that empowers leaders to ensure the health and readiness of service members and their families. We concur that there have been a proliferation of services available to service men and women affected by post traumatic stress and traumatic brain injury. We must balance the desire to provide service members with

options; understanding that one size does not fit all, with the possibility of creating confusion by providing too many alternatives.

To address this issue we are working with the Naval Center for Combat and Operational Stress Control (NCCOSC) to develop consolidated strategic communications for psychological health initiatives across the Department of the Navy. Similarly we are working with the Defense Center of Excellence to consolidate resources and Web sites supported by the Military Health System and Department of Defense.

Furthermore, across DOD strides are being taken to address effecencies within the multiple programs offered to our wounded, ill and injured service members. The Department of Defense (DOD) Task Force on the Care, Management and Transition of Recovering Wounded Ill and Injured Members of the Armed Forces, also known as the Recovering Warrior Task Force (RWTF) provides DOD with advice and recommendations on matters related to the effectiveness of the policies and programs developed and implemented by DOD, and by each of the military services in caring for our wounded, ill and injured service members. The goal of this task for is to look at best practices and various ways in which DOD can more effectively address matters relating to the care, management, and transition of these warriors.

RECRUITING AND RETENTION

Question. The Air Force is short surgeons, family practitioners, clinical psychologists, and technicians. In addition to compensation, the Air Force identifies the lengthy hiring process for both officers and civil service health professionals as a top recruiting challenge.

The Army faces personnel shortages in numerous healthcare specialties including: neurosurgeons, nurse anesthetists, behavioral health experts, physical therapists, oral surgeons, and others. Some of these areas are staffed at less than 50 percent of need. The Army is seeking to increase compensation for critical skills to reduce the gap between civilian and military pay, as well as leverage its Health Professions Scholarship Program.

Overall, the Navy has somewhat improved recruitment and retention of medical officers over the last 3 years. The greatest challenges remain in the areas of general surgery, family medicine, oral surgeons, general dentists, and psychiatry. The problem is more severe in the reserve component.

Admiral Robinson, some medical specialties are severely understaffed, particularly in the reserve component. For example, less than one-quarter of critical care medicine and cardiology positions are filled. How is the Navy ensuring that it has the number of reserve physicians it needs?

Answer. Direct appointment recruiting of physicians and dentists remains a challenge, primarily because these healthcare professionals have well-established medical practices and are very well compensated in the civilian market. Interrupting their civilian medical careers is often personally and financially unattractive to many private medical providers. Additionally, retention has improved in the active forces, reducing Navy Veterans available for Reserve appointments.

We are developing incentives within budgetary constraints to target specific communities that are, and will remain, critical to our mission. A credible recruiting bonus is critical and remains the primary incentive to attracting these professionals.

We have collaborated with Navy Recruiting Command at a recently held Medical Stakeholders Conference and have developed a Medical Professionals Task Force Charter group in an effort to improve access and to collaboratively market targeted specialties to achieve recruiting goals. Working closely with Navy Recruiting Command, we have also restructured the Training Medical Specialties Drilling option (one of the most successful Physician recruiting options) to ensure the program is meeting the needs of Navy Medicine as well as attracting candidates.

Despite these Reserve shortages, Navy Medicine continues to meet its global commitments in support of all contingency operations.

MILITARY MEDICINE

Question. Since fiscal year 2010, the Department of Defense (DOD) has requested funds for the advancement of military medicine. Prior to that, the majority of these funds were provided to the Department through earmarks and nationally competed programs added to the Defense budget by Congress. In the fiscal year 2012 budget request the Department is requesting $438 million through the Defense Health Program and the Defense Advanced Research Projects Agency (DARPA) to further these efforts.

Admiral Robinson, we are currently investing in medical research applicable to the needs of our current warfighter but what do we know about the issues we might face in the future and how are we attempting to stay ahead of that curve?

Answer. In my testimony, I outlined a strategic vision for Navy Medicine that keeps us as a world leader in patient and family centered medical care. We manage the spectrum of current needs, while ensuring that the urgencies of the present do not diminish the intensity of our focus on the future. That focus is a critical element of our RDT&E and medical education vision and mission.

One-third of our research portfolio of over 1,200 individual research studies is focused on the delivery of technologies to the Warfighter in the near-term through advanced development. Another third targets the next 10 to 20 years (technology development), with the balance addressing technology innovation for 20 to 50 years out (basic research). Where appropriate, this research is executed both at our research and development facilities in CONUS and overseas as well as in our Medical Treatment Facilities (MTF) by our experienced clinicians and our most promising graduate trainees, where appropriate. Navy Medicine demonstrates excellence in research in each domain. While our research focuses on Navy and Marine Corps requirements, our efforts complement and are closely coordinated with our sister services, the Defense Health Program, and DARPA.

We are expanding the envelope of the possible, providing technologies, procedures, and practices that promote reintegration of our wounded warriors into productive roles in the services and in society. We will continue to expand on our progress in the areas of rehabilitative and regenerative medicine. The revolutionary advances we have made in wound management are a prelude to upcoming developments in prosthetics, transplantation, and regeneration.

We recognize the critical role personalized medicine will play in maintaining the capabilities of our Fleet and Marine Forces. With small unit, agile forces on the ground and reduced manned ships at sea, the importance of each individual is magnified. Our progress in individualized medical care, personalized health maintenance and promotion, and enhanced individual and unit readiness will play a critical role in the future effectiveness of the DOD.

History tells us that during peace-time and during armed conflict, more of our service members are rendered less than fully operational by disease than by bullets and bombs. As we evolve our global military presence, Navy Medicine is enhancing our capabilities through global health initiatives with our international partners and through a global presence. We are at the forward edge of battle in combating emerging diseases and solving health problems worldwide.

Every day, the CONUS and OCONUS Navy Medical Research labs and the MTF-based Clinical Investigation Programs conduct cutting edge research to answer issues, both current and projected to arise. These facilities are necessarily lean and our researchers are few in number, but they have made significant contributions to the men and women who wear the cloth of our Nation and for the world. We will continue to develop innovative technologies to save the life and limb and to expand the operational envelope of our Navy and Marine Corps Warfighters.

PSYCHOLOGICAL HEALTH

Question. There has been a significant expansion of psychological healthcare across the military health system. This includes increasing the number of specialists in psychiatry, psychology, mental health, and social work, to provide more services at a greater number of locations. Psychological treatment options are also being integrated into primary care to provide more comprehensive and holistic support.

Early identification and treatment of psychological health issues can accelerate healing and improve long-term outcomes. This is supported by numerous campaigns to train service members to identify warning signs of excessive stress, suicidal tendencies, depression, or other mental health concerns. Given the stress of combat operations and repeated deployments, the services are striving to place more psychological health providers in theater, as well as continued screening for symptoms long after service members return.

Admiral Robinson, the services are seeking to provide early identification and treatment of psychological health needs in theater by deploying additional psychological health professionals to forward operating bases. Since the Marines are sometimes located in remote locations with limited access to even basic services, how can the Navy ensure this care reaches them?

Answer. Within the Marine Corps, we continue to see the effectiveness of the Operational Stress Control and Readiness (OSCAR) program, as well as the OSCAR Extender program. OSCAR embeds full-time mental health personnel with deploying Marines and uses existing medical and chaplain personnel as OSCAR Extenders together with trained senior and junior Marines as mentors to provide support at all levels to reduce stigma and break down barriers to seeking help. Embedded mental health providers can provide coordinated, comprehensive primary and secondary

prevention efforts throughout the deployment cycle, focusing on resilience training, stress reduction efforts, and when necessary, timely access to a known provider with reduced stigma associated with mental health intervention. Our priority remains ensuring we have the service and support capabilities for prevention and early intervention available where and when it is needed. OSCAR is allowing us to make progress in this important area.

PATIENT CENTERED MEDICAL HOMES

Question. The fiscal year 2012 budget request supports the phased implementation of the Patient Centered Medical Home concept for delivering primary care for all three services. This concept, originating in the private sector, seeks to improve quality of care and the patient experience by integrating primary care into a comprehensive service. Patients will have an ongoing relationship with a personal physician leading a team of professionals that collectively takes responsibility for the individual's or family's healthcare needs.

The Army is beginning with Community Based Medical Homes, which are Army-run clinics located off-post. They function as extensions of the Army hospital and are staffed by civil servants. Seventeen are currently underway in communities which needed increased access to primary care, including one in Hawaii.

The Air Force was the first service to implement the concept, which it termed the Family Health Initiative, beginning in 2008. It will soon be expanding the concept across all the clinics service-wide. The Navy is also ramping up its program to convert its facilities, started in May 2010, called Medical Home Port. Over 200,000 sailors and family members are already enrolled.

Admiral Robinson, as the Navy creates additional Medical Home Ports, how will this new reorganization lead to more comprehensive service to patients and better continuity of care?

Answer. Medical Home Port is Navy Medicine's Patient-Centered Medical Home (PCMH) model, an important initiative that will significantly impact how we provide care to our beneficiaries. In alignment with my strategic goal for patient and family centered care, Medical Home Port emphasizes team-based, comprehensive care and focuses on the relationship between the patient, their provider and the healthcare team. The Medical Home Port team is responsible for managing all healthcare for empanelled patients, including specialist referrals when needed. Patients see familiar faces with every visit, assuring continuity of care. Appointments and tests get scheduled promptly and care is delivered face-to-face or when appropriate, using secure electronic communication.

It is important to realize that Medical Home Port (MHP) is not brick and mortar; but rather a philosophy and commitment as to how you deliver the highest quality care. A critical success factor is leveraging all our providers, and supporting information technology systems, into a cohesive team that will not only provide primary care, but integrate specialty care as well. We continue to move forward with the phased implementation of Medical Home Port at our medical centers and family medicine teaching hospitals, and initial response from our patients is very encouraging. To date, there are 68 MHP teams across seven Navy Medical Treatment Facilities with over 225,000 beneficiaries enrolled.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

MEDICAL FORCE STRUCTURE

Question. Has the Navy evaluated the capacity of its medical community against the current and future structure?

Answer. Navy Medicine evaluates annually and as needed our current and future total force structure in response to changing requirements to ensure that the correct mix of medical, dental, medical service, nurse and hospital corps professions are available to support our Nation's needs. Included in these analyses are our total force of active, reserve, civilian and contract professional to meet the operational and beneficiary missions.

MENTAL HEALTH FORCE STRUCTURE

Question. Does the Navy have enough mental health providers to meet soldier and dependent needs? If there is a gap in mental health providers, what efforts are being taken to get more providers in the system? What programs are being undertaken to address the mental health needs of spouses and dependent children?

Answer. We are committed to improving the psychological health, resiliency and well-being of our Sailors, Marines and their family members and ensuring they have

access to the programs and services they need. We recognize that shortfalls within the market of qualified mental health providers has led to challenges in contracting and filling provider and support staff positions; however, recruitment and retention of uniformed personnel have improved. Current Navy inventory for mental health professionals (February 2011) is as follows:

—Psychiatrist: 73 percent—projected to be at 86 percent end of fiscal year 2012.
—Psychologist: 75 percent—projected to be at 93 percent end of fiscal year 2012.
—Clinical Social Worker: 48 percent—projected to be at 44 percent end of fiscal year 2012. This is due to significant billet growth, from 35 billets in fiscal year 2010 to 86 billets in fiscal year 2012.
—Mental Health Nurse Practitioner: 57 percent—projected to be 100 percent end of fiscal year 2012.
—Mental Health Nurse: 111 percent.

Mental Health Professional recruiting remains a top priority. Navy uses numerous accession and retention bonuses to attract and retain mental health professionals. Medical Special and Incentive Pays are critical to attracting and retaining Navy medicine professional staff inventory.

—*Psychiatrists*.—In fiscal year 2011 there is a $272,000 critical wartime skills accession bonus available to Psychiatrists entering the Navy. In addition, up to $63,000/year is available through Incentive Special Pay/Multi-Year Special Pay for current Navy psychiatrists who qualify.
—*Psychologists & Clinical Social Workers.*—The Accession Health Professionals Loan Repayment Program pays out up to $40,000 to qualified licensed clinical social workers up to $80,000 to clinical psychologists. The Health Professions Scholarship Program is available to attract and train clinical psychologists by paying for tuition, books, fees and a stipend. The Health Services Collegiate Program is available to attract and train licensed clinical social workers paying E6 salary and benefits while candidates are in training. In addition, a clinical psychologist accession bonus pays up to $60,000 for a 4 year obligation, and clinical psychologist incentive pay is $5,000/year. The clinical psychologist retention bonus pays up to $80,000 for a 4 year obligation, and the licensed clinical social worker accession bonus pays up to $30,000 for a 4 year obligation. Board certification pay of $6,000/year for both specialties is also available to these mental health professionals. A retention bonus for clinical social workers has recently been submitted and is pending review and approval.
—*Mental Health Nurse Practitioner & Mental Health Nurse.*—In fiscal year 2011 there is up to $30,000 available through the Nurse Corps accession bonus for nurses entering the Navy. In addition up to $20,000/year is available through Registered Nurse Incentive Special Pay.

When our Sailors and Marines deploy, families are their foothold. Family readiness is force readiness and the physical, mental, emotional, spiritual health and fitness of each individual is critical to maintaining an effective fighting force. A vital aspect of caring for our service members is also caring for their families. FOCUS is a family centered resiliency training program based on evidenced-based interventions that enhances understanding, psychological health and developmental outcomes for highly stressed children and families. FOCUS has been adapted for military families facing multiple deployments, combat operational stress, and physical injuries in a family member. The program provides community outreach and education, resiliency skill building workshops and at the center of the program a 8-week, skill-based, trainer-led intervention that addresses difficulties that families may have when facing the challenges of multiple deployments and parental combat related psychological and physical health problems. It has demonstrated that a strength-based approach to building child and family resiliency skills is well received by servicemembers and their family members. Notably, program participation has resulted in statistically significant increases in family and child positive coping and significant reductions in parent and child distress over time, suggesting longer-term benefits for military family wellness. To date over 200,000 Service members, families and community providers have received FOCUS services.

In addition to FOCUS, the Reserve Psychological Health Outreach Program (RPHOP) identifies Navy and Marine Corps Reservists and their families who may be at risk for stress injuries and provides outreach, support and resources to assist with issue resolution and psychological resilience. An effective tool at the RPHOP Coordinator's disposal is the Returning Warrior Workshop (RWW), a 2-day weekend program designed specifically to support the reintegration of returning Reservists and their families following mobilization.

The Naval Special Warfare (NSW) Family Resiliency Enterprise (FRE) program was designed toward enhancing the performance and readiness of the force by increasing resilience of the service member and his or her family—and thus the team,

squadron, group and overall NSW community. To date, each NSW SEAL Team has conducted seven or more consecutive combat deployments resulting in cumulative exposure to wartime events and extensive familial separations. The goal has been to build resilience by collecting baseline information (seven main areas: psychological, neuropsychological, physiological, relationships, spirituality, finances, and lifestyle) about service members and their spouses/significant others; identifying areas of concern and providing training as indicated; and providing forums (overnight retreats) for family members to network to build support during deployments, as well as celebrate return from deployment and facilitate reintegration. To date, about 5,500 participants have attended NSW FRE retreats.

MEDICAL TRAINING PROGRAMS

Question. The Navy is producing medics with a wealth of experience in a variety of medical specialties like trauma care. Has there been any effort to align training programs with civilian training requirements? If no, then why not?

Answer. Yes, our enlisted training programs are aligned and often exceed civilian training programs. Similar to civilian medical training, military medical training is nationally accredited by the American Council on Education and the Council on Occupational Education, representing higher education and quality for the U.S. Government. The academic programs for enlisted medic training are under the auspices of the National License Practical Nursing guidelines for our basic hospital course and the National Emergency Medical Technical for field training.

The Navy Credentialing Opportunity Online (COOL) program provides expanded opportunities to earn civilian occupational licenses and certifications. The program promotes recruiting and retention and further enhances the Sailor's ability to make a smooth transition to the civilian workforce. The Navy's credentialing program has two key components—dissemination of information on civilian licensure and certification opportunities and payment of credentialing exam fees.

Community College of Air Force (CCAF) is a multi-campus community college accredited through the Southern Association of Colleges and awards course college credits to the enlisted personnel of the Air Force (AF) Medical Program. Navy corpsman participating in consolidated courses with the Air Force (AF), such as those offered at Medical Enlisted Training Campus (METC) in San Antonio, Texas or Sheppard AFB, are awarded college credits for training (i. e. emergency medicine, biomed tech, surgical tech, radiology, etc.) in both hospital corpsman basic and technical medical course work.

In addition, Navy Medicine is formally affiliated with the LA County Trauma Center, California, approved by American College of Surgeons and sends medical teams (nurses, physicians and corpsman) to train in level 1 trauma care. This training opportunity allows for integration of knowledge and skill performances of civilian and military working side by side in trauma teams.

MEDICAL ACQUISITION PROGRAMS

Question. How well does your medical community interact with your acquisition community? As different injuries are identified as prevalent within your service, what are the procedures to work with the acquisition community to acquire equipment, tools, or clothing to limit or prevent these injuries?

Answer. Let me share how various aspects of Navy Medicine work together to improve medical care for Wounded Warriors.

In the scenario you describe, surgeons at a forward operating base would note a change in the type or severity of injuries being treated. The change might be caused by new weapons or tactics employed by the enemy. The surgeons at the forward operating base would describe the new injuries and define a new medical capability needed to meet the threat. In this scenario, this information would go to the Navy Medicine Specialty Leader for Surgery. This senior surgeon represents the entire surgical community to Navy Medicine at large. There are specialty leaders for all aspects of clinical care.

The Surgical Specialty Leader validates the new capability that is needed and determines whether the new capability can be satisfied by using a new surgical protocol or through the use of new or additional equipment not currently in theater. If the new capability can be achieved through the use of new surgical protocols, the Surgical Specialty Leader initiates the change in procedure.

If the Surgical Specialty Leader determines new or additional medical equipment is needed, Navy Medicine's clinical engineers will write the specifications for the new equipment and our acquisition office will purchase it. These three groups—specialty leaders, clinical engineers, and acquisition professionals—have established

procedures to validate, define, and procure medical supplies and equipment for our forward deployed providers.

If the Surgical Specialty Leader determines that the new and needed medical capability cannot be satisfied using existing equipment or techniques, then the requirement is turned over to the Navy Medicine Research Center. These skilled and dedicated researchers work with colleagues in academia and industry to put new medical capability into the hands of our clinicians.

QUESTIONS SUBMITTED BY SENATOR TIM JOHNSON

ELECTRONIC HEALTH RECORDS

Question. Secretary Gates and Secretary Shinseki recently announced that the Department of Defense and the Department of Veterans Affairs will develop a joint electronic health record. On April 1, 2011, the Department of Veterans Affairs also announced that it will form an open architecture community around the VA's electronic health record, VISTA. Are these the same thing or will each Department still keep its own version of VISTA and AHLTA?

Do the Departments envision the joint electronic health record (EHR) replacing VISTA and AHLTA?

When will the Departments release details and a comprehensive plan forward on the joint electronic health record?

Answer. Department of Defense (DOD) is leading the way forward on Electronic Health Records (EHR) and Navy Medicine is providing support for this mission.

DOD and Veterans Affairs (VA) will continue to synchronize EHR planning activities for a joint approach to EHR modernization. The Departments have already identified many synergies and common business processes, including common data standards and data center consolidation, common clinical applications, and a common user interface. The VA has released a request For proposal to evaluate open source management options, and DOD is working with the VA to identify opportunities to contribute and participate in the open source collaboration. As the open source communities mature, DOD and VA will continue to analyze open source components that fit the architectural construct for use in the future EHR.

The following excerpt from the April 6, 2011 testimony of Ms. Beth McGrath, DOD Deputy Chief Management Officer, before the House Armed Services Subcommittee on Emerging Threats and Capabilities additionally supports the commitment by both the DOD and VA to develop a joint approach to EHR modernization.

"In the field of health IT, DOD and the Department of Veterans Affairs (VA) have committed to a full and seamless electronic exchange and record portability of healthcare information in a secure and private format, wherever needed, to ensure the highest quality and effective delivery of healthcare services for our military servicemembers and Veterans, from their accession into service and throughout the rest of their lives. To this end, the Departments are collaborating on a common framework and approach to modernize our Electronic Health Record (EHR) applications. On March 17, the Secretary of Defense and Secretary of Veterans Affairs affirmed we will continue to synchronize our EHR planning activities to accommodate the rapid evolution of healthcare practices and data sharing needs, and to speed fielding of new capabilities. The Departments have already identified many synergies and common business processes, including common data standards and data center consolidation, common clinical applications and a common user interface."

VISION CENTER OF EXCELLENCE

Question. As Chairman of the Military Construction and VA Appropriations Subcommittee, I have closely followed the development of the Vision Center of Excellence and pressed for better cooperation between the Department of Defense and the VA. I have been frustrated with the delays in funding, full military staffing, and operational support for this important project.

Admiral Robinson, what are the Navy's budgetary plans for fiscal year 2012–fiscal year 2015 for the Vision Center of Excellence? Where is the Navy currently at with staffing the Vision Center of Excellence? What staffing levels—military, Federal, and contractor support—are necessary to be fully operational and when do you anticipate reaching that point?

Answer. The Joint DOD/VA Vision Center of Excellence (VCE) is a demonstration of a high level of cooperation between the DOD and VA. It continues to advance the coordination of vision care and research across both Departments and the VCE's work on the Joint Defense and Veterans Eye Injury and Vision Registry is an excel-

lent example of how the two Departments can integrate processes. Further, the VCE has an integrated staff and is funded by both Departments.

Oversight and direction of the VCE is accomplished jointly, specifically by the VA/DOD Health Executive Council (HEC) and the Joint Executive Council (JEC). The VCE is included in the VA/DOD JEC Joint Strategic Plan reported to Congress annually.

The Navy has operational authority for the VCE, and the Assistant Secretary of Defense for Health Affairs has funding responsibility. The Navy is developing a transition plan for the transfer of funding and staffing responsibility from Health Affairs to the Navy.

My office works closely with Health Affairs to adequately fund the VCE. Most of the leadership is in place now and additional key staff will be on board in fiscal year 2012. The VCE is funded at $17.9 million in fiscal year 2012, which will support requisite operations, registry development, contractors, and DOD civilians (an increase of 18 from the current 6 DOD civilian staff). Additionally, there are a total of 13 Federal staff members at the VCE, including 5 VA and 2 military. Our estimate is 111 staff will be required to achieve full operating capability by fiscal year 2017. We will continue to work with the VCE the requirements, as well as continue to evaluate all of our organizations to support DOD efficiency initiatives.

JOINT VETERANS EYE INJURY AND VISION REGISTRY

Question. Admiral Robinson, what is the status of the implementation of the Joint Defense Veterans Eye Injury and Vision Registry? How soon will this become fully operational? Does the Navy have the funding necessary for full implementation?

Answer. Development of the Defense and Veterans Eye Injury and Vision Registry is progressing very well and is 6 months ahead of schedule. During the first year of operations of the Vision Registry, the Joint Department of Defense (DOD) and Department of Veterans Affairs (VA) Vision Center of Excellence (VCE) will validate the registry capabilities; collect and enter ocular data of Service Members and Veterans with ocular injuries into the registry; and identify future registry requirements and capabilities. We expect the Vision Registry to be fully operational by first quarter fiscal year 2013.

The VCE is developing the Vision Registry to be a dynamic tool. As the first central repository of DOD and VA clinical ocular related data, the Vision Registry will provide the quantitative data necessary to perform longitudinal analyses for the development of preventative measures and for recognition of best practices for treatment and rehabilitation of injuries and disorders of the visual system.

Personnel and operational costs for the Vision Registry sustainment and continued development are included in the proposed VCE fiscal year 2013–17 POM.

QUESTIONS SUBMITTED TO LIEUTENANT GENERAL CHARLES B. GREEN

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

SOURCES OF HELP FOR SERVICEMEMBERS AND THEIR FAMILIES

Question. General Green, what role do you see the private sector playing in your efforts to reach out to servicemembers and their families to provide access to psychological health services?

Each Service has taken a different approach to address the psychological health needs of their servicemembers and their families. In addition, the Department of Defense and the Tricare contractors have also instituted programs to help provide this type of care. Rather than streamlining those services, new Web sites and phone lines are created. On top of those efforts, the private sector, the Department of Veteran's Affairs, and non-profits are all trying to address these issues. This is all well intended but more often than not it is challenging for servicemembers and family members to guide their way through a maze of avenues to seek for sources to help.

On one Navy pamphlet to combat operational stress there are 16 different Web sites and phone numbers and on another there eight. Each one has very little information associated with them, forcing the individual to access each Web site to decipher if that meets their needs. One Air Force pamphlet has 13 and on one Army pamphlet there are 19. People seeking help should not have to go through a maze like this.

Answer. Private sector organizations and individual providers play a critical role in the delivery of psychological health services to service members and families. TRICARE providers, community resources and non-medical counseling options sup-

plement the direct military medical care system. They also offer options which may be perceived as bearing lower stigma for military families.

In the Air Force, most formal mental healthcare for family members is provided by TRICARE providers or through other community agencies. Unfortunately, anecdotal reports from geographically remote bases particularly indicate that child and adolescent mental health services may be hard to find. There is a nation-wide shortage of qualified mental health providers. This situation becomes more problematic in remote locations or where there are low numbers of providers accepting TRICARE.

While not providing formal mental healthcare, Military One Source counselors available through on-line or toll-free call referral, or Military and family life consultants and child and youth behavioral consultants working out of base Airman and Family Readiness Centers provide confidential, non-medical, short term counseling services to address issues common in the military community, with no medical documentation.

Case management and referral management occurs both through private and military offices. Medical treatment facilities assist in locating specialty care for their enrolled patients and TRICARE regional contractors offer this service as well. Additionally, there are numerous private and local advocacy groups and offices that aid with access to services. The Defense Veterans Brain Injury Center provides coordination of care for individuals suffering from a Traumatic Brain Injury (TBI).

Indeed there are many Web sites, agencies and advocacy groups providing resources for individuals and families with needs in the area of mental health. There are DOD/VA workgroups in place which are working to further consolidate and simplify these resources and establish one site for patients to seek medical information regarding psychological health. The breadth of resources is reflective of the wide array of topics being addressed: from type of problem (post traumatic stress disorder, depression, suicide, deployment related issues, TBI) to demographic or beneficiary issues (Guard/Reserve, Active Duty, family/individual, and age). Fortunately, in the military medical system, each patient has his/her own primary care physician as the first and best advocate to assist in the management of services.

Because of the importance of the relationship with a primary care manager, the Air Force is placing behavioral health providers in primary care clinics. Where this is in place, patients see mental health providers for targeted, brief care in the primary care clinic avoiding the stigma of making a mental health clinic appointment. When further care is required the provider can refer the patient to the community to see a private sector or TRICARE provider or other appropriate resources.

MILITARY MEDICINE

Question. General Green, a key element to the improvement of care is how fast we are able to transport servicemembers from the point of injury to the care they need. Can you detail some of the advancements in our aeromedical evacuations and what areas you are researching to further these efforts?

Since fiscal year 2010, the Department of Defense has requested funds for the advancement of military medicine. Prior to that, the majority of these funds were provided to the Department through earmarks and nationally competed programs added to the Defense budget by Congress. In the fiscal year 2012 budget request the Department is requesting $438 million through the Defense Health Program and the Defense Advanced Research Projects Agency to further these efforts.

Answer. Evolutionary advancements in technology, and improvements in clinical interventions enable movement of the most severely injured or ill patients. Recent technology advancements introduced by the Air Force include: advanced ventilators, video assisted intubation devices, improved aircraft configuration equipment for litter patients, improved aircraft lighting systems, an extracorporeal membrane oxygenation device for adult patients, and improved virtual training for medical personnel to name a few.

Aeromedical evacuation today is done flawlessly but must always be focused on continuous improvement to care for ever more complex patients. Based on operational outcomes, effects, and well defined capability gaps, the major focus areas for enroute care research are: patient stabilization; patient preparation for movement; patient staging; impacts of in-transit environment on patient physiology and medical crew/attendant performance; occupational concerns for medical staff; human factors and patient safety; medical personnel training and equipment; environmental health issues; infectious disease and cabin infection control; burn and pain management; resuscitation; life saving interventions; nutrition; alternative medicine; and a wide variety of organ system effects (neurologic, psychologic, orthopedic, pulmonary, cardiovascular, gastrointestinal, renal, and respiratory). Air Force, Army, Navy,

public and private academia, and industry partners are engaged in research in these focus areas.

PATIENT CENTERED MEDICAL HOMES

Question. General Green, the Air Force continues to transition its clinics to the patient centered medical home model. This concept organizes health professionals into teams able to provide more comprehensive primary care. Each patient's personal physician leads the team and serves as a continuous point of contact for care. Has the Air Force seen improvements in patient satisfaction or cost control with this initiative?

The fiscal year 2012 budget request supports the phased implementation the Patient Centered Medical Home concept for delivering primary care for all three services. This concept, originating in the private sector, seeks to improve quality of care and the patient experience by integrating primary care into a comprehensive service. Patients will have an ongoing relationship with a personal physician leading a team of professionals that collectively takes responsibility for the individual's or family's healthcare needs.

The Army is beginning with community based medical homes, which are Army-run clinics located off-post. They function as extensions of the Army hospital and are staffed by civil servants. Seventeen are currently underway in communities which needed increased access to primary care, including one in Hawaii.

The Air Force was the first service to implement the concept, which it termed the Family Health Initiative, beginning in 2008. It will soon be expanding the concept across all the clinics service-wide. The Navy is also ramping up its program to convert its facilities, started in May 2010, called Medical Home Port. Over 200,000 sailors and family members are already enrolled.

Answer. The Air Force Medical Service has seen improvement in patient satisfaction and access at locations that have implemented FHI. Early data from the RAND (Research and Development) evaluation of the Air Force Medical Home Model (RPN PA06R–R190) study show a 1.3 percent increase in patient satisfaction. Additionally, continuity between patients and their providers is on the rise changing from an average of 40 percent of patients seen by their assigned clinical to 60 percent following FHI implementation. Continuity with the assigned team is even higher averaging greater than 80 percent of the time seeing either the physician or the extender on the health team. A secondary effect of this improved continuity is decreased demand for acute appointments and improved access to care. Patients have shown less need for follow-up appointments as their assigned providers are able to provide more comprehensive care to patients they know, driving down the total number of overall healthcare visits. Provider satisfaction with this model of care has also led to a 5 percent reduction in attrition of our family physicians.

We are also monitoring Emergency Department (ED)/Urgent Care Clinic utilization to see if the increased continuity can reduce high cost ED visits. As continuity increases patients learn that visits to their assigned provider, who are familiar with their medical history, offer advantages over convenience of acute care clinics. The roll out of Relay Health secure patient messaging over the next year will allow simpler communication with patients electronically and further enhance continuity.

Disease management and case management programs built into PCMH are maturing and health indicators (such as diabetes compliance) are improving. The patient linked as partner with a specific healthcare team allows our extensive informatics network to provide decision support to both patients and the care team. Aggregating patient data into the informatics network will allow better care to populations as we tie specialty consultants and analytic experts together to improve care. It all starts with the partnership between patient and the healthcare team in PCMH.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

Question. Has the Air Force evaluated the capacity of its medical community against the current and future structure?

Answer. Yes, the Air Force uses current and projected mission changes to align resources where most appropriate. Beginning with Base Realignment and Closure 2005, and continuing in subsequent program objective memorandum (POM), the Air Force Medical Service (AFMS) has realigned manpower and medical facility capability based on changing mission requirements, including those mission changes associated with BRAC decisions or other Department of Defense mission movements or beneficiary changes.

We continue to use staffing models, beneficiary population, and projected mission changes from the Air Force and the Office of the Secretary of Defense communities to place resources where they can be most effective, and where our deploying medics can receive the most current, diverse case-mix. Beginning in the fiscal year 2010 POM, and continuing today, the AFMS is aligning resources back into our inpatient platforms, with plans to increase enrollment by 35,000 and increasing inpatient capability at several of our larger Military Treatment Facilities. Specifically, the AFMS increased Joint Base Elmendorf by 200 personnel to account for force structure changes, beneficiary recapture opportunity, and to improve currency. Similar initiatives are in progress at Joint Base Langley-Eustis, and Eglin and Nellis Air Force Bases in response to mission changes. These efforts will result in medical personnel being better prepared for deployment to the area of responsibility), and will bring care back into the Direct Care System, a critical long-term goal to reduce costs and improve efficiency.

The AFMS reviews current and future healthcare needs and directs changes within the assigned force structure (specialties) of each Corps. Under direction of the National Defense Authorization Act 2010, Section 714, the AFMS is increasing the active duty mental health authorizations by 25 percent to better address the needs of our service members and their families. These additional authorizations are built based both on the identified needs of our beneficiaries as well as our projected ability to recruit and retain professionals in these specialties. Although all active duty mental health professions will increase in the next 5 years, the largest growth will be in social workers, who we have had recent success in recruiting. We will also increase both psychiatrists and psychiatric nurse practitioners to increase our ability to provide psychiatric medication management services. We recently reviewed our current force structure to realign mental health resources and support the needs of our beneficiary population while maintaining manning levels within the current Air Force manpower constraints. Additionally, the AFMS is adding more contract mental health professionals as a gap-fill measure until the added active duty manpower needs are filled. This increase in mental health manning does not increase the overall manning numbers of the AFMS, but realigns the mix of specialty resources of our current medical program to more effectively recapture costs and provide expanded mental health services of these essential programs.

Question. Does the Air Force have enough mental health providers to meet soldier and dependent needs?

Answer. Through the TRICARE network and community organizations, the Air Force Medical Service (AFMS) has the mental health staffing to meet the treatment needs for Airmen and family members. The availability of resources varies depending on geographical region and catchment area but it is adequate to provide for mental health needs in a manner equal to other types of insurance.

Question. If there is a gap in mental health providers, what efforts are being taken to get more providers in the system?

Answer. There is a nationwide shortage of mental health providers which the AFMS confronts in a three-pronged approach addressing: (a) educational programs and scholarships, (b) direct compensation, and (c) quality of life (QOL) initiatives.

(a) Due to historical difficulties recruiting fully qualified specialists, the AFMS places emphasis and funding into educational scholarships.

(b) We use accession bonuses to recruit fully qualified specialists into the Air Force and retain them through the use of retention bonuses.

(c) The AFMS addresses QOL initiatives such as family services, medical practice, educational or leadership opportunities, or frequency of moves and deployments to recruit and retain our health professionals.

Question. What programs are being undertaken to address the mental health needs of spouses and dependent children?

Answer. A variety of programs provide support for the mental health needs of spouses and dependent children. Each installation has a Family Advocacy Program (FAP) that provides outreach and prevention services to families. One novel FAP approach is the New Parent Support Program (NPSP), which provides support and guidance in the home to parents screened as high risk for family maltreatment. Educational and Development Intervention Services (EDIS) are provided by a child psychologist for special education children in DOD schools. Other programs provide education on common family issues like good parenting, couples communication, or redeployment integration. Counseling for families is also available. Military One Source is a DOD program using a civilian network that provides face-to-face, telephonic, or online counseling/consultation to service members and families for up to twelve sessions. Also providing nonmedical counseling, Airman and Family Readiness Centers have Military and family life consultants and child and youth behavioral consultants. These provide confidential, non-medical, short term counseling

services to address issues common in military families such as deployment stresses and relocation. Other nonmedical counseling alternatives for family members not able to be seen at military medical treatment facilities have access to services through community TRICARE providers. These providers offer an array of services from individual counseling and group therapy, to inpatient behavioral healthcare.

Question. The Air Force is producing medics with a wealth of experience in a variety of medical specialties like trauma care. Has there been any effort to align training programs with civilian training requirements? If no, then why not?

Answer. We have established multiple training affiliations with our civilian counterparts in numerous settings aimed at providing mutual exchange of education. The purpose is not to align our training programs with civilian requirements, but to optimize the respective programs for both military and civilian students for the best outcomes. We have military instructors embedded in civilian institutions where we have military students for both GME (Graduate Medical Education) and sustainment training. In turn, several civilian schools use our medical facilities for student training with experiences unique to the military.

Many of our surgical trauma experts are now in faculty positions in different private sector university hospitals. Our Centers for Sustainment of Trauma and Resuscitation Skills share expertise at University of Maryland, University of Cincinnati and St Louis University. Our Sustainment of Trauma and Resuscitation Skills Programs also share expertise with Tampa General Hospital, University of California—Davis, Scottsdale Medical Center, Miami Valley Medical Center, and University of Texas-San Antonio. We also have surgeons working closely with the Veterans Administration Hospitals, University of Alabama-Birmingham and University of Pittsburgh Medical Centers.

Three of the four Centers of Excellence for the Nursing Transition Program are civilian medical centers, two having achieved Magnate status. These institutions provide a rich environment for our new nurse graduates as they transition from new nurse graduate to military nurse. Our military instructors and students provide our civilian colleagues with unique training opportunities as experiences with the phenomenal care we give our wounded warriors, establishing a collaborative process of information sharing for optimal patient outcomes.

Question. How well does your medical community interact with your acquisition community? As different injuries are identified as prevalent within your service, what are the procedures to work with the acquisition community to acquire equipment, tools, or clothing to limit or prevent these injuries?

Answer. The medical community and acquisitions community work closely together. Human Systems Integration has been a focus of the Air Force Medical Service and the Vice Chief of Staff of the Air Force for over 7 years to ensure new high cost military equipment addresses the needs of the human that will operate it. There are continuous efforts with Air Force logistics and the Army to mitigate the impact of combat injuries by evaluating protective equipment and improving it. Once protective equipment is identified as needed, our Air Force Medical Service Medical Logistics Division at Fort Detrick, Maryland, works with the acquisition community to contract for needed medical supplies, equipment and services based on clinically identified requirements and specific items are obtained as needed.

QUESTION SUBMITTED BY SENATOR TIM JOHNSON

Question. Secretary Gates and Secretary Shinseki recently announced that the Department of Defense and the Department of Veterans Affairs will develop a joint electronic health record. On April 1, 2011, the Department of Veterans Affairs also announced that it will form an open architecture community around the VA's electronic health record, VISTA. Are these the same thing or will each Department still keep its own version of VISTA and AHLTA?

Do the Departments envision the joint electronic health record replacing VISTA and AHLTA?

When will the Departments release details and a comprehensive plan forward on the joint electronic health record?

Answer. The Department of Veterans Affairs and the Department of Defense are collaborating on the Integrated Electronic Health Record (iEHR) program which will operate in the future as a common EHR. Given the iEHR is a complex, multi-year development program, a DOD–VA Integrated Program Office is being created to coordinate the development and deployment of the iEHR and then the sun-setting of VISTA and AHLTA. During the initial planning, the Departments have identified common business processes and practices, including common data standards, data center consolidation, common clinical applications, and a common user interface. Co-

ordinating the efforts between the Departments sets the course toward a seamless electronic health record exchange and portability of health information in a secure and private format.

The EHR Senior Working Group and various subgroups are currently assembling the information needed to put together a comprehensive plan. The plan is considering the budget, architecture, security, policies, and business processes. A high level project plan is being constructed that includes cost models, proposed timelines, and joint assumptions. The Secretary of Defense and the Secretary of the Veterans Affairs are scheduled to receive a status brief on cost, schedule and performance on May 2, 2011.

QUESTIONS SUBMITTED TO REAR ADMIRAL ELIZABETH S. NIEMYER

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

PEDIATRIC INJURIES ON THE BATTLEFIELD

Question. Since 2002, DOD hospitals in Iraq and Afghanistan have treated over 2,000 injured children with over 1,000 of these children having suffered from blast injuries. Children have unique physiological responses to illness and injury. Therefore, the treatment of children demands specific training, equipment and approaches that are different than those required for adults. Children injured in war zones are sometimes treated as "little adults", and the healthcare professionals do not have the experience or training necessary to appropriately care for pediatric trauma injuries.

Admiral Niemyer, our military medical personnel in theater are treating a wide array of civilian cases in addition to caring for our servicemembers. As a result, they are seeing numerous pediatric injuries similar to injuries sustained by adults. Has the Navy implemented any pre-deployment training for nurses to address the unique needs of pediatric casualties of war?

Answer. In 2002, the Navy established the Navy Trauma Training Center (NTTC), a joint cooperative medical venture with the Los Angeles County-University of Southern California Medical Center, to train our nurses, doctors, and corpsmen in real world trauma medicine skills and experiences. Staff teaching this course solicit feedback from students who have completed the course and deployed. Over time our personnel noted a change in the demographic population of those injured in Afghanistan to include children. This feedback was used to begin incorporating a more robust training module highlighting the physiologic differences and responses to pediatric trauma, injury patterns, and pediatric specific treatments. Furthermore, because of this feedback clinical rotations in the Pediatric Intensive Care Unit and Pediatric Trauma Emergency Department have increased. Approximately 75 percent of NTTC students deploy with Marine units.

One of our pediatricians, Captain Jon Woods, was involved with extensive pediatric trauma in Afghanistan. He identified the requirement for qualified nurses trained specifically in military transport of pediatric patients. Staff at Naval Medical Center San Diego took this information and are in the process of creating a certified training program using their extensive simulation resources. The plan is to create a simulated space equivalent to that found inside a Blackhawk transport helicopter, where students in full battle gear will have pediatric trauma simulation experiences in which care is affected by significant limitations in visibility, communication, and movement.

RECRUITMENT AND RETENTION

Question. Despite well known shortages in the nursing profession, the three services have continued to do well in recruiting nurses into the military. Last year, the Air Force testified that one of the challenges the nurse corps faced was the development of new flight nurses and technicians in the pipeline to meet the needs of the ever growing aeromedical evacuation mission. Flight nurses remain the lowest manned specialty in the nurse corps (78 percent), and have one of the highest demands. For the fifth consecutive year the Navy has achieved their active component nursing goal (92 percent manning) and they have 2,852 nurses currently serving around the world. In fiscal year 2010, the Army was able to recruit 642 nurses, meeting 105 percent of its active duty need and 94 percent for the reserve.

Admiral Niemyer, how are deployments affecting the Navy nurse corps' ability to retain experienced nurses, particularly those working in high demand, low occupancy nursing career fields?

Answer. With the ongoing war efforts, we are keenly aware of the need to grow and retain nurses in our critical war-time subspecialties. Though loss rates have improved overall, there remains a gap in the inventory to authorized billets for junior nurses with 5 to 10 years of commissioned service.

Key efforts which have positively impacted retention include Registered Nurse Incentive Special Pay (RN–ISP), which targets bonuses to undermanned clinical nursing specialties, and the Health Professional Loan Repayment Program (HPLRP), which offers educational loan repayment up to $40,000. Full-time Duty Under Instruction (DUINS) further supports Navy recruitment and retention objectives by encouraging higher levels of professional knowledge and technical competence through graduate education. Training requirements are selected based on Navy nursing needs for advanced skills in war-time critical subspecialties. Seventy-six applicants were selected for DUINS through the fiscal year 2011 board.

Tracking specific reasons for losses is complex, but currently the Center for Naval Analysis is completing a follow-up study where intent to leave is one of the outcome variables. As the economy improves and civilian nursing opportunities expand through the Affordable Care Act, we might once again be faced with recruiting and retention challenges. In anticipation of these challenges, we are inviting nursing students and new graduate nurses to participate as American Red Cross volunteers at our hospitals and clinics to enhance exposure to the military. Additionally, we assigned a Nurse Corps Fellow to my staff to monitor recruitment and retention, and to ensure that both remain a priority.

NURSING RESEARCH

Question. Scientific inquiry, planned and conducted by nurses, is a vital part of improving the health and healthcare of Americans. Nursing research has been a long time catalyst for many of the positive changes that we have seen in patient care over the years. The National Institute of Nursing Research defines nursing research as the development of knowledge to build a scientific foundation for clinical nursing practice, prevent disease and disability, manage and eliminate symptoms caused by illness, and enhance end-of-life and palliative care. The TriService Nursing Research Program (TSNRP) is one such venue to help ensure nursing care remains evidence based.

Admiral Niemyer, nurses have a long history of promoting quality healthcare that is not only focused on the needs of the patient but also on the needs of their families. Nursing research has played a big part in how we take care of patients today. How are you ensuring that Navy nurses at all levels in the organization understand the research process and are given opportunities to participate in nursing research efforts?

Answer. The Navy Nurse Corps has aligned nursing research priorities with military relevant Surgeon General's priorities and has embraced evidence based practice. "Invigorating Nursing Research" is a priority and one of the five Navy Nurse Corps' Strategic Goals for 2011. It is aligned with the Navy Medicine Goal of Research and Development and Clinical Investigation programs. Also an active participant in the Tri-Service Nursing Research Program (TSNRP), the Navy Nurse Corps' aim is to continually increase the interest, submission, and subsequent selection of military relevant funded research projects to improve the health of our patients and/or add to the body of nursing knowledge.

Our Nursing Research assets are aligned regionally and are aimed at providing guidance, communication, and mentoring to nurses at all levels of the organization. These assets actively advertise and provide TSNRP and other educational research and evidence based practice course offerings through presentations, site visit training, postings on the Navy Knowledge Online Navy Nurse Corps Web site, and enterprise-wide emails. Due to the efforts of the Strategic Goal Team and the synergy of the research assets in the region (both active component and reserve component), an overwhelming successful number of nurses have applied to participate in the TSNRP Research Development Course offered in San Diego in May 2011. Twenty-one Navy Nurses were selected to fill 25 Tri-Service seats.

QUESTIONS SUBMITTED TO KIMBERLY SINISCALCHI

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

RECRUITMENT AND RETENTION

Question. General Siniscalchi, last year you testified that one of the challenges the nurse corps faced was the development of new flight nurses and technicians in the

pipeline to meet the needs of the ever growing aeromedical evacuation mission. Would you please provide us with an update on the status of those initiatives to increase this career field?

Despite well known shortages in the nursing profession, the three services have continued to do well in recruiting nurses into the military.

Last year, the Air Force testified that one of the challenges the nurse corps faced was the development of new flight nurses and technicians in the pipeline to meet the needs of the ever growing aeromedical evacuation mission. Flight nurses remain the lowest manned specialty in the nurse corps (78 percent), and have one of the highest demands.

For the fifth consecutive year the Navy has achieved their active component nursing goal (92 percent manning) and they have 2,852 nurses currently serving around the world.

In fiscal year 2010, the Army was able to recruit 642 nurses, meeting 105 percent of its active duty need and 94 percent for the reserve.

Answer. Despite this critically manned, high demand specialty, Aeromedical Evacuation (AE) nurses and technicians continue to perform superbly with a 100 percent mission success. In fiscal year 2010, AE authorizations increased and as a result, the percentage of staffed versus authorized dropped significantly. At the same time, we relocated the Air Force School of Aerospace Science from Brooks City-Base, San Antonio to Wright-Patterson AFB, Ohio, which temporarily affected our training pipeline.

Several initiatives are now underway to fill AE requirements. To improve retention, flight nurses are now offered Incentive Special Pay (ISP). The ISP program is making a positive impact on professional satisfaction and retention. To maximize our training investment in both AE nurses and technicians, the Air Force Personnel Center initiated several changes to allow nurses and technicians to complete a full 3-year tour with the option to extend. An AE force development model was developed to allow nurses and technicians to weave in and out of flying assignments throughout their career. Developmental leadership positions were also established so nurses and technicians can return to AE and provide the much needed leadership and clinical mentorship for our junior AE nurses and technicians. Previous flyers are being asked to volunteer to return to flying assignments and many are eager to have the opportunity to return to flying. We project filling 100 percent of our allocated training seats this year.

In addition, we are currently working on AE training transformation. We scheduled a utilization and training workgroup in fiscal year 2011 to streamline training by leveraging distance learning and creating modular training. The new format will increase the volume of Phase I students and decrease training time needed for Phase II students with a flying assignment pending. Our partnership with Wright State University in Dayton, Ohio is progressing well as we continue to refine the new graduate program in Flight Nursing. This new program offers didactic and clinical training in flight nursing, disaster preparedness/homeland defense, and adult health clinical nurse specialist. Our first student graduates in May 2012.

NURSING RESEARCH

Question. General Siniscalchi, how are you fostering nurse researchers in the Air Force?

Scientific inquiry, planned and conducted by nurses, is a vital part of improving the health and healthcare of Americans. Nursing research has been a long time catalyst for many of the positive changes that we have seen in patient care over the years. The National Institute of Nursing Research defines nursing research as the development of knowledge to build a scientific foundation for clinical nursing practice, prevent disease and disability, manage and eliminate symptoms caused by illness, and enhance end-of-life and palliative care. The TriService Nursing Research Program (TSNRP) is one such venue to help ensure nursing care remains evidence based.

Answer. In addition to our Master Clinician's and Master Research career paths, we recently developed a nursing research fellowship and the first nurse started in August 2010. This 1 year, pre-doctoral research fellowship, focuses on clinical and operational sustainment platforms. The intent of this program is for the fellow to develop a foundation in nursing research and ultimately pursue a Ph.D. Following the fellowship, they will be assigned to work in Plans and Programs within the Human Performance Wing of the Air Force Research Laboratory. This direction is consistent with the National Research Council of the National Academies recommendations for research career paths.

Under Air Force Colonel Marla De Jong's leadership, and for the first time in its history, TSNRP offered research grant awards to nurses at all stages of their careers—from novice nurse clinician to expert nurse scientist. The Military Clinician-Initiated Research Award is targeted to nurse clinicians who are well-positioned to identify clinically important research questions and conduct research to answer these questions under the guidance of a mentor. The Graduate Evidence-Based Practice Award is intended for Doctor of Nursing Practice students who will implement the principles of evidence-based practice and translate research evidence into clinical practice, policy, and/or military doctrine. It is critical that funded researchers disseminate the results of their studies so that leaders, educators, and clinicians can apply findings to practice, policy, education, and military doctrine as appropriate. This grant will enhance this dissemination and uptake of evidence.

Further opportunities to maximize the potential of our Airman and grow the next generation of noncommissioned officers are available through the Air Force Institute of Technology for certain key enlisted specialties. To date, we have three such positions identified; one in education and training at the Air Force Medical Operations Agency, another within our Modeling and Simulation program at Air Education and Training Command, and the third within the research cell at Wilford Hall Medical Center. Our most recent addition to the research cell is Senior Master Sergeant Robert Corrigan, who just arrived to Wilford Hall Medical Center.

NURSING ISSUES

Question. General Siniscalchi, the acuity of patients, level of experience of nursing staff, layout of the unit, and level of ancillary support are all key components in establishing the "right" nurse-patient ratio for any unit. This year I reintroduced The Registered Nurse Safe Staffing Act which addresses those concerns. How does the Air Force ensure adequate nurse staffing levels on inpatient units?

A new study published in the New England Journal of Medicine shows that inadequate staffing is tied to higher patient mortality rates which supports the principles that call for nurse staffing to be flexible and continually adjusted based on patients' needs and other factors.

Answer. A workload data review is conducted on a facility's patient census and acuity to establish a workload average over a 4 year period. From this data review, staffing levels are set at 15 to 20 percent greater than the average census to cover the anticipated patient load. Through the Tri-Service Patient Acuity and Staff Scheduling System Working Group, a model is being developed to staff according to patient need, nurse experience, and acuity versus a fixed nurse to patient ratio. Currently, there is no national standard for nurse staffing, however, the American Nurses Association provides a compilation of State regulated requirements which are taken into consideration for the current Air Force manpower model.

In step with our manpower and staffing initiatives, our Air Force Medical Operations Agency in conjunction with the Department of Defense (DOD), implemented the Patient Safety Reporting (PSR) System in Air Force Military Treatment Facilities worldwide. The PSR provides staff with a simple process for reporting patient safety events using DOD standard taxonomies, which enhance consistency and timely event reviews. The PSR event data will be analyzed for trends and assist in identifying targets for process improvement, both at Air Force and DOD levels.

Question. General Siniscalchi, how many nursing positions does the Air Force have for senior nurses to remain in direct patient care?

Answer. We have developed a career track for Master Clinicians and Master Research positions through the rank of Colonel. This career track will allow our expert clinicians and researchers to stay within their realm of expertise without sacrificing promotion opportunity.

Master Clinicians are board certified nursing experts with a minimum preparation of a master's degree and at least 10 years of clinical experience in their professional specialty. They serve as the functional expert and mentor to junior nurses. Our Master Researchers are Ph.D. prepared and have demonstrated sustained excellence in the research arena.

Both of these highly respected positions are critical in the advancement of nursing practice and to the mentoring of our novice nurses. Currently we have 19 Master Clinician and 3 Master Researcher positions established at designated areas. In addition to our Master Clinicians, 3,073 of our 3,355 nurses or 92 percent of our nurses are in direct patient care positions.

Question. General Siniscalchi, how many nursing positions does the Air Force have for senior nurses to remain in direct patient care?

A new study published in the New England Journal of Medicine shows that inadequate staffing is tied to higher patient mortality rates which supports the prin-

ciples that call for nurse staffing to be flexible and continually adjusted based on patients' needs and other factors.

Answer. We have developed a career track for Master Clinicians and Master Research positions through the rank of colonel. This career track will allow our expert clinicians and researchers to stay within their realm of expertise without sacrificing promotion opportunity.

Master Clinicians are board certified nursing experts with a minimum preparation of a master's degree and at least 10 years of clinical experience in their professional specialty. They serve as the functional expert and mentor to junior nurses. Our Master Researchers are Ph.D. prepared and have demonstrated sustained excellence in the research arena.

Both of these highly respected positions are critical in the advancement of nursing practice and to the mentoring of our novice nurses. Currently we have 19 Master Clinician and 3 Master Researcher positions established at designated areas. In addition to our Master Clinicians, 3,073 of our 3,355 nurses or 92 percent of our nurses are in direct patient care positions.

SUBCOMMITTEE RECESS

Chairman INOUYE. The subcommittee will reconvene on Wednesday, April 13 at 10:30 for a classified briefing with the Commander of the United States Pacific Command. Until then, we stand in recess.

[Whereupon, at 12:34 p.m., Wednesday, April 6, the subcommittee was recessed, to reconvene subject to the call of the Chair.]