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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 2011

WEDNESDAY, MARCH 10, 2010

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

The subcommittee met at 10:13 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Daniel K. Inouye (chairman) presiding.

Present: Senators Inouye, Murray, and Cochran.

DEPARTMENT OF DEFENSE

MEDICAL HEALTH PROGRAMS

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

OPENING STATEMENT OF CHAIRMAN DANIEL K. INOUYE

Chairman INOUYE. The hearing will come to order.

This morning, we will review the Department of Defense's medical programs.

And we'll have two panels. First, we'll hear from the Surgeon Generals of the services: General Schoomaker, Admiral Adam Robinson, Jr., and General Charles Green. Then we'll hear from the Chiefs of the Nurse's Corps, General Patricia Horoho, Admiral Karen Flaherty, and General Kimberly Siniscalchi.

And I'd like to welcome all of you this morning, and I'd like to welcome back General Schoomaker, Admiral Robinson, and a special welcome to General Green, when he gets here.

Welcome, sir.

General GREEN. Thank you. My apologies.

Chairman INOUYE. This is your first hearing, and we look forward to working together.

The subcommittee holds a special hearing each year for an opportunity to discuss the critically important issues related to healthcare, the well-being of our servicemembers and their families. As such, the Surgeons General and the Chiefs of the Nurse's Corps have been called upon to share their insight on areas that need improvement and areas that see continuing success and progress.

Military medicine is a critical element in our defense strength and an essential component of the benefits provided to our servicemembers and their families. We must ensure that the most

advanced treatment and technology is being used by expertly trained personnel, and, on the battlefield, at the same time, providing sufficient capacity to care for servicemembers and their families at home.

Our ability to care for our wounded on the modern battlefields is a testament both to hard work and dedication of our men and women in uniform and to the application of new technology, which is a hallmark of the United States Armed Forces. It is also due to the dedicated men and women in our Medical Service Corps that are deploying with our soldiers, airmen, sailors, and marines.

On average, over 50 percent of our current Active Duty Medical Service Corps have deployed at least once. Numerous specialties have had multiple deployments. This tempo is making it more challenging to recruit and to retain qualified medical personnel into the services, and is presenting new stress for our caregivers who move from treating injured servicemembers on the battlefield to treating them back at home.

We are concerned about the number of deployments for all servicemembers, but today I'd like to take this opportunity to highlight the impact on our medical personnel.

Our medical personnel rely on a small pool of resources for deployment. While the total medical workforce is over 255,000, many of these individuals are civilians or contractors, and do not deploy. Therefore, the total pool of deployable military medical personnel is only 177,000 plus. In 2009, 12,700 medical personnel were deployed, over 7 percent of the pool. These numbers present serious challenges to the men and women testifying before us. It falls on them to ensure a proper balance of care at home and treatment on the battlefield, all the while furthering our advances in training and technology, and providing care for our caregivers.

To help meet these needs, our medical service personnel must be provided sufficient resources. The fiscal year 2011 budget before us goes a long way in providing these resources. The Department has made substantial progress in moving programs into the base budget that were initially funded through supplementals.

Determining that medical research and prevention for injuries such as traumatic brain injury (TBI), psychological health, prosthetic, eye injuries, and hearing loss, and so much more, our cobudget responsibility of the Department of Defense (DOD) is essential in addressing the numerous issues facing our families and members.

In addition, we're aware that resources are required to achieve a world-class facility at the new Walter Reed National Military Medical Center. We also understand that more will be required as we continue to identify the long-term needs of both our wounded and our nonwounded servicemembers and their families.

These are some of the issues we'll discuss this morning, and I look forward to your testimony and note that your full statements will be made part of the record.

And may I call upon you, Admiral Robinson, for the opening statement.

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

Admiral ROBINSON. Thank you very much, sir.

Good morning, Chairman Inouye, Senator Cochran, Senator Murray, distinguished members of the subcommittee. I want to thank you for your unwavering support of Navy medicine—particularly as we continue to care for those who go in harm's way—their families, and all beneficiaries. I am honored to be with you today to provide an update on the state of Navy medicine, including some of our accomplishments, our challenges and our strategic priorities.

Navy medicine: world-class care anytime, anywhere. This poignant phrase is arguably the most telling description of Navy medicine's accomplishments in 2009 and continues to drive our operational tempo and priorities for the coming years and beyond.

Throughout the last year, we saw challenges and opportunities and, moving forward, I anticipate the pace of operations and demands will continue to increase. We have been stretched in our ability to meet our increasing operational and humanitarian assistance requirements, as well as maintain our commitment to provide care to a growing number of beneficiaries. However, I am proud to say that we are responding to this demand with more flexibility and agility than ever before.

The foundation of Navy medicine is force health protection; it's what we do and why we exist. Nowhere is our commitment more evident than in Iraq and Afghanistan. During my October 2009 trip to theater, I again saw the outstanding work of our medical personnel. The Navy medicine team is working side by side with Army and Air Force medical personnel and coalition forces to deliver outstanding healthcare to our troops and civilians alike.

As our wounded warriors return from combat and begin the healing process, they deserve a seamless and comprehensive approach to their recovery. We want them to mend in body, mind, and spirit.

Our patient and family centered approach brings together medical treatment providers, social workers, case managers, behavioral health providers, and chaplains. We are working closely with our line counterparts with the Marine Corps Wounded Warrior regiments and Navy's Safe Harbor, to support the full-spectrum recovery process for sailors, marines, and their families.

We must act with a sense of urgency to continue to help build resiliency among our sailors and marines, as well as the caregivers who support them. We are aggressively working to reduce the stigma surrounding psychological health and operational stress concerns which can be a significant barrier to seeking mental health services.

Programs such as Navy operational stress control, Marine Corps combat operational stress control, FOCUS—that is, families over coming under stress—caregiver occupational stress control, and our suicide prevention programs are in place and maturing to provide support to personnel and their families.

An important focus area for all of us continues to be caring for our warriors suffering with traumatic brain injury. We are expanding TBI training to healthcare providers throughout the fleet and the Marine Corps. We are also implementing a new in-theater TBI Surveillance Program and conducting important research. We are also employing a strategy that is both collaborative and integrative by actively partnering with the other services, the Defense Center of Excellence for Psychological Health and Traumatic Brain Injury,

the Department of Veterans Affairs, and leading academic medical and research centers, to make the best care available to our warriors.

We must continue to recognize the occupational stress on our caregivers. They are subject to the psychological demands of exposure to trauma, loss, fatigue, and inner conflict. This is why our caregiver occupational stress control programs are so important to building and sustaining the resiliency of our providers.

Mental health specialists are being placed in operational environments and forward deployed to provide services where and when they are needed. The Marine Corps is sending more mental health teams to the front lines, with the goal of better treating an emotionally strained force.

Operational stress control and readiness teams, known as OSCAR, will soon be expanded to include the battalion level. This will put mental health support services much closer to combat troops.

A mobile care team of Navy medicine mental health professionals is currently deployed to Afghanistan, conducting mental health surveillance, commander leadership consultation, and coordination of mental healthcare for sailors throughout the area of responsibility (AOR).

As you know, an integral part of Navy medicine, or Navy's maritime strategy is humanitarian assistance and disaster relief. In support of Operation Unified Response, Haiti, Navy medicine answered the call. We deployed *Comfort* from her home port in Baltimore, within 77 hours of the order, and ahead of schedule. She was on station in Port-au-Prince, 5 days later. And from the beginning, the operational tempo onboard *Comfort* was high, and our personnel have been challenged, both professionally and personally. For many, this will, indeed, be a career-defining experience. And I spoke to the crew as they were preparing to get underway, and related just how important this mission is and why it is a vital part of Navy's maritime strategy.

I am encouraged with our recruiting efforts within Navy medicine, and we are starting to see the results of new incentive programs. But, while overall manning levels for both officer and enlisted personnel are relatively high, ensuring we have the proper specialty mix continues to be a challenge in both the Active and Reserve components.

Several wartime critical specialties, as well as advanced practice nursing and physicians assistants, are undermanned. We are facing shortfalls for general dentists, oral maxillofacial surgeons, and many of our mental health specialists, including clinical psychologists and social workers. We continue to work hard to meet this demand, but fulfilling the requirements among these specialties is expected to present a continuing challenge.

Research and development is critical to Navy medicine's success and our ability to remain agile to meet the evolving needs of our warfighter. It is where we find solutions to our most challenging problems and, at the same time, provide some of medicine's most significant innovations and discoveries.

Research efforts targeted at wound management, including enhanced wound repair and reconstruction, as well as extremity and

internal hemorrhage control and phantom limb pain in amputees, present definitive benefits. These efforts support our emerging expeditionary medical operations and aid in support to our wounded warriors.

Clearly, one of the most important priorities for leadership of all the services is the successful transition to the Walter Reed National Military Medical Center on board the campus at the National Naval Medical Center. We are working diligently with the lead DOD organizations, the Joint Task Force National Capital Medical, to ensure that this significant and ambitious project is executed without any disruption to services to our sailors, marines, and their families, and all of our beneficiaries for whom we are privileged and honored to serve.

In summary, I believe that we are at an important crossroads for military medicine. How we respond to the challenges facing us today will likely set the stage for decades to come. Commitment to our wounded warriors and their families must never waiver, and our programs of support and hope must be built and sustained for the long haul. And the long haul is the rest of this century, when the young wounded warriors of today mature into our aging heroes in the latter part of this century. They will need our care and support, as well as their families, for a lifetime.

PREPARED STATEMENT

On behalf of the men and women of Navy medicine, I want to thank the subcommittee for their tremendous support, their confidence and their leadership. It has been my pleasure to testify today, and I look forward to your questions.

Thank you very much.

[The statement follows:]

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

INTRODUCTION

Chairman Inouye, Senator Cochran, distinguished Members of the Subcommittee, I am honored to be with you today to provide an update on the state of Navy Medicine, including some of our accomplishments, challenges and strategic priorities. I want to thank the Committee Members for your 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—World Class Care . . . Anytime, Anywhere. This poignant phrase is arguably the most telling description of Navy Medicine's accomplishments in 2009 and continues to drive our operational tempo and priorities for the coming year and beyond. Throughout the last year we saw challenges and opportunities; and moving forward, I anticipate the pace of operations and demands placed upon us will continue to increase. Make no mistake: We have been stretched in our ability to meet our increasing 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 to that we are responding to this demand with more flexibility and agility than ever before. We are a vibrant, world-wide healthcare system fully engaged and integrated in carrying out the core capabilities of the Maritime Strategy around the globe. Regardless of the challenges ahead, I am confident that we are well-positioned for the future.

Since becoming the Navy Surgeon General in 2007, I have invested heavily in our strategic planning process. How we accomplish our mission is rooted in sound planning, sharp execution and constructive self-assessment at all levels of our organization. I challenged our leadership to create momentum and establish a solid foundation of measurable progress. It's paying dividends. We are seeing improved and sustained performance in our strategic objectives. Just as importantly, our planning

process supports alignment with the Department of Navy's Strategic Plan and Operations Guidance.

Navy Medicine's commitment to Patient and Family-Centered Care is also reflected in our resourcing processes. An integral component of our Strategic Plan is providing performance incentives that promote quality and directly link back to workload and resources. We are evolving from a fiscal planning and execution process rooted in historical data, to a system which links requirements, resources and performance goals. This transformation properly aligns authority, accountability and financial responsibility with the delivery of quality, cost-effective healthcare.

The President's budget for fiscal year 2011 adequately funds Navy Medicine to meet its medical mission for the Navy and Marine Corps. The budget also provides for the maintenance of our facilities. We are, however, closely assessing the resource impacts associated with Operation Unified Response, in Haiti. While seeking reimbursement as appropriate from U.S. Southern Command in accordance with DOD direction, we are working to mitigate any potential impacts—both in the short-term and long-term. We are cross-leveling personnel, meaning that we are assigning personnel within Navy Medicine to ensure effective use of existing resources, while leveraging support from the Navy Reserve, the other Services and our civilian network partners, as needed, and when conditions warrant.

FORCE HEALTH PROTECTION

The foundation of Navy Medicine is Force Health Protection. It's what we do and why we exist. In executing our Force Health Protection mission, the men and women of Navy Medicine are engaged in all aspects of expeditionary medical operations in support of our warfighters. The continuum of care we provide includes all dimensions of physical and psychological well-being. This is our center of gravity and we have and will continue to ensure our Sailors and Marines are medically and mentally prepared to meet their world-wide missions.

Nowhere is our commitment to Force Health Protection more evident than in our active engagement in military operations in Iraq and Afghanistan. As these overseas contingency operations evolve, and in many respects become increasingly more dangerous, we are seeing burgeoning demand for expeditionary combat casualty care in support of joint operations. I recently returned from a trip to Afghanistan and I again saw the outstanding work of our medical personnel. The Navy Medicine team is working side-by-side with Army and Air Force medical personnel and coalition forces to deliver outstanding healthcare to our troops and civilians alike.

We must continue to be innovative and responsive at the deckplates and on the battlefield. Since the start of Operation Enduring Freedom and Operation Iraqi Freedom, the Marine Corps has fielded new combat casualty care capabilities which include: updated individual first aid kits with combat gauze, advanced tourniquets, use of Tactical Combat Casualty Care principles, troop training in Combat Lifesaver, and the use of Factor VII—a blood clotting agent used in trauma settings. In addition, Navy Fleet Hospital transformation has redesigned expeditionary medical facilities that are lighter, modular, more mobile, and interoperable with other Services' facilities.

Our progress is also evident in the innovative work undertaken by a Shock Trauma Platoon (STP) 2 years ago in Afghanistan. This team, comprised of two physicians, two nurses, a physician assistant and 14 corpsmen, essentially created a mobile emergency room—a seven-ton truck with a Conex container and welded steel plates—that went into combat to administer more expedient and effective care in austere settings. This prototype led to the creation of the Mobile Trauma Bay (MTB), a capability that both Marine Corps and Navy Medicine leadership immediately recognized as vital to the warfighter and an unquestionable life-saver on the battlefield. MTB use has already been incorporated into our Afghanistan shock trauma platoon operations, and they are already positively impacting forward resuscitative and stabilization care. We understand that the Marine Corps has fully embraced the MTB concept and is planning to add additional units in future POM submissions.

HUMANITARIAN ASSISTANCE AND DISASTER RESPONSE

An integral part of the Navy's Maritime Strategy is humanitarian assistance and disaster response. In the wake of the devastating earthquake in Haiti earlier this year, our Nation moved forward with one of the largest relief efforts in our history to save lives, deliver critically needed supplies and provide much-needed hope. The response was rapid, as Navy deployed ships and expeditionary forces, comprised of more than 10,000 personnel, to provide immediate relief and support for the Haitian people. In support of Operation Unified Response, Navy Medicine answered the call.

We deployed USNS *Comfort* (T–AH 20) from her homeport in Baltimore within 77 hours and ahead of schedule—going from an industrial shipboard site to a ready afloat Naval hospital, fully staffed and equipped. She was on station in Port-au-Prince 5 days later and treating patients right away. From the beginning, the operational tempo onboard USNS *Comfort* has been high with a significant trauma and surgical caseload. Medical teams from the ship are also ashore to help in casualty evaluation, triage crush wounds, burn injuries and other health issues. Providing care around the clock, our personnel have been challenged both professionally and personally. For many, this will be a career-defining experience and certainly reflects the Navy's commitment as a "Global Force for Good." I spoke to the crew as they were preparing to get underway, and personally related just how important this mission is and why it is a vital part of the Navy's Maritime Strategy.

We train so we are mission ready and USNS *Comfort* was well-prepared for this challenging deployment as a result of her crew's participation in Continuing Promise (April–June 2009), a humanitarian and civic assistance mission, in partnership with nations of the Caribbean and Latin America, to provide medical, dental, veterinary, educational and engineering programs both ashore and afloat.

We are continuing to respond to requirements from the Commander, U.S. Southern Command in order to put the proper supporting medical elements in the area of operations. Navy Medicine additional support includes the deployment of a Forward Deployed Preventive Medicine Unit (FDPMU) and augmented Casualty Receiving and Treatment Ship (CRTS) medical staff capabilities onboard U.S.S. *Bataan* (LHD 5). We also recognize the potential psychological health impact on our medical personnel involved in this humanitarian assistance mission and have ensured we have trained Caregiver Occupational Stress Control (CgOSC) staff onboard.

Navy Medicine is inherently flexible and capable of meeting the call to support multiple missions. I am proud of the manner in which the men and women of Navy Medicine leaned forward in response to the call for help. In support of coordination efforts led by the Department of State and the U.S. Agency for International Development, and in collaboration with nongovernmental organizations, both domestic and international, our response demonstrated how the expeditionary character of our Naval and Marine forces is uniquely suited to provide assistance during interagency and multinational efforts.

CONCEPT OF CARE

Navy Medicine's Concept of Care is Patient and Family-Centered Care. It is at the epicenter of everything we do. This concept is elegant in its simplicity yet extraordinarily powerful. It identifies each patient as a participant in his or her own healthcare and recognizes the vital importance of the family, military culture and the military chain of command in supporting our patients. My goal is for this Concept of Care—this commitment to our patients and their families—to resonate throughout our system and guide all our actions. It is enabled by our primary mission to deliver force health protection and a fully ready force; mutually supported by the force multipliers of world class research and development, and medical education. It also leverages our emphasis on the health and wellness of our patients through an active focus on population health.

CARING FOR OUR HEROES

When our Warriors go into harm's way, we in Navy Medicine go with them. At sea or on the ground, Sailors and Marines know that the men and women of Navy Medicine are by their side ready to care for them. There is a bond of trust that has been earned over years of service together, and make no mistake, today that bond is stronger than ever. Our mission is to care for our wounded, ill and injured, as well as their families. That's our job and it is our honor to have this opportunity.

As our Wounded Warriors return from combat and begin the healing process, they deserve a seamless and comprehensive approach to their recovery. We want them to mend in body, mind and spirit. Our focus is multidisciplinary-based care, bringing together medical treatment providers, social workers, case managers, behavioral health providers and chaplains. We are working closely with our line counterparts with programs like the Marine Corps' Wounded Warrior Regiments and the Navy's Safe Harbor to support the full-spectrum recovery process for Sailors, Marines and their families.

Based on the types of injuries that we see returning from war, Navy Medicine continues to adapt our capabilities to best treat these conditions. When we saw a need on the West Coast to provide expanded care for returning Wounded Warriors with amputations, we established the Comprehensive Combat and Complex Cas-

uality Care (C^5) Program at Naval Medical Center, San Diego, in 2007. C^5 manages severely injured or ill patients from medical evacuation through inpatient care, outpatient rehabilitation, and their eventual return to active duty or transition from the military. We are now working to expand utilization of Project C.A.R.E—Comprehensive Aesthetic Recovery Effort. This initiative follows the C^5 model by ensuring a multidisciplinary approach to care, yet focuses on providing state-of-the-art plastic and reconstructive surgery for our Wounded Warriors at both Naval Medical Center San Diego and Naval Medical Center Portsmouth, with potential future opportunities at other treatment facilities.

We have also significantly refocused our efforts in the important area of clinical case management at our military treatment facilities and major clinics serving Wounded Warriors to ensure appropriate case management services are available to all who need them. The Clinical Case Management Program assists patients and families with clinical and non-clinical needs, facilitating communication between patient, family and multi-disciplinary care team. Our clinical case managers collaborate with Navy and Marine Corps Recovery Care Coordinators, Federal Recovery Coordinators, Non-Medical Care Managers and other stakeholders to address Sailor and Marine issues in developing Recovery Care Plans. As of January 2010, 192 Clinical Case Managers are assigned to Military Treatment Facilities and ambulatory care clinics caring for over 2,900 Sailors, Marines and Coast Guardsmen.

PSYCHOLOGICAL HEALTH AND POST-TRAUMATIC STRESS

We must act with a sense of urgency to help build resiliency among our Sailors and Marines, as well as the caregivers who support them. We recognize that operational tempo, including the number and length of deployments, has the potential to impact the psychological health of service members and their family members. We are aggressively working to reduce the stigma surrounding psychological health and operational stress concerns which can be a significant barrier to seeking mental health services for both military personnel and civilians. Programs such as Navy Operational Stress Control, Marine Corps Combat Operational Stress Control, FOCUS (Families Overcoming Under Stress), Caregiver Occupational Stress Control (CgOSC), and our suicide prevention programs (A–C–T Ask-Treat-Care) are in place and maturing to provide support to personnel and their families.

The Navy Operational Stress Control program and Marine Corps Combat Operational Stress Control program are the cornerstones of the Department of the Navy's 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.

—Multidisciplinary expertise (medical, chaplains and other support services) for more affected members.

Decreasing the stigma associated with seeking psychological healthcare requires a culture change throughout the Navy and Marine Corps. Confronting an ingrained culture will take time and active leadership support. Stigma reducing interventions span three major fronts: (1) education and training for individual Sailors and Marines that normalizes mental healthcare; (2) leadership training to improve command climate support for seeking mental healthcare; and (3) encouragement of care outreach to individual Sailors, Marines, and their commands. This past year saw wide-spread dissemination of Operational Stress Control (OSC) doctrine as well as a Navy-wide education and training program that includes mandatory Navy Knowledge Online courses, instructor led and web-based training.

Navy Medicine ensures a continuum of psychological healthcare is available to service members throughout the deployment cycle—pre-deployment, during deployment, and post-deployment. We are working to improve screening and surveillance using instruments such as the Behavior Health Needs Assessment Survey (BHNAS) and Post-Deployment Health Assessment (PDHA) and Post-Deployment Health Reassessment (PDHRA).

Our mental health specialists are being placed in operational environments and forward deployed to provide services where and when they are needed. The Marine Corps is sending more mental health teams to the front lines with the goal of better treating an emotionally strained force. Operational Stress Control and Readiness (OSCAR) teams will soon be expanded to include the battalion level, putting mental health support services much closer to combat troops. A Mobile Care Team (MCT) of Navy Medicine mental health professionals is currently deployed to Afghanistan to conduct mental health surveillance, command leadership consultation, and coordi-

nate mental healthcare for Sailors throughout the AOR. In addition to collecting important near real-time surveillance data, the MCT is furthering our efforts to decrease stigma and build resilience.

We are also making mental health services available to family members who may be affected by the psychological consequences of combat and deployment through our efforts with Project FOCUS, our military treatment facilities and our TRICARE network partners. Project FOCUS continues to be successful and we are encouraged that both the Army and Air Force are considering implementing this program. We also recognize the importance of the counseling and support services provided through the Fleet and Family Support Centers and Marine Corps Community Services.

Beginning in 2007, Navy Medicine established Deployment Health Centers (DHCs) as non-stigmatizing portals of care for service members staffed with primary care and psychological health providers. We now have 17 DHCs operational. Our healthcare delivery model supports early recognition and treatment of deployment-related psychological health issues within the primary care setting. Psychological health services account for approximately 30 percent of all DHC encounters. We have also increased mental health training in primary care, and have actively partnered with Line leaders and the Chaplain Corps to develop combat and operational stress control training resources. Awareness and training are keys to our surveillance efforts. Over 4,000 Navy Medicine providers, mental health professionals, chaplains and support personnel have been trained to detect, screen and refer personnel who may be struggling with mental health issues.

We must continue to recognize the occupational stress on our caregivers. They are subject to the psychological demands of exposure to trauma, loss, fatigue and inner conflict. This is why our Caregiver Occupational Stress Control programs are so important to building and sustaining the resiliency of our providers. We cannot overlook the impact on these professionals and I have directed Navy Medicine leadership to be particularly attuned to this issue within their commands.

TRAUMATIC BRAIN INJURY

While there are many significant injury patterns in theatre, an important focus area for all of us remains Traumatic Brain Injury (TBI). Blast is the signature injury of OEF and OIF—and from blast injury comes TBI. The majority of TBI injuries are categorized as mild, or in other words, a concussion. Yet, there is much we do not yet know about these injuries and their long-term impacts on the lives of our service members.

The relative lack of knowledge about mild TBI amongst service members and healthcare personnel represents an important gap that Navy Medicine is seriously addressing. We are providing TBI training to healthcare providers from multiple disciplines throughout the fleet and the Marine Corps. This training is designed to educate personnel about TBI, introduce the Military Acute Concussion Exam (MACE) as a screening tool for mild TBI, inform providers about the Automated Neurocognitive Assessment Metric (ANAM) test, and identify a follow-up for assessment including use of a repeatable test battery for identification of cognitive status. We have recently established and are now expanding our TBI program office to manage the implementation of the ANAM as a pre-deployment test for service members in accordance with DOD policy. This office will further develop models of assessment and care as well as support research and evaluation programs.

All the Services expect to begin implementation of a new in-theater TBI surveillance system which will be based upon incident event tracking. Promulgated guidelines will mandate medical evaluation for all service members exposed within a set radius of an explosive blast, with the goal to identify any service member with subtle cognitive deficits who may not be able to return to duty immediately.

Navy Medicine has begun implementing the ANAM assessment at the DHCs and within deploying units as part of an Assistant Secretary of Defense (Health Affairs) mandate. We have also partnered with Line leadership, or operational commanders, to identify populations at risk for brain injury (e.g., front line units, SEAL units, and Navy Explosive Ordinance Disposal units). In addition, an in-theater clinical trial for the treatment of vestibular symptoms of blast-exposure/TBI was completed at the USMC mTBI Center in Al Taqqadum, Iraq.

Both our Naval Health Research Center and Navy-Marine Corps Public Health Center are engaged with tracking TBI data through ongoing epidemiology programs. Goals this year include the establishment of a restoration center in-theatre to allow injured Sailors and Marines a chance to recover near their units and return to the fight.

Additionally, the National Naval Medical Center's Traumatic Stress and Brain Injury Program provides care to all blast-exposed or head-injured casualties returning from theatre to include patients with an actual brain injury and traumatic stress. Navy Medicine currently has TBI clinics at San Diego, Portsmouth, Camp Pendleton and Camp Lejeune with plans for further expansion reflecting our commitment to the treatment of this increasingly prevalent injury.

We are employing a strategy that is both collaborative and integrative by actively partnering with the other Services, Defense Center of Excellence for Psychological Health and Traumatic Brain Injury, the Veterans Administration, and leading academic medical and research centers to make the best care available to our Warriors afflicted with TBI.

EXCELLENCE IN RESEARCH AND DEVELOPMENT (R&D)

Research and development is critical to Navy Medicine's success and our ability to remain agile to meet the evolving needs of our warfighters. It is where we find solutions to our most challenging problems and, at the same time, provide some of medicine's most significant innovations and discoveries. Our R&D programs are truly force-multipliers and enable us to provide world-class healthcare to our beneficiaries.

The approach at our research centers and laboratories around the world is straightforward: Conduct health and medical research, development, testing, evaluation and surveillance to enhance deployment readiness. Each year, we see more accomplishments which have a direct impact on improving force health protection. The contributions are many and varied, ranging from our confirmatory work in the early stages of the H1N1 pandemic, to the exciting progress in the development of a malaria vaccine. Research efforts targeted at wound management, including enhanced wound repair and reconstruction as well as extremity and internal hemorrhage control, and phantom limb pain in amputees, present definitive benefits. These efforts also support our emerging expeditionary medical operations and aid in support to our Wounded Warriors.

THE NAVY MEDICINE TEAM

Navy Medicine is comprised of compassionate and talented professionals who continue to make significant contributions and personal sacrifices to our global community. Our team includes our officers, enlisted personnel, government civilian employees, contract workers and volunteers working together in a vibrant healthcare community. All have a vital role in the success of our enterprise. Our priority is 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.

Overall, I am encouraged with our recruiting efforts within Navy Medicine and we are starting to see the results of new incentive programs. But while overall manning levels for both officer and enlisted personnel are relatively high, ensuring we have the proper specialty mix continues to be a challenge. Several wartime critical specialties including psychiatry, family medicine, general surgery, emergency medicine, critical care and perioperative nursing, as well as advanced practice nursing and physician assistants, are undermanned. We are also facing shortfalls for general dentists, oral maxillofacial surgeons, and many of our mental health specialists including clinical psychologists and social workers. We have increasing requirements for mental health professionals as well as for Reserve Component Medical Corps, Dental Corps, Medical Service Corps and Nurse Corps officers. We continue to work hard to meet this demand, but fulfilling the requirements among these specialties is expected to present a continuing challenge.

I want to also reemphasize the priority we place on diversity. We are setting the standard for building a diverse, robust, innovative healthcare workforce, but we can do more in this important area. Navy Medicine is stronger and more effective as a result of our diversity at all levels. Our people are our most important resource, and their dignity and worth are maintained through an atmosphere of service, professionalism, trust and respect.

PARTNERSHIPS AND COLLABORATION

Navy Medicine continues to focus on improving interoperability with the Army, Air Force, Veterans Administration (VA), as well other Federal and civilian partners to bring operational efficiencies, optimal technology and training together in support of our patients and their families, our missions, and the national interests. Never has this collaborative approach been more important, particularly as we improve our approaches to ensuring seamless transitions for our veterans.

We remain committed to resource sharing agreements with the VA and our joint efforts in support of improving the Disability Evaluation System (DES) through the ongoing pilot program at several MTFs. The goal of this pilot is to improve the disability evaluation process for service members and help simplify their transitions. Together with the VA and the other Services, we are examining opportunities to expand this pilot to additional military treatment facilities. Additionally, in partnership with the VA, we will be opening the James A. Lovell Federal Health Care Center in Great Lakes, Illinois—a uniquely integrated Navy/VA medical facility.

We also look forward to leveraging our inter-service education and training capabilities with the opening of the Medical Education and Training Campus (METC) in San Antonio in 2010. This new tri-service command will oversee the largest consolidation of service training in DOD history. 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 hospital corpsmen bring to the Navy and Marine Corps—in hospitals, clinics at sea and on the battlefield.

Clearly one of the most important priorities for the leadership of all the Services is the successful transition to the Walter Reed National Military Medical Center onboard the campus of the National Naval Medical Center, Bethesda. We are working diligently with the lead DOD organization, Joint Task Force—National Capital Region Medical, to ensure that this significant and ambitious project is executed properly and without any disruption of services to our Sailors, Marines, their families, and all our beneficiaries for whom we are privileged to serve.

THE WAY FORWARD

I believe we are at an important crossroads for military medicine. How we respond to the challenges facing us today will likely set the stage for decades to come. Commitment to our Wounded Warriors and their families must never waver and our programs of support and hope must be built and sustained for the long-haul—and the long-haul is the rest of this century when the young Wounded Warriors of today mature into our aging heroes in the years to come. They will need our care and support as will their families for a lifetime. Likewise, our missions of cooperative engagement, through humanitarian assistance and disaster response, bring opportunities for us, our military and the Nation. It is indeed a critical time in which to demonstrate that the United States Navy is truly a "Global Force for Good."

Navy Medicine is a vibrant, world-wide healthcare system comprised of compassionate and talented professionals who are willing to make contributions and personal sacrifices. This team—our team—including officer, enlisted, civilians, contractors, and volunteers work together as a dynamic healthcare family. We are all essential to success.

Navy Medicine will continue to meet the challenges ahead and perform our missions with outstanding skill and commitment. On behalf of the men and women of Navy Medicine, I want to thank the Committee for your tremendous support, confidence and leadership. It has been my pleasure to testify before you today and I look forward to your questions.

Chairman INOUYE. I thank you very much, Admiral.

Before we proceed, I must apologize to my vice chairman for overlooking his presence. May I call upon the vice chairman for his opening statement.

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

It's a pleasure to join you in welcoming the leaders of our doctors and nurses who serve in the military forces. We appreciate their sacrifice and their service and their leadership in helping ensure that, here at home and around the world, our servicemen and women get the best medical care available. We look forward to working with you in the appropriations process to identify priorities, to make sure that we have money where the needs are, and living up to the commitment that we all feel toward our servicemembers and their families who sacrifice so much for the security interests of our country.

Thank you very much for your service and for your presence here today.

Chairman INOUYE. Senator Murray.

Senator MURRAY. Mr. Chairman, I will pass on an opening statement.

I just want to thank all of our witnesses today, and for having this important hearing.

Chairman INOUYE. Thank you. Thank you very much.

And I'd like to now call upon the Surgeon General of the Army, General Schoomaker.

STATEMENT OF LIEUTENANT GENERAL ERIC B. SCHOOMAKER, M.D., Ph.D., SURGEON GENERAL; AND COMMANDER, U.S. ARMY MEDICAL COMMAND, DEPARTMENT OF THE ARMY

General SCHOOMAKER. Chairman Inouye, Vice Chairman Cochran, Senator Murray, and other distinguished members of the Defense Subcommittee, thank you for inviting us here to discuss the Defense Health Program and our respective service medical programs.

Now, in my third congressional hearing cycle as the Army Surgeon General and the Commanding General of the Army Medical Command, I can tell you that these hearings are valuable opportunities for me to talk about the accomplishments and challenges of Army medicine, and to hear—for all of us to hear your collective perspectives regarding military health promotion and healthcare.

You and your staff members ask some difficult questions, but these questions help keep us focused on those whom we serve: our soldiers, sailors, airmen, marines, coast guardsmen, our family members, our retirees, and the American public at large.

Sir, you earlier introduced her, but I wanted to take this opportunity to welcome and introduce my chief of the Army Nurse Corps, returning from a very successful command of the Western Regional Medical Command, headquartered at Fort Lewis, Washington, and covering the western third of the United States, including Alaska, Major General Patty Horoho. I'm pleased to say that she'll be joining me on my staff as our Deputy Surgeon General, as of the 1st of April, when David Rubenstein leaves a very successful tour to take command of the Army Medical Center and School in San Antonio, Texas.

And so, Patty, welcome, and we're glad to have you on the staff.

I'm pleased to tell you that the President's budget submission for fiscal year 2011 fully funds the Army Medical Department's needs. Your support of the President's proposed budget will be greatly appreciated.

One particular area of special interest to this subcommittee is our comprehensive effort to improve warrior care from the point of injury through evacuation and inpatient treatment to rehabilitation and return to duty or to productive citizens' lives. We, in Army medicine, continue to focus our efforts on our "warriors in transition," which is the term we apply to our wounded and injured soldiers. And I want to thank the Congress for its unwavering support of this effort.

The support of this subcommittee has allowed us to hire additional providers to staff our warrior transition units, the units to which these warriors in transition are assigned, to conduct relevant medical research, and to build even healing campuses across the Army.

I'm convinced the Army has made some lasting improvements there. The most important improvement may be the change of mindset from a focus on disability to an emphasis on ability and achievement. Each of these warriors has the opportunity and the resources to create their own future as soldiers or as productive private citizens. I should say, in this forum, sir, lessons which you, yourself, taught us following your own battle injuries in—in World War II, Mr. Chairman.

In keeping with our focus on preventing injury and illness, Army leadership is currently engaged in an all-out effort to change the Department of Defense's culture regarding traumatic brain injury, or TBI, especially the milder form, which we call "concussion." Our goal is nothing less than a cultural change in the management of soldiers after potential concussive events. Every warrior requires appropriate treatment to minimize concussive injury and to maximize recovery. To achieve this goal, we are educating the force so as to have trained and prepared soldiers, leaders, and medical personnel to provide early recognition, treatment, and tracking of concussive injuries, ultimately designed to protect warrior health.

Traumatic brain injury is a disruption of brain function that results from a blow or a jolt to the head or a penetrating head injury. These occur in combat, they occur on our highways, on our training posts, and on sports fields across the Nation. It's not a phantom condition that is exhibited by a weak servicemember who's trying to get out of a deployment. A servicemember who's behaving badly or irregularly may be struggling and needs help, and we feel very strongly that we need to do everything we can to take care of these warriors who need help. Leaders at all levels must ensure that individuals are aware of, and are willing to take advantage of, available treatments and counseling options.

Our concern is—and this has been documented in a number of studies that we've conducted, including those in the battlefield—that our soldiers and other servicemembers are not coming forward for treatment after the time of an incident. This results in delay in identification, and it compliments the treatment course back here in the United States. We know that early detection leads to early treatment and improved outcomes. However, undiagnosed concussion leads to symptoms affecting operational readiness on the battlefield and the risk of recurrent concussion during the healing period, which can then lead to more long-term permanent brain impairment.

An overview of the education program that we've worked on here is included in this packet, "Brain Injury Awareness Toolkit," which we have available for you and your staffs after the hearing.

The Army is issuing very direct standards and protocols to Commanders and healthcare providers in the field, similar to actions taken after aviation incidents. We have automatic grounding and medical assessments which are required for any soldiers that meets specified criteria.

The end state of these efforts is that every servicemember sustaining a potential concussion will receive early detection, state-of-the-art treatment, and return-to-duty evaluation, with long-term digital healthcare record tracking of their management.

Treatment of mild traumatic brain injury, or concussion, is an emerging science. We feel strongly that the Army is leading the way in implementing these new treatment protocols for the Department of Defense, and that the Department of Defense and the military health system (MHS) is leading the Nation in this regard. I truly believe that this evidence-based directive approach to concussive management is going to change the military culture regarding head injuries and significantly impact the well-being of the force.

In closing, I'm very optimistic about the next 2 years. We have weathered some very serious challenges to the trust that you all have in Army medicine. Logic would not predict that we would be doing as well as we are, and attracting and retaining and career-developing such a talented team of uniformed and civilian medical professionals. However, we continue to do so, year after year, a tribute to all of our Officer Corps and the leadership of our Non-commissioned Officer Corps and our military and civilian workforce. Their continued leadership and dedication are essential for Army medicine to remain strong, for the Army to remain healthy and resilient, and for the Nation to endure.

I personally feel very privileged to serve with these men and women in Army medicine, as soldiers, as Americans, and as global citizens.

PREPARED STATEMENT

We thank you for holding this hearing and for your unwavering support of the military health system and of Army medicine, and I look forward to answering your questions.

Thank you, sir.

Chairman INOUYE. I thank you very much, General.

[The statement follows:]

PREPARED STATEMENT OF LIEUTENANT GENERAL ERIC B. SCHOOMAKER

Chairman Inouye, Vice Chairman Cochran, and distinguished members of the Defense Subcommittee, thank you for inviting us to discuss the Defense Health Program and our respective Service medical programs. Now in my third Congressional hearing cycle as the Army Surgeon General and Commanding General, U.S. Army Medical Command (MEDCOM), I can tell you that these hearings are valuable opportunities for me to talk about the accomplishments and challenges of Army Medicine and to hear your collective perspectives regarding military healthcare. You and your staff members ask some difficult questions, but these questions help keep us focused on those we serve—the Soldiers, Sailors, Marines, Airmen, Coast Guardsmen, Family members, and Retirees as well as the American public. I hope you also find these hearings beneficial as you review the President's budget submission, which this year fully funds the Army Medical Department's needs, and determine priorities and funding levels for the next fiscal year.

The U.S. Army Medical Department is a complex, globally-deployed, and world class team. My command element alone, the MEDCOM, is an $11 billion international health improvement, health protection, emergency response and health services organization staffed by 70,000 dedicated Soldiers, civilians, and contractors. I am in awe at what these selfless servants have done over the past years—their accomplishments have been quietly, effectively, powerfully successful. While we have experienced our share of crises and even tragedies, despite 8 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 cutting-edge fashion when prevention fails; and are supported by an extraordinarily talented medical force to include those who serve at the side of the Warrior on the battlefield. We mourn the loss of 26 teammates in the Fort Hood shootings—six dead and 20 wounded—but are inspired by the resolve shown by their units to continue their

missions and the exemplary performance of the 467th and 1908th Medical Detachments serving in Afghanistan today.

One particular area of special interest to this subcommittee is our comprehensive effort to improve warrior care from point of injury through evacuation and inpatient treatment to rehabilitation and return to duty. I am convinced the Army has made some lasting improvements, and I was recently heartened to read the comments of a transitioning Warrior that reinforced these perceptions. She commented:

"As I look back in the past I am able to see with a reflective eye . . . the people that have helped me fight this battle, mostly my chain of command, who have always stood beside me instead of in front of me. They have gone out of their way to do what was best for me and I cannot say I would be here still if I hadn't had such wonderful support . . . This is my story at the WTB and all in all, I just had to make aware to everyone that has helped that I am very grateful and I truly appreciate all of the work you have done for me."

There is nothing more gratifying than to care for these wounded, ill, and injured heroes. We in Army Medicine continue to focus our efforts on our Warriors in Transition and I want to thank Congress for your unwavering support. The support of this committee has allowed us to hire additional providers, staff our warrior transition units, conduct relevant medical research, and build healing campuses. In the remainder of my testimony today, I will discuss how we are providing optimal stewardship of the investment the American public and this Committee has made in Army Medicine.

We lead and manage Army Medicine through the Kaplan & Norton Balanced Scorecard performance improvement framework that I introduced to you in last year's testimony. The Scorecard balances missions and resources across a broad array, while ensuring that near-term measures of success are aligned with longer-term, more strategic results. This balancing is depicted on the Scorecard's Strategy Map, which shows how we marshal our resources, train and develop our people, and focus our internal processes and efforts so as to balance competing goals. Ultimately our means, ways, and ends contribute toward accomplishing our mission and achieving our strategic vision. The five strategic themes that guide our daily efforts are: Maximize Value in Health Services, Provide Global Operational Forces, Build the Team, Balance Innovation with Standardization, and Optimize Communication and Knowledge Management. Although distinct themes, they inevitably overlap and weave themselves through everything we do in Army Medicine.

The first strategic theme—Maximize Value in Health Services—is built on the belief that providing high quality, evidence-based services is not only the right for our Soldiers and Families; it results in the most efficient use of resources within the healthcare system, thus delivering value to not only our Patients, but indeed, the Nation. In fact, what we really want to do is move from a healthcare system to a system for health.

We have resisted simply inventing a new process, inserting a new diagnostic test or therapeutic option *in vacuo* or adding more layers of bureaucracy but are truly adding value to the products we deliver, the care we provide, and the training of our people. This requires focusing on the clinical outcome for the patient and the community and maintaining or even reducing the overall resource expenditure needed to achieve this objective. It has occurred through adoption of evidence-based practices and reducing unwarranted practice variation—even "unwarranted administrative practice variation" for the transactional processes in our work. As one example of this, Army Medicine is expanding upon our Performance Based Budget model to link resources to clinical and quality outputs. The Healthcare Effectiveness and Data Information Set (HEDISR) is a tool used by more than 90 percent of America's health plans (>400 plans) to measure performance on important dimensions of care, namely, the prevention of disease and evidence-based treatments for some of the most common and onerous chronic illnesses. The measures are very specifically defined, thus permitting comparison across health plans. Since 2007, we have been providing financial incentives to our hospitals, clinics and clinicians for superior compliance in key HEDIS measures. Currently, we track nine measures and compare our performance to national benchmarks. Our performance has improved on each measure, in one case by 63 percent. We have demonstrated that these incentives work to change organizational behavior to achieve desired outcomes in our health system. Put quite simply, our beneficiaries, patients and communities are receiving not only better access to care but better care—objectively measured.

As the DOD budget and health-/healthcare-related costs come under increasing scrutiny, this element of our strategy will be even more critical for us. As the United States struggles to address improvements in health and healthcare outcomes while stabilizing or reducing costs of our national system of care, we in Army Medicine

and the Military Health System will surely keep the goal of maximizing value in our cross-hairs . . . or we will find our budgets tightening without a way to measure the effects on our patients' and our communities' health and well-being.

All of these remarkable achievements would be without meaning or importance to our Soldiers, their Families and our patients if we do not provide access and continuity of care, especially within the direct care system of our medical centers, community hospitals, health centers, and clinics. I am looking carefully at my commanders' leadership and success in ensuring that their medical and dental treatment facilities provide timely access and optimize continuity of care. We have undertaken major initiatives to improve both access and continuity—this is one of the Army Chief of Staff's and my top priorities. After conducting thorough business case analyses, Army Medicine is expanding product lines in some markets and expanding clinical space in others. At 14 locations, we are establishing Community Based Primary Care Clinics by leasing and operating clinics located in off-post communities that are close to where active duty Families live, work, and go to school. These clinics will provide a patient-centered medical home for Families and will provide a range of benefits:

—Improve the readiness of our Army and our Army Family;
—Improve access to and continuity of care;
—Reduce emergency room visits;
—Improve patient satisfaction;
—Implement Best Practices and standardization of services;
—Increase physical space available in military treatment facilities (MTFs); and
—Improve physical and psychological health promotion and prevention.

Along with the rest of the Military Health System, Army Medicine is embracing the Patient-Centered Medical Home concept, which is a recommended practice of the National Committee for Quality Assurance and is endorsed by a number of medical associations, several large third-party payers, and many employers and health plans. The Patient-Centered Medical Home improves patient satisfaction through its emphasis on appropriate access, continuity and quality, and effective communication. The goal is simple: consult with one consistent primary care provider-nurse team for all your medical needs. The seven core features of the Medical Home are:

—Personal Primary Care Provider (primary care manager/team);
—Primary Care Provider Directed Medical Practice (the primary care manager is team leader);
—Whole Person Orientation (patient centered, not disease or provider centered);
—Care is Coordinated and/or Integrated (across all levels of care);
—Quality and Safety (evidenced-based, safe medical care);
—Enhanced Access (meets access standards from the patient perspective); and
—Payment Reform (incentivizes the development and maintenance of the medical home).

I look for 2010 to be the year Army Medicine achieves what we set out to improve 2 years ago in access and continuity, key elements of our covenant with the Army Family, led by our Chief of Staff and Secretary of the Army.

Unlike civilian healthcare systems that can focus all of their energy and resources on providing access and continuity of care, the Military Health System has the equally important mission to Provide Global Operational Forces.

The partnership between and among the medical and line leadership of Operations Iraqi Freedom and Enduring Freedom, Central Command, Army Forces Command, U.S. Army Reserve Command, National Guard Bureau, Army Medical Department Center and School, Medical Research and Materiel Command, Army G3/5/7, and others has resulted in a dynamic reconfiguration of the medical formations and tactics, techniques, and procedures required to support the deployed Army, joint and coalition force. Army Medicine has never missed movement and we continue to achieve the highest survivability rate in the history of warfare. Army Medicine leaders have never lost sight of the need to first and foremost make a difference on the battlefield.

This will not change—it will even intensify in 2010 as the complexity of the missions in Afghanistan increases. And this is occurring even while the need to sustain an Army and joint force which is responsibly withdrawing from Iraq puts more pressure on those medics continuing to provide force health protection and care in Operation Iraqi Freedom. This pressure on our All-Volunteer Army is unprecedented. Healthcare providers, in particular, are subject to unique strains and stressors while serving in garrison as well as in deployed settings. The MEDCOM has initiated a defined program to address provider fatigue with current efforts focused on sustaining the healthy force and identifying and supporting higher risk groups. MEDCOM has a healthy healthcare workforce as demonstrated by statistically significant lower provider fatigue and burnout than: The Professional Quality of Life

Scale (ProQol) norming sample of 1,187 respondents; and Sprang, Clark and White-Woosley's study of 222 civilian behavioral health (BH) providers. But as our Chief of Staff of the Army has told us: this is not an area where we just want to be a little better than the other guy—we want the healthiest and most resilient healthcare provider workforce possible.

The Provider Resiliency Training (PRT) Program was originally designed in 2006, based on Mental Health Advisory Team findings. The U.S. Army Medical Department Center and School (AMEDDC&S) developed a military-specific model identifying "provider fatigue" as the military equivalent of compassion fatigue. In June of 2008, MEDCOM implemented a mandated PRT program to educate and train all MTF personnel to include support staff on the prevention and treatment of signs and symptoms of provider fatigue. The stated goal of PRT is to mitigate the negative effects of exposure to combat, to deployment, to secondary trauma from caring for the casualties of war as well as the unremitting demand for healthcare services and from burnout. All will ultimately improve organizational effectiveness. The AMEDDC&S currently offers three courses in support of the MEDCOM PRT: the Train the Trainer Course; the Professional Resiliency Resident Course; and the PRT Mobile Training.

None of our goals and themes would be achievable without the right mix of talented professionals within Army Medicine and working with Army Medicine; what our Balanced Scorecard refers to as Build The Team: a larger, more inclusive joint medical team; an adaptive and responsive interagency team (VA, DHS, DHHS/NIH/NIAID, CDC, USDA, etc.); an effective coalition team; and a military-civilian/academic-operational team. The teams we build must be aligned with the Army, Defense, and National Military Strategy and long-term goals, not based solely on personalities and the arcane interests of a few. My Deputy Surgeon General, subordinate leaders, and others have been increasingly more deliberate and disciplined in how we form and sustain these critical partnerships.

Effective joint, interagency and coalition team-building has been a serious challenge for some time now. I see the emphasis on our ability to craft these teams grow in 2010. The arrival of September 15, 2011—the deadline for the 2005 BRAC—will be one of the key milestones and tests of this skill. My regional commanding generals in San Antonio and Washington, DC have taken lead roles in this endeavor. Let there be no question among those who underestimate our collective commitment to working as a team and our shared vision to serve the Nation and protect and care for the Warriors and his or her Family—we are One Team!

In addition to building external teams, we need to have the right mix and quality of personnel internal to Army Medicine. In fiscal year 2010 and continuing into fiscal year 2011 the Army requested funding for programs to improve our ability to attract and retain the professional workforce necessary to care for our Army. Our use of civilian hiring incentives (Recruiting, Retention, and Relocation) increased in fiscal year 2010 by $90 million and should increase by an additional $30 million in fiscal year 2011. In fiscal year 2011, civilian hiring incentives will equate to 4.8 percent of total civilian pay. We have instituted and funded civilian recruiting programs at the MEDCOM, regional, and some local levels to seek qualified healthcare professionals. For our military workforce, we are continuing our successful special salary rates, civilian nurse loan repayment programs, and civilian education training programs. Additionally, our Health Professional Scholarship Program and loan repayments will increase in fiscal year 2010 by $26 million and continue into fiscal year 2011. This program supports 1,890 scholarships and 600 participants in loan repayments—it is as healthy a program as it has ever been. Let me point out that our ability to educate and train from within the force—through physician, nursing, administrative, medic and other programs in professional education—is a vital capability which we cannot permit to be degraded or lost altogether. In addition to providing essential enculturation for a military healthcare provider, administrator and leader, these programs have proven to be critical for our retention of these professionals who are willing to remain in uniform, to deploy in harm's way and to assume many onerous duties and assignments in exchange for education in some of the Nation's best programs. Army and Military Graduate Medical, Dental, Nursing and other professional education has undoubtedly played a major role in our remaining a viable force this far into these difficult conflicts.

The theme of evidence-based practice runs through everything we do in Army Medicine and is highlighted throughout our Balanced Scorecard. Evidence-based practices mean integrating individual clinical expertise with the best available external clinical evidence from systematic research. Typical examples of evidence-based practices include implementation of clinical practice guidelines and dissemination of best practices. I encourage my commanders and subordinate leaders to be innovative, but across Army Medicine we Balance Innovation with Standardization

so that all of our patients are receiving the best care and treatment available. Standardization efforts include:

—The MEDCOM AHLTA Provider Satisfaction (MAPS) initiative.

—Care of combat casualties through the Joint Theater Trauma System (JTTS), enabled by the use of a Joint Theater Trauma Registry (JTTR)—both of which I will discuss further below—which examines every casualty's care and outcome of that care, including en route care during medical evacuation (MEDEVAC) with an eye toward standardizing care around the best practices.

—The Virtual Behavioral Health Pilot (aka Comprehensive Behavioral Health Integration) being conducted at Schofield Barracks and Fort Richardson.

—Our initiative to reduce Ventilator Associated Pneumonia events in our ICUs by adopting not only industry best practices, but sending out an expert team of MEDCOM professionals to evaluate our own best practices and barriers to success.

—Our standardized events-driven identification and management of mild TBI/concussion on the battlefield coupled with early diagnosis and treatment of Post-Traumatic Stress Reactions/Acute Stress Reactions as close in time and space to the events which lead to these reactions.

Programs which are in the process of maturing into best practices for more widespread dissemination are:

—The Confidential Alcohol Treatment & Education Pilot (CATEP).

—The standardized and now automated Comprehensive Transition Plan for Warriors In Transition in our WTUs and CBWTUs.

—A standardized program to "build trust in Army Medicine" through hospitality and patient/client/customer service in our medical, dental, and veterinary treatment facilities and throughout the MEDCOM.

—Standardized support of our Active, National Guard, and Reserve forces engaged in the reiterative, cyclic process of the Army Force Generation Model (ARFORGEN) including but not restricted to preparation for combat medics and medical units, Soldier Readiness Processing of deploying units, ensuring full medical readiness of the force, restoration of dental and behavioral health upon redeployment, support of the total Army Family while Soldiers are deployed, and provision of healthcare for mobilized and demobilizing Reserve Component Soldiers and their Families.

These and many other standardized efforts reflect a change in how we do the business of Army Medicine. We can no longer pride ourselves on engaging in a multiplicity of local "science projects" being conducted in a seemingly random manner by well-meaning and creative people but without a focus on added value, standard measures of improved outcomes, and sustainability of the product or process. Even the remarkably agile response to the behavioral health needs-assessment and ongoing requirements at Fort Hood following the tragic shooting were conducted in a very deliberate and effective fashion which emphasized unity of command and control, alignment of all efforts and marshalling of resources to meet a well-crafted and even exportable community behavioral health plan.

The emphasis which Army Medicine leaders have placed on disciplining these innovative measures so as to harvest best practices, subject them to validation at other sites, and rapidly proliferate them across the MEDCOM and Army in a standard fashion has been remarkable. It is the essence of Optimizing Communication and Knowledge Management.

Many of our goals, internal processes and enablers, and resource investments are focused on the knowledge hierarchy: collecting data; coalescing it into information over time and space; giving it context to transform it into knowledge; and applying that knowledge with careful outcome measures to achieve wisdom. This phenomenon of guiding clinical management by the emergence of new knowledge is perhaps best represented by Dr. Denis Cortese, former President and Chief Executive Officer of the Mayo Clinic. He laid out this schematic earlier this year after participating in a set of workshops which centered on healthcare reform. We participated to explore how the Federal system of care might contribute to these changes in health improvement and healthcare delivery.

What Dr. Cortese depicted is a three-domain ideal representation of healthcare delivery and its drivers. We share this vision of how an ideal system should operate. His notion is that this system of care should focus on optimizing individual health and healthcare needs, leveraging the knowledge domain to drive optimal clinical practices. This transition from the knowledge domain to the care delivery domain now takes 17 years. The clinical practice domain then informs and drives the payer domain to remunerate for effective clinical outcomes. What occurs too often today is what I call "widget-building" or "turnstile" medical care which chases remuneration for these encounters—too often independent of whether it is the best treatment

aimed at the optimal outcome. To transform from a healthcare system to a system for health, we need to change the social contract. No longer should we be paid for building widgets (number of clinic visits or procedures), rather, we should be paid for preventing illness and promoting healthy lifestyles. And when bad things happen to good people—which severe illness and injury and war continuously challenge us with—we should care for these illnesses, injuries and wounds by the most advanced evidence-based practices available, reducing unwarranted variation in practice whenever possible.

Our Military Health System is subtly different in that we have two practice domains—garrison and battlefield. Increasingly, we leverage the clinical domain to provide feedback into the knowledge domain—with the help of the electronic health record—AHLTA—and specialized databases. We do this in real time and all under the umbrella of the regulatory domain which sets and enforces standards.

The reengineering of combat trauma care borne of rapid turnaround of new-found, data-driven knowledge to new materiel and doctrinal solutions is one of the premier examples of this concept. The simplest example is our continuous re-evaluation of materials and devices available to Soldiers, combat life savers, combat medics and the trauma team at the point of injury and in initial trauma management and the intellectual framework for their application to rapidly improve outcomes from combat-injured Warriors.

After making the first major change in 40 years to the field medical kit—the Improved First Aid Kit (IFAK)—we have modified the contents of the kit at least three times since May 2005 based upon ongoing reviews of the effectiveness of the materials and head-to-head comparisons to competing devices or protocols. In like fashion, we have modified protocols for trauma management through active in-theater and total systemic analyses of the clinical outcomes deriving from the use of materials and protocols.

The specialized system in this endeavor is a joint and inter-agency trauma system which creates the equivalent of a trauma network available for a major metropolitan area or geographic region in the United States but spread across three continents, 8000 miles end-to-end—the Joint Theater Trauma System (JTTS). Staffed and led by members of the Army, Navy, Marine Corps and Air Force, it is truly a joint process. It is centered on the U.S. Army Institute of Surgical Research in San Antonio, Texas. The specialized database in this effort and an essential element of the JTTS is the Joint Theater Trauma Registry (JTTR)—a near-comprehensive standardized database which has been developed for each casualty as soon as possible in the treatment evacuation chain—usually at level II or III healthcare in theater. One of the most important critical applications of the JTTS and JTTR at present is the ongoing analysis of MEDEVAC times and the casualties being managed during evacuation. This is our effort to minimize the evacuation time for casualty in a highly dispersed force which is subjected in Afghanistan to the "tyranny of terrain and weather."

The decisions about where and how many trauma teams should be placed around the theater of operation as well as where to place MEDEVAC crews and aircraft is a delicate balancing act—one which balances the risk of putting care providers and MEDEVAC crews and helicopters at risk to the enemy and the elements with the risk of loss of life and limb to Warriors whose evacuation may be excessively prolonged. The only way to fully understand these competing risks is to know the outcomes of care and evacuation by injury type across a wide range of MEDEVAC missions. This analysis will help us understand if we still require a "Golden Hour" for every casualty between initial management at the point of injury and arrival at a trauma treatment site (like an Army Forward Surgical Team, the Marine Forward Resuscitative Surgical System or a Combat Support Hospital) or whether we now have a "Platinum 15 Minutes" at the point of injury which extends the Golden Hour.

This methodology and these casualty data are being applied to the next higher level of inquiry: how do we prevent injury and death of our combatants from wounds and accidents at the point of potential injury? Can we design improved helmets, goggles, body armor, vehicles and aircraft to prevent serious injuries? These questions are answered not only through the analysis of wound data, both survivable and nonsurvivable, through the JTTS and data from the virtual autopsy program of the Office of the Armed Forces Medical Examiner, but also by integrating these data with information from the joint operational, intelligence, and materiel communities to enable the development of improved tactics, techniques, and procedures and materiel improvements to protective equipment worn by the Warriors or built into the vehicles or aircraft in which they were riding. This work is performed by the Joint Trauma Analysis and Prevention of Injury in Combat program, a component of the DOD Blast Injury Research Program directed by the National Defense Authorization Act for 2006. To date it has been an effective means of improving the protection of War-

riors and preventing serious injury and death even as the enemy devises more lethal and adaptive weapons and battlefield tactics, techniques, and procedures.

We in Army Medicine are applying these knowledge management tools and approaches to the improvement of health and the delivery of healthcare back home as well. We are coupling these knowledge management processes with a funding strategy which incentivizes our commanders and clinicians to balance productivity—providing episodes of care—with optimal outcome: the right kind of prevention and care.

Among our greatest team achievements in 2009 was our effort to better understand how we communicate effectively with our internal and external stakeholders, patients, clients and customers. We adopted a formal plan to align our messages—ultimately all tied to Army goals and those on our Balanced Scorecard. Our creation of a Strategic Communications Directorate to ensure alignment of our key messages, to better understand and use social media, to expedite cross-talk and learning among such diverse groups as the Office of Congressional Liaison, Public Affairs, Protocol, Medical History, the Borden Institute, the AMEDD Regiment and others speaks directly to these efforts.

While we are still in the "advanced crawl/early walk" phase of knowledge management, we know from examples such as the Joint Theater Trauma System and the Performance Based Budget Model that we can move best practices and newly found evidence-based approaches into common or widespread use if we aggressively coordinate and manage our efforts and promote transparency of data and information and the knowledge which derives from it. We have begun a formal process under the Strategy and Innovation Directorate to move the best ideas in both clinical and transactional processes into standard practices across the MEDCOM in a timely way. This will be achieved through a process to identify, validate, and transfer best practices. We endeavor to be more agile and adaptive in response to a rapidly changing terrain of U.S. and Federal healthcare and operational requirements for a Nation at war.

In closing, I am very optimistic about the next 2 years. We have weathered some serious challenges to trust in Army Medicine. Logic would not predict that we would be doing as well as we are in attracting, retaining and career developing such a talented team of uniformed and civilian medical professionals. However, we continue to do so year after year—a tribute to all our Officer Corps, the leadership of our Non-Commissioned Officers, and our military and civilian workforce. The results of our latest Medical Corps Graduate Medical Education Selection Board and the Human Capital Distribution Plan show continued strength and even improvements over past years. The continued leadership and dedicated service of officers, non-commissioned officers, and civilian employees are essential for Army Medicine to remain strong, for the Army to remain healthy and strong, and for the Nation to endure. I feel very privileged to serve with the men and women of Army Medicine during this historic period as Army Medics, as Soldiers, as Americans and as global citizens.

Thank you for holding this hearing and your unwavering support of the Military Health System and Army Medicine. I look forward to working with you and your staff and addressing any of your concerns or questions.

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

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

General GREEN. Chairman Inouye, Vice Chairman Cochran—

Thank you, sir. I'm new at this, and please forgive me.

Chairman Inouye, Vice Chairman Cochran, and distinguished members of the subcommittee, it's an honor and a privilege to appear before you representing the Air Force Medical Service. I look forward to working with you, and pledge to do all in my power to support the men and women of our Armed Forces and this great country. Thank you for your immeasurable contributions to the success of our mission.

"Trusted Care Anywhere" is our vision for 2010 mission and beyond. Our nearly 60,000 total force medics contribute world-class medical capabilities to Air Force, joint, and coalition teams. Over 1,600 Air Force medics are currently deployed to 40 locations in 20

countries, delivering state-of-the-art preventive medicine, rapid life-saving care, and critical-care air evacuation. At home, our healthcare teams assure patient-centered care to produce healthy and resilient airmen and provide families and retirees with full-spectrum healthcare.

Our success on the battlefield underscores our ability to provide "Trusted Care Anywhere." Since 2001, we have air-evacuated more than 70,000 patients from Afghanistan and Iraq. We have lost only four patients, and one dog. Joint and coalition medical teams have achieved a less than 10 percent died of wounds rate, the best survival rate in the history of war.

In July, a British soldier sustained multiple gunshot wounds in Afghanistan. He was stabilized by medical teams on the ground, who replaced his blood more than 10 times and removed an injured lung. It took two airplanes, three aircrews to get the medical team and equipment in place, and another aircraft to fly the patient to Germany. Every member of the joint casualty care and air evacuation team selflessly gave their all to ensure this soldier received the critical care and compassionate support required. This was the first known successful air evacuation of a patient with a traumatic lung removal. The patient is doing well in Birmingham, England, today.

In January 2010, a U.S. marine sustained dislocation of both knees, with loss of blood flow to his lower legs following an improvised explosive device (IED) attack in the Helmand Province. Casualty evacuation delivered the marine to our British partners at Camp Bastion, where surgeons restored blood flow to both legs, using temporary shunt procedures that our surgeons had shared in surgical journals. The marine was further evacuated to Craig Joint Theater Hospital at Bagram, where Air Force surgeons performed definitive vascular reconstruction. The marine is now recovering at National Naval Medical Center and is expected to have fully functional limbs.

These success stories are possible only because of the tireless efforts of Air Force, Army, Navy, and coalition medics to continuously improve our care.

Air Force medics are responding globally in humanitarian missions as well as on the battlefield. Over the last 6 months, we contributed significant support in Indonesia, to the treatment and evacuation of Haiti earthquake victims, and now have another expeditionary medical system (EMEDS) that should be arriving in Chile today.

The Air Force Special Operations Command had 47 medics on the ground within 12 hours following the Haiti disaster, performing site assessments, preventive public health measures, and delivering lifesaving care. And Air Force EMEDS continues to coordinate care in Haiti today.

At home, we're improving our patient and provider satisfaction through our patient-centered medical home, building strong partnerships between patients and their healthcare teams. We are seeing improved performance in healthcare continuity, in quality, access, and patient satisfaction, based on our medical-home efforts. We recognize the high OPSTEMPO and have identified high-risk groups to target interventions and training, improving both airmen

and family resilience. Collaborative care, in the form of mental health providers embedded in our family health clinics is present at the majority of Air Force treatment facilities today.

To achieve our vision of "Trusted Care Anywhere," we require highly trained, current, and qualified providers. We are extremely grateful to this subcommittee for your many efforts to strengthen our recruiting and retention programs. Your support, in particular, for the Health Profession Scholarship Program, the Uniformed Services University, and other retention initiatives is making a huge difference.

We are also indebted to private sector and Federal partners, who help us maximize resources, leverage new capabilities, and sustain clinical currency. Our research partners, with universities and private industry, ensure U.S. forces benefit from the latest medical technologies and clinical advancements, and research and regenerative medicine, directed energy, improved diabetes prevention and treatment, and state-of-the-art medical informatics shapes the future and allows Air Force medics to implementation innovative solutions.

Our Centers for the Sustainment of Trauma and Readiness Skills at St. Louis University, University of Maryland, Baltimore Shock Trauma, and University of Cincinnati College of Medicine are all superb examples of what we can achieve through partnerships.

We also actively partner with the VA to meet beneficiary needs, and now have five joint ventures, including Keesler Air Force Base, Mississippi, and soon will open our sixth, with the standup at Buckley Air Force Base, Colorado.

PREPARED STATEMENT

The Air Force Medical Service is committed to the health and wellness of all entrusted to our care. We are, as our Chief says, all in to meet our Nation's call, and we will achieve our vision through determined, continuous improvement. We could not achieve our goals of better readiness, better health, better care, and best value for our heroes and their families without your support.

Thank you, sir.

Chairman INOUYE. I thank you very much.

[The statement follows:]

PREPARED STATEMENT OF LIEUTENANT GENERAL CHARLES B. GREEN

"Trusted Care Anywhere" is the Air Force Medical Service's vision for 2010 and beyond. In the domain of Air, Space and Cyberspace, our medics contribute to the Air Force, Joint, and coalition team with world class medical capabilities. Our 60,000 high performing Total Force medics around the globe are trained and ready for mission success. Over 1,600 Air Force medics are now deployed to 40 locations in 20 countries, building partnership capability and delivering state of the art preventive medicine, rapid life-saving care, and critical air evacuation. In all cases, these efforts are conducted with joint and coalition partners. At home, our healthcare teams assure patient-centered care to produce healthy and resilient Airmen, and provide our families and retirees with full spectrum healthcare.

Today's focus is on world-class healthcare delivery systems across the full spectrum of our operations. From theater hospitals in Balad and Bagram, to the efforts of humanitarian assistance response teams, to the care of our families at home, we put patients first. We are transforming deployable capabilities, building patient-centered care platforms, and investing in our people, the foundation of our success. We are expanding collaboration with joint and coalition partners to collectively strengthen rapid response capabilities. Globally, Air Force medics are diligently

working to balance the complex demands of multiple missions in current and expanding areas of operations.

We are committed to advancing capabilities through education and training, research, and infrastructure recapitalization. Recent efforts in these areas have paid huge dividends, establishing new standards in virtually every major category of full spectrum care including humanitarian assistance. The strategic investments assure a trained, current, and deployable medical force today and tomorrow. They reinforce a culture of learning to quickly adapt medical systems and implement agile organizations to produce healthier outcomes in diverse mission areas.

While we've earned our Nation's trust with our unique capabilities and the expertise of our people, we constantly seek to do better! I would like to highlight our areas of strategic focus and share some captivating examples of Air Force medics in action.

TRANSFORMING EXPEDITIONARY MEDICINE AND AEROMEDICAL EVACUATION CAPABILITIES

Our success on the battlefield underscores our ability to provide "Trusted Care, Anywhere." The joint and coalition medical teams bring wounded warriors from the battlefield to an operating room within an unprecedented 20 to 40 minutes! This rapid transfer rate enables medics to achieve a less than 10 percent died-of-wounds rate, the best survival rate ever seen in war.

In late July, a British soldier sustained multiple gunshot wounds in Afghanistan. After being stabilized by medical teams on the ground, who replaced his blood supply more than 10 times, doctors determined the patient had to be moved to higher levels of care in Germany. It took two airplanes to get the medical team and equipment in place, another aircraft to fly the patient to Germany, three aircrews and many more personnel coordinating on the ground to get this patient to the next level of care. Every member of the joint casualty care and aeromedical evacuation teams selflessly gave their all to ensure this soldier received the compassionate care he deserved. After landing safely at Ramstein Air Base in Germany, the soldier was flown to further medical care at a university hospital by helicopter. This case highlights the dedication and compassion our personnel deliver in the complex but seamless care continuum. This tremendous effort contributes to our unprecedented survival rate.

As evidenced in this story, our aeromedical evacuation system (AE) and critical care air transport teams (CCATT) are world-class. We mobilize specially trained flight crews and medical teams on a moment's notice to transport the most critical patients across oceans. Since November 2001, we have transported more than 70,000 patients from Afghanistan and Iraq.

We are proud of our accomplishments to date, but strive for further innovation. As a result of battlefield lessons learned, we have recently implemented a device to improve spinal immobilization for AE patients that maximizes patient comfort and reduces skin pressure. We are working toward an improved detection mechanism for compartment syndrome in trauma patients. The early detection and prevention of excess compartment pressure could eliminate irreversible tissue damage for patients. In February 2010, a joint Air Force and Army team will begin testing equipment packages designed to improve ventilation, oxygen, fluid resuscitation, physiological monitoring, hemodynamic monitoring and intervention in critical care air transport.

INFORMATION MANAGEMENT/INFORMATION TECHNOLOGY

Our Theater Medical Information Program Air Force (TMIP AF) is a software suite that automates and integrates clinical care documentation, medical supplies, equipment, and patient movement. It provides the unique capabilities for in-transit visibility and consolidated medical information to improve command and control and allow better preventive surveillance at all Air Force deployed locations. This is a historic first for the TMIP AF program.

Critical information is gathered on every patient, then entered into the Air Force Medical Service (AFMS) deployed system. Within 24 hours, records are moved and safely stored at secure consolidated databases in the United States. During the first part of 2010, TMIP AF will be utilized in Aeromedical Evacuation and Air Force Special Operations areas.

EXPEDITIONARY MEDICINE AND HUMANITARIAN ASSISTANCE

We have also creatively developed our Humanitarian Assistance Rapid Response Team (HARRT), a Pacific Command (PACOM) initiative, to integrate expeditionary medical systems and support functions. The HARRT provides the PACOM Com-

mander with a rapid response package that can deploy in less than 24 hours, requires only two C–17s for transport and can be fully operational within hours of arrival at the disaster site. This unique capability augments host nation efforts during the initial stages of rescue/recovery, thus saving lives, reducing suffering, and preventing the spread of disease. So far, HARRT successfully deployed on two occasions in the Pacific. Efforts are underway to incorporate this humanitarian assistance and disaster relief response capability into all AFMS Expeditionary Medical System (EMEDS) assets.

Air Force medics contribute significant support to the treatment and evacuation of Haiti earthquake victims. The Air Force Special Operations Command sent 47 medics to support AFSOC troops on the ground within 12 hours following the disaster to perform site assessments, establish preventive public health measures, and deliver life-saving trauma care to include surgical and critical care support. This team was also instrumental in working with Southern Command and Transportation Command to establish a patient movement bridge evacuating individuals from Haiti via air transport.

As part of the U.S. Air Force's total force effort, we sent our EMEDS platform into Haiti and rapidly established a 10-bed hospital to link the hospital ship to ground operations. The new EMEDS includes capabilities for pediatrics, OB/GYN and mental health. Personnel from five Air Force medical treatment facilities (MTFs) are supporting Operation Unified Response, as well as volunteers from the Air Reserve Forces.

BUILD PATIENT-CENTERED CARE AND FOCUS ON PREVENTION TO OPTIMIZE HEALTH

We are committed to achieving the same high level of trust with our patients at home through our medical home concept. Medical home includes initiatives to personalize care, and to improve health and resilience. We are also working hard to optimize our operations, reduce costs and improve patient access. We partner with our Federal and civilian colleagues to continuously improve care to all our beneficiaries.

Family Health Initiative

To achieve better health outcomes for our patients, we implemented the Family Health Initiative (FHI). FHI mirrors the American Academy of Family Physicians' "Patient Centered Medical Home" concept and is built on the team-approach for effective care delivery. The partnership between our patients and their healthcare teams is critical to create better health and better care via improved continuity, and reduce per capita cost.

Our providers are given full clinical oversight of their care teams and are expected to practice to the full scope of their training. We believe the results will be high quality care and improved professional satisfaction. Two of our pilot sites, Edwards AFB, CA, and Ellsworth AFB, SD, have dramatically improved their national standings in continuity, quality, access to care, and patient satisfaction. Eleven other bases are implementing Medical Home, with an additional 20 bases scheduled to come on-line in 2010.

We are particularly encouraged by the results of our patient continuity data in Medical Home. Previous metrics showed our patients only saw their assigned provider approximately 50 percent of the time. At Edwards and Ellsworth AFBs, provider continuity is now in the 80–90 percent range.

We still have work to do, such as developing improved decision support tools, case management support, and improved training. Implementing change of this size and scope requires broad commitment. The Air Force Medical Service has the commitment and is confident that by focusing on patient-centered care through Medical Home, we will deliver exceptional care in the years ahead.

The Military Health System's Quadruple Aim of medical readiness, population health, experience of care and per capita cost serves us well. Patient safety remains central to everything we do. By focusing on lessons learned and sharing information, we continually strive to enhance the safety and quality of our care. We share our clinical lessons learned with the Department of Defense (DOD) Patient Safety Center and sister Services. We integrate clinical scenarios and lessons learned into our simulation training. We securely share de-identified patient safety information across the Services through DOD's web-based Patient Safety Learning Center to continuously improve safety.

Improving Resilience and Safeguarding the Mental Health of Our Airmen

Trusted care for our beneficiaries includes improving resilience and safeguarding their mental health and well-being. We are engaged in several initiatives to optimize mental health access and support.

Air Force post-deployment health assessment (PDHA) and post-deployment health re-assessment (PDHRA) data indicates a relatively low level of self-reported stress. However, about 20–30 percent of service members returning from OIF/OEF deployments report some form of psychological distress. The number of personnel referred for further evaluation or treatment has increased from 25 percent to 50 percent over the past 4 years, possibly reflecting success in reducing stigma of seeking mental health support. We have identified our high-risk groups and can now provide targeted intervention and training.

We recently unveiled "Defenders Edge," which is tailored to security forces Airmen who are deploying to the most hostile environments. This training is intended to improve Airmen mental resiliency to combat-related stressors. Unlike conventional techniques, which adopt a one-on-one approach focusing on emotional vulnerability, "DEFED" brings the mental health professional into the group environment, assimilating them into the security forces culture as skills are taught.

Airmen who are at higher risk for post traumatic stress are closely screened and monitored for psychological concerns post-deployment. If treatment is required, these individuals receive referrals to the appropriate providers. In addition to standard treatment protocols for post traumatic stress disorder (PTSD), Air Force mental health professionals are capitalizing on state-of-the-art treatment options using Virtual Reality. The use of a computer-generated virtual Iraq in combination with goggles, headphones, and a scent machine allow service members to receive enhanced prolonged exposure therapy in a safe setting. In January 2009, 32 Air Force Medical Service therapists received Tri-Service training in collaboration with the Defense Center of Excellence at Madigan Army Medical Center. The system was deployed to eight Air Force sites in February 2009 and is assisting service members in the treatment of PTSD.

Future applications of technology employing avatars and virtual worlds may have multiple applications. Service member and family resiliency will be enhanced by providing pre- and post-deployment education; new parent support programs may offer virtual parent training; and family advocacy and addiction treatment programs may provide anger management, social skills training, and emotional and behavioral regulation.

Rebuilding Our Capabilities by Recapturing Care and Reducing Costs

Our patients appropriately expect AFMS facilities and equipment will be state-of-the art and our medical teams clinically current. They trust we will give them the best care possible. We are upgrading our medical facilities and rebuilding our capabilities to give patients more choice and increase provider satisfaction with a more complex case load. In our larger facilities, we launched the Surgical Optimization Initiative, which includes process improvement evaluations to improve operating room efficiency, enhance surgical teamwork, and eliminate waste and redundancy. This initiative resulted in a 30 percent increase in operative cases at Elmendorf AFB, Alaska, and 118 percent increase in neurosurgery at Travis AFB, California.

We are engaged in an extensive modernization of Wright-Patterson Air Force Base Medical Center in Ohio with particular focus on surgical care and mental health services. We are continuing investment in a state-of-the-art new medical campus for SAMMC at Lackland AFB, TX. Our ambulatory care center at Andrews AFB, MD, will provide a key capability for the delivery of world-class healthcare in the National Capital Region's multi-service market.

By increasing volume, complexity and diversity of care provided in Air Force hospitals, we make more care available to our patients; and we provide our clinicians with a robust clinical practice to ensure they are prepared for deployed operations, humanitarian assistance, and disaster response.

Partnering With Our Private Sector and Federal Partners

Now more than ever, collaboration and cooperation with our private sector and Federal partners is key to maximizing resources, leveraging capabilities and sustaining clinical currency. Initiatives to build strong academic partnerships with St. Louis University, Wright State University (Ohio); University of Maryland; University of Mississippi; University of Nebraska-Lincoln; University of California-Davis and University of Texas-San Antonio, among others, bolster research and training platforms and ultimately, ensures a pipeline of current, deployable medics to sustain Air Force medicine.

Our long history of collaborating with the Veterans Administration (VA) also enhances clinical currency for our providers, saves valuable resources, and provides a more seamless transition for our Airmen as they move from active duty to veteran status. The Air Force currently has five joint ventures with the VA, including the

most recent at Keesler AFB, MS. Additional efforts are underway for Buckley AFB, CO, to share space with the Denver VA Medical Center, which is now under construction.

The new joint Department of Defense-Veterans Affairs disability evaluation system pilot started at Malcolm Grow Medical Center at Andrews AFB, MD in November 2007. It was expanded to include Elmendorf AFB, AK; Travis AFB, CA and Vance AFB, OK; and MacDill AFB, FL, in May 2009. Lessons learned are streamlining and expediting disability recovery and processing, and creating improved treatment, evaluation and delivery of compensation and benefits. The introduction of a single comprehensive medical examination and single-sourced disability rating was instrumental to improving the process and increasing the transparency. Services now allow members to see proposed VA disability ratings before separation.

We continue to work toward advances in the interoperability of the electronic health record. Recent updates allow near real-time data sharing between DOD and Veterans Affairs providers. Malcolm Grow Medical Center, Wright-Patterson Medical Center, and David Grant Medical Center are now using this technology, with 12 additional Air Force military treatment facilities slated to come online. New system updates will enhance capabilities to share images, assessment reports, and data. All updates are geared toward producing a virtual lifetime electronic record and a nationwide health information network.

YEAR OF THE AIR FORCE FAMILY

This is the "Year of the Air Force Family," and we are working hand in hand with Air Force personnel and force management to ensure our Exceptional Family Member Program (EFMP) beneficiaries receive the assistance they need.

In September 2009, the Air Force sponsored an Autism Summit where educational, medical, and community support personnel discussed challenges and best practices. In December 2009, the Air Force Medical Service provided all Air Force treatment facilities with an autism tool kit. The kit provided educational information to providers on diagnosis and treatment. Also, Wright-Patterson AFB, OH is partnering with Children's Hospital of Ohio in a research project to develop a comprehensive registry for autism spectrum disorders, behavioral therapies, and gene mapping.

The Air Force actively collaborates with sister Services and the Defense Center of Excellence for Psychological Health and Traumatic Brain injury (DCoE) to offer a variety of programs and services to meet the needs of children of wounded warriors. One recent initiative was the "Family Connections" website with "Sesame Street"-themed resources to help children cope with deployments and injured parents. In addition, DOD-funded websites, such as afterdeployment.org, providing specific information and guidance for parents/caregivers to understand and help kids deal with issues related to deployment and its aftermath.

Parents and caregivers also consult with their child's primary care manager, who can help identify issues and refer the child for care when necessary. Other resources available to families include counseling through Military OneSource, Airman and Family Readiness Centers, Chaplains, and Military Family Life Consultants—all of whom may refer the family to seek more formal mental health treatment through consultation with their primary care manager or by contacting a TRICARE mental health provider directly.

INVESTING IN OUR PEOPLE: EDUCATION, TRAINING, AND RESEARCH

Increased Focus on Recruiting and Retention Initiatives

To gain and hold the trust of our patients, we must have highly trained, current, and qualified providers. To attract those high quality providers in the future, we have numerous efforts underway to improve recruiting and retention.

We've changed our marketing efforts to better target recruits, such as providing Corps-specific DVDs to recruiters. The Health Profession Scholarship Program remains vital to attracting doctors and dentists, accounting for 75 percent of these two Corps' accessions. The Air Force International Health Specialist program is another successful program, providing Air Force Medical Service personnel with opportunities to leverage their foreign language and cultural knowledge to effectively execute and lead global health engagements, each designed to build international partnerships and sustainable capacity.

The Nursing Enlisted Commissioning Program (NECP) is a terrific opportunity for Airmen. Several Airmen have been accepted to the NECP, completed degrees, and have been commissioned as Second Lieutenant within a year. To quote a recent graduate, 2nd Lt. April C. Barr, "The NECP was an excellent way for me to finish

my degree and gave me an opportunity to fulfill a goal I set as a young Airman . . . to be commissioned as an Air Force nurse."

For our enlisted personnel, targeted Selective Reenlistment Bonuses, combined with continued emphasis on quality of life, generous benefits, and job satisfaction have positively impacted enlisted recruiting and retention efforts.

Increasing Synergy to Strengthen GME and Officer/Enlisted Training

We foster excellence in clinical, operational, joint and coalition partner roles for all Air Force Medical Service personnel. We are increasing opportunities for advanced education in general dentistry and establishing more formalized, tiered approaches to Medical Corps faculty development. Senior officer and enlisted efforts in the National Capital Region and the San Antonio Military Medical Center are fostering Tri-Service collaboration, enlightening the Services to each others' capabilities and qualifications, and establishing opportunities to develop and hone readiness skills.

The Medical Education and Training Campus (METC) at Fort Sam Houston, Texas, will have a monumental impact on the Department of Defense and all military services. We anticipate a smooth transition with our moves completed by summer 2011. METC will train future enlisted medics to take care of our service members and their families and will establish San Antonio as a medical training center of excellence.

Our Centers for the Sustainment of Trauma and Readiness Skills at St. Louis University, University of Maryland-Baltimore Shock Trauma and University of Cincinnati College of Medicine remain important and evolving training platforms for our doctors, nurses and medical technicians preparing to deploy. We recently expanded our St. Louis University training program to include pediatric trauma. Tragically, this training became necessary, as our deployed medics treat hundreds of children due to war-related violence.

Partnerships with the University Hospital Cincinnati and Scottsdale, AZ, trauma hospitals allow the Air Force's nurse transition programs to provide newly graduated registered nurses 11 weeks of rotations in emergency care, cardiovascular intensive care, burn unit, endoscopy, same-day surgery, and respiratory therapy. These advanced clinical and deployment readiness skills prepare them for success in Air Force hospitals and deployed medical facilities, vital to the care of our patients and joint warfighters.

Setting Clear Research Requirements and Integrating Technology

Trusted care is not static. To sustain this trust, we must remain agile and adaptive, seeking innovative solutions to shape our future. Our ongoing research in procedures, technology, and equipment will ensure our patients and warfighters always benefit from the latest medical technologies and clinical advancements.

Air Force Medical Service vascular surgeons, Lieutenant Colonels Todd Rasmussen and William "Darrin" Clouse, have completed 17 research papers since 2005 and edited the vascular surgery handbook. On January 10, 2009 a U.S. Marine sustained bilateral posterior knee dislocations with subsequent loss of blood flow to his lower legs following an improvised explosive device attack in the Helmand Province. Casualty evacuation delivered the Marine to our British partners at Camp Bastion, a level II surgical unit within an hour. At Bastion, British surgeons applied knowledge gained from combat casualty care research and restored blood flow to both legs using temporary vascular shunts. Medical evacuation then delivered the casualty to the 455th Expeditionary Medical Group at Bagram. Upon arrival, our surgeons at Bagram performed definitive vascular reconstruction and protected the fragile soft tissue with negative pressure wound therapy. The Marine is currently recovering at the National Military Medical Center in Bethesda and is expected to have functional limbs.

In another example, a 21-year-old Airman underwent a rare pancreatic autotransplantation surgery at Walter Reed Army Medical Center (WRAMC) to salvage his body's ability to produce insulin. The airman was shot in the back three times by an insurgent at a remote outpost in Afghanistan. The patient underwent two procedures in Afghanistan to stop the bleeding, was flown to Germany, then to WRAMC. Army surgeons consulted with University of Miami's Miller School of Medicine researchers on transplantation experiments. The surgeons decided to attempt a rare autotransplantation surgery to save the remaining pancreas cells. WRAMC Surgeons removed his remaining pancreas cells and flew them over 1,000 miles to the University of Miami Miller School of Medicine. The University of Miami team worked through the night to isolate and preserve the islet cells. The cells were flown back to WRAMC the next day and successfully implanted in the patient. The surgery was a miraculous success, as the cells are producing insulin.

These two cases best illustrate the outcome of our collaborations, culture of research, international teamwork, innovation, and excellence.

Shaping the Future Today Through Partnerships and Training

Under a new partnership with the University of Illinois at Chicago, we are researching directed energy force protection, which focuses on detection, diagnosis and treatment of directed energy devices. We are exploring the discovery of biomarkers related to laser eye injuries, development of films for laser eye protection and the development of a "tricorder" prototype capable of laser detection and biomarker assessment. Additional efforts focus on the use and safety of laser scalpels and the development of a hand-held battery operated laser tool to treat wounds on the battlefield.

We continue our 7-year partnership with the University of Pittsburgh Medical Center to develop Type II diabetes prevention and treatment programs for rural and Air Force communities. Successful program efforts in the San Antonio area include the establishment of a Diabetes Center of Excellence, "Diabetes Day" outreach specialty care, and efforts to establish a National Diabetes Model for diabetic care.

Another partnership, with the University of Maryland Medical Center and the Center for the Sustainment of Trauma and Readiness Skills (C–STARS) in Baltimore is developing advanced training for Air Force trauma teams. The project goal is to develop a multi-patient trauma simulation capability using high fidelity trauma simulators to challenge trauma teams in rapid assessment, task management, and critical skills necessary for the survival of our wounded warriors. A debriefing model is being developed to assist with after action reviews for trauma team members.

Radio frequency technology is contributing to medical process improvements at Keesler AFB, MS. Currently, Keesler AFB is analyzing the use of automatic identification and data capture (AIDC) in AFMS business processes. The AIDC evaluation focuses on four main areas: patient tracking, medication administration, specimen tracking, and asset management. Further system evaluation and data collection is ongoing in 2010 with an expansion of AIDC use in tracking automated data processing equipment.

CONCLUSION

As a unique health system, we are committed to success across the spectrum of military operations through rapid deployability and patient-centered care. We are partnering for better outcomes and increasing clinical capacity. We are strengthening our education and training platforms through partnerships and scanning the environment for new research and development opportunities to keep Air Force medicine on the cutting edge.

We will enhance our facilities and the quality of healthcare to ensure health and wellness of all entrusted to our care. We do all this with a focus on patient safety and sound fiscal stewardship. We could not achieve our goals of better readiness, better health, better care and reduced cost without your support, and so again, I thank you.

In closing, I share a quote from our Air Force Chief of Staff, Gen. Norton A. Schwartz, who said, "I see evidence every day the Medical Service is 'All In,' faithfully executing its mission in the heat of the fight, in direct support of the warfighter, and of families back home as well." I know you would agree that "All in" is the right place to be.

CRITICAL WARFIGHTING-SKILL BONUSES

Chairman INOUYE. I have many questions here. I'd like to submit most of them. But, I have a few.

This morning, I received a call from a constituent, who said, "I just saw an ad that provides a bonus of $350,000 to anyone volunteering to serve as a doctor." I have no idea what service or where the ad was, but, General, do you have any idea what this is all about?

RECRUITING BONUSES

General SCHOOMAKER. No, sir, but I'll be happy to look into it further. We have a variety of bonus programs to bring medical professionals of a variety of sources—physicians——

Chairman INOUYE. What is the bonus for, say, a surgeon?

General SCHOOMAKER. Sir, I'll have to look into the——

Chairman INOUYE. Oh.

General SCHOOMAKER [continuing]. Specifics of it. It's dependent upon whether we're looking at loan repayment from earlier training or multiyear signing bonuses by specialty. It's pretty much shared across the three services. Maybe—I'm sorry, I don't have the authority to do this—but maybe one of my colleagues would be able to answer.

Admiral ROBINSON. Senator Inouye, Mr. Chairman, I think the critical warfighting-skill bonuses are in the, on the order of about $275,000 over a 4-year period. And I may not have all of the numbers right. And then, there are a variety of lesser bonuses that fit into place. So, there's variable incentive pay, there's board-certified pay. There is a list of them, and they're utilized in general surgery, orthopaedic surgery. And the things that are most critical that we are seeing now are mental health specialists, so psychiatrists will also benefit.

There's another level of board—or of bonus pay for clinical psychologists, for social workers, and also for mental health nurse specialists. It's much less, but there are incentive bonuses that are being utilized. All three services are utilizing—we do it a little differently, but the amounts are approximately the same.

So, I do not know anything about a $350,000 bonus. But, again, we can look into that.

[The information follows:]

No, there is not currently a $350,000 bonus for "anyone volunteering to serve as a doctor." Navy currently offers a Critical Wartime Skills Accession Bonus (CWSAB) for specific physician and dental specialties. The accession bonus depends on the specialty being accessed. The bonuses range from $220,000 to $400,000. The Navy currently authorizes CWSAB to General Surgery, Orthopedic Surgery, Urology, Family Medicine, Emergency Medicine, Psychiatry, Pulmonology, Diagnostic Radiology, Anesthesiology, Preventive Medicine, Oral and Maxillofacial Surgeons, and Comprehensive Dentists.

Chairman INOUYE. I thank you very much.

General——

General GREEN. Senator, if I may add——

Chairman INOUYE. Yes.

General GREEN. I'm sorry, sir.

Under current authorities for the multiyear retention bonuses can go as high as $100,000 a year. Although I am not familiar with the ad that you bring to our attention; however, I will say that, as our personnel communities look at accession bonuses, one of the tools they have used is to build an accession bonus that basically gives a lump-sum payment, but then, they don't necessarily receive that particular multiyear retention pay. So, accession bonuses could go up, technically, by the authorities we have, as high as $400,000, but then they would not receive that same pay while they were on Active Duty. If that helps you, sir.

Chairman INOUYE. Oh, thank you.

REHABILITATION FOR WOUNDED WARRIORS

General Schoomaker, on warriors in transition, is that a rehab program? Because I had the good fortune to be assigned to Percy Jones General Hospital during World War II, and there they had

a 10-month program that included everything from how to use your prosthetic appliance, driving, carpentry, electrical work, plumbing, musical instruments, sports, sex, the whole works—dining. And I felt, when I left the hospital, prepared for the world. Do we have any sort of rehab program for our men and women?

General SCHOOMAKER. Yes, sir. I mean, the simple answer is, "absolutely." In fact, I think, in prior conversations you and I have had, you shared with me the experience that you had. And I'm—I, frankly, have taken that on the road, frequently, to talk about rediscovering lessons from prior wars, what we had in World War II through the convalescent hospital that you recovered in at Battle Creek, our Valley Forge Convalescent Hospital during the Vietnam era. These were lessons, quite frankly, that, in the late 1970s and 1980s and 1990s, we forgot. And as we move toward a more strict definition, much like the civilian sector, of inpatient and outpatient medicine, this war and the injuries, both in battle and not, and the illnesses associated with it, have taught us the need to rediscover and to redesign intermediate rehabilitation.

And this transition process that we have, that—most recently, my deputy commander—excuse me—my Assistant Surgeon General for Warrior Care and Transition, and the Commander of our Warrior Transition Command, Brigadier General Gary Cheek, a career artilleryman, has worked on—in association and collaboration with our colleagues in the Navy, the Marine Corps, and the Air Force, has developed a comprehensive transition plan—it's automated now across our 29 warrior transition units—and nine State-based, community-based warrior transition units. And it includes all of the things that you describe, from initial healing to longer-term recovery and rehabilitation, and includes the family, and is tailored to the individual. It has vocational elements to it, educational elements, and always wraps in there the family and the soldier's interest in either returning to duty or going out into productive citizenship. On average, right now, about 50 percent of our warriors in transition actually return to duty, which is, I think, a substantial reinvestment of our people back into uniform.

You know, I think, sir, that we have returned to duty over 140 amputees, as an example of this, and we've sent about 40 of them into combat, 3 or 4 of whom have gone back into combat as amputees, having lost their limb not in combat, but in training accidents or in motor vehicle accidents. And so, we see this as a terrific success and a rediscovery and a recharging of the whole effort to transition these soldiers successfully.

Chairman INOUYE. Is this a standard program for all men and women in transition, or is it up to the hospital?

WALTER REED NATIONAL MILITARY MEDICAL CENTER

General SCHOOMAKER. No, sir. There are criteria to get them into the program. We currently have approximately 9,000 soldiers in them across these units I described; about 7,000 of them are within our hospitals and on campuses in our installations; about 2,000 are out in nine different States in these community-based organizations. We have some fairly good criteria to get them into the program, but, once into the program, the emphasis is in transition. It's a—an aspirational model that focuses on building abilities and re-

channeling or redirecting their efforts and their interests if their former service and their former roles cannot be re-realized again. And it's in very close association with the Veterans Administration and other civilian rehabilitation efforts.

Chairman INOUYE. Thank you.

Admiral Robinson, I'd like to ask a few questions relating to Walter Reed National Military Medical Center. The subcommittee has just a vague idea of what the additional budget will look like. We have no idea precisely as to how much military construction will be involved, when will it commence, and how much operation/maintenance will cost, how much new equipment. Can you give us some idea?

Admiral ROBINSON. Yes, sir. I can't give you the complete answer that you're looking for, but I can give you a Navy answer, of sorts.

The complete answer has to be contained in the JTF CAPMED comprehensive master plan for the facility. And then, when that occurs, we can have, I think, an understanding of what requirements will be necessary for the facilities—whatever increased additional cost there will be for facilities at the Walter Reed National Military Medical Center.

As I sit today, there is a very—I call, a nonrobust number of about, perhaps, $750 or $800 million that is being projected to be needed in order to finish that construction, but I think that we'll really need to wait, because that's not a very good requirements-based analysis, as I sit now.

So, I think the first answer is the research—or, the comprehensive master plan.

The second portion is, in terms of the building that is occurring now, the Base Realignment and Closure Commission (BRAC) has funded us completely for new construction, and that's been fine, and that's worked well. BRAC, as you know, did not fund any renovation. And the problems that have occurred have been that we're building a wonderful and state-of-the-art facility, but we're attaching it to a 1982 constructed building. It's a very good building, it's a very fine building; but it's 2010, so it's a building from another era. The renovation that is going to occur was not part of the BRAC funding, so Navy has taken that up, and we are working hard and will fund the renovation.

Sequencing it and getting it all done is the major element now, because we don't think that we will be able to get all of the renovation done by the opening date of September 2011 at the Walter Reed National Military Medical Center. We do not feel that that will decrease the timeline on the opening of the new medical center, but we do think that there will be more work to be done on the renovation side of the building.

And the third thing is, there are many definitions that are now running around regarding what makes the proper facilities commitment and what makes the proper "world-class"—which is the word I'm getting to—there are many definitions of what that could be, and I'm not sure exactly what that means.

In terms of quality of care, in terms of satisfaction with care, in terms of ability to give care comprehensively, we already feel that we are at a world-class level. If "world-class" is defined from a facilities point of view, that means square footage of operating rooms

or square footage of single-family or single-patient rooms, then there will be more work that has to be done.

I think that that definition of "world-class" needs to be placed in a very careful place, because "world-class" at the National Naval Medical Center or Walter Reed National Military Medical Center will automatically be translated to "world-class" in the military health system for Army, for Air Force, for Navy, and that will be CONUS and OCONUS facilities. So, I think that how we define "world-class" can't be defined just for one facility, it's going to need to be defined for the MHS. Keeping that in mind as we do this, I think, is important.

Chairman INOUYE. In terms of dollars, how much is involved?

Admiral ROBINSON. Sir, at this point, the buildings—and, forgive me, I don't do this on a daily basis, but I think we're at the $1.5 billion level, in terms of facilities, but I think that the addition that will be needed is truly unclear at this moment. The additional funding that we—that is being talked about by the JTF CAPMED is in the $800 million range, but I don't think that that is a number that—I don't think that is the end number, and I don't think—I don't know the analysis behind that number. So, unfortunately, I'm not able to give you a very good answer regarding that.

Chairman INOUYE. May I request that, for the record, a detailed response be made?

Admiral ROBINSON. Yes, sir, we'll do that.

Chairman INOUYE. Thank you.

Admiral ROBINSON. You're welcome.

[The information follows:]

To carry out the 2005 BRAC law, JTF CAPMED was established to oversee the realignment of Walter Reed Army Medical Center to the new Walter Reed National Military Medical Center in Bethesda and Fort Belvoir Community Hospital. JTF CAPMED reports to the Secretary of Defense through the Deputy Secretary of Defense. Due to the alignment of JTF CAPMED as an independent DOD entity, Navy Medicine does not direct JTF CAPMED on construction or other priorities, nor are we planning for future operation and maintenance requirements, since that by definition belongs to JTF CAPMED. These emerging priorities and requirements are driven by many things, all of which are outside Navy Medicine's budget process. As part of our mission to ensure that our Wounded Warriors receive the care they need and deserve, Navy Medicine is in regular communication with JTF CAPMED and continues to provide support as necessary. Because of this regular communication Navy Medicine is aware of the unique challenges facing JTF CAPMED, to include the projected increase of financial requirements. However, specific details of these challenges or the financial requirements cannot be defined or defended by Navy Medicine.

Chairman INOUYE. And now, General Green, on the matter of recruiting and retaining, we have noted that, for example, in medical schools today, about one-half of the graduates are women, but, on an average throughout the services—in the Medical Corps, I think it's 72 percent men and 28 percent women. And it's the same thing in the Dental Corps; it's about 75–25. Is a special effort being made to recruit women, or is that part of culture?

General GREEN. Sir, we have looked at many avenues to try and increase our attractiveness to women graduating from medical school. Many times, it comes up to, as they look at life choices and raising a family, concerns over time away from that family, et cetera, play into this. And so, one of the things that we've been looking at is whether we could do something with the Reserves,

which would allow people to come on Active Duty, basically pay back a portion of their commitment, and, as some life-changing event occurred, could there be a way to let them go into a Reserve commitment for a period of time, and then come back to us on Active Duty? These things have many implications regarding how a career is managed and whether or not they can be competitive with others, to make certain that we do not limit them in any way in their career planning.

And so, we have done some research, actually gone out and talked with medical schools, looked at reasons why we have not been attractive. And, for the most part, it is not that our scholarships are not attractive to these folks, it's not that we don't have very successful scholarship programs, it has to do with concerns over lifestyle and the ability to adjust to things like childbirth, marriage, and changes in their own personal situation.

And so, we'll continue to very actively try and attract those folks. We realize that more than 50 percent of medical school graduates now are women, and we very much want to bring them in; we simply have not yet found a way to make ourselves attractive and change those percentages that you have quoted to us, sir.

Chairman INOUYE. How would you rate our retention and recruiting? Excellent? Good? Fair?

General GREEN. We have taken a different approach in the Air Force. As you know, we did not have a great deal of success in bringing in fully qualified, and so, we decided to move dollars from our recruiting into scholarship programs, and have significantly increased the scholarships that we are offering.

We have done very well. We have three areas that we are having troubles right now; in particular, it's with psychologists, oral surgeons, and pharmacists. And so, we are hoping to offer some more scholarships in those lines.

When we go after people who are interested in pursuing education, we find that we have always been able to fill nearly 100 percent. We had one year where we were at 98 percent. Whereas, when we went after fully qualified, we frequently were not able to get even one-half of what we were trying to achieve.

With our nurses this year, with the changes we've made in recruiting, we have seen a decrease in our ability to bring nurses in. Whereas, the other two services, in their recruiting, have brought in, I believe, very close to 100 percent of their nurses that they need, this year we were only able to bring in about 81 percent.

Now, our nurse manning statistics are good. We're sitting at about 90 percent. And our efforts have shifted again to try and use the enlisted to nursing, and we're going to be bringing in about 50 enlisted members per year, which we think will fill the gap.

I will let General Siniscalchi talk a little bit as to some of the things that we're also doing to establish relationships with the nursing schools to show the benefits of an Air Force career.

I don't think that we're falling behind, in terms of our changes in how we approach recruiting, but some of the efforts, in terms of the scholarships and things, have long tails. As you know, to graduate a physician—I'll use a family physician—4 years of medical school and 3 years of residency. And so, from the time they take the scholarship to the time we see them coming out is about 7

years. And so, we are very interested in maintaining our ability to bring in fully qualified. We are leveraging the special pays and authorities that you have given us, to make certain that we can bring in people who are interested in an Air Force career.

Chairman INOUYE. Thank you.

General Schoomaker and Admiral Robinson, for the record, will you submit a paper on recruiting and retention?

Admiral ROBINSON. Yes, sir.

General SCHOOMAKER. Absolutely, sir.

[The information follows:]

The Army Medical Department is experiencing shortages in certain specialties and in certain locations. However, despite the persistent deployment tempo, the national shortage of many healthcare disciplines, and the compensation gap between military and civilian providers, the Army is doing well recruiting and retaining healthcare providers. Recruiting and retention authorities and bonuses are working, but we need to maintain constant vigilance.

The most difficult skill sets to recruit and retain are fully qualified physicians with surgical or primary care specialties, dentists (general and specialty), behavioral health professionals, and nurse anesthetists. According to the U.S. Army Recruiting Command (USAREC), one of the greatest challenges in the recruitment of health professionals is simply a lack of awareness of military medicine in general and Army Medicine in particular. In an attempt to alleviate this challenge, USAREC is adopting a strategy of increased marketing of the benefits of Army Medicine.

Mission success within the active force continues to rely on recruitment into our student programs. The world-class training programs offered by the Army Medical Department are critical to recruiting and retaining providers. Graduates of Army medical training programs enjoy a first-time board pass rate well above the national average.

The Critical Skills Accession Bonus granted by Congress has been fundamental in turning around recruitment into the Health Professions Scholarship Program. In fiscal year 2009, we were able to recruit 103 percent of mission for dental students, 103 percent of Veterinary Corps recruiting missions, and 93 percent for medical students. These are significant increases from previous fiscal years and will be the building blocks for the future force.

The Active Duty Health Professions Loan Repayment program has been very successful with 256 officers participating and receiving up to $44,000 annually. The average continuation rate of healthcare personnel (the percentage of personnel who, at their first opportunity to leave service, choose to remain) has averaged 92.5 percent over the last 5 years, peaking at 93.7 percent in 2009. Health Professions Special Pays are a key element in the retention of health professions. The new Consolidated Special Authority authorized by Congress provides increased flexibility for which we are grateful. We must continue to make full use of the recruiting and retention authorities and bonuses provided by Congress if we are to maintain strong recruiting and retention. Our experience over the last decade has proven that incentives, bonuses, and special pays work.

Recruiting for Navy Medical Department active duty is good to very good. Navy Medicine recruiting efforts have been successful the past few years in making overall goal for all Corps in fiscal year 2008 and fiscal year 2009. Active Duty recruiting is projected to meet or exceed fiscal year 2010 goals with fiscal year 2010 recruiting performance outpacing the fiscal year 2009 effort. There continues to be difficulty in directly accessing wartime specialties and medical specialties that are highly compensated in the civilian sector.

Retention for Navy Medical Department active duty is fair to good. Retention has stabilized over the past years due to increased retention bonuses. The overall loss rate for the officer corps was approximately 9 percent. The following provides a short synopsis of each of the Corps' issues.

Medical Corps

We continue to experience difficulty in recruiting mental health providers, possibly due to the increased demand in the civilian sector.

Recruiting and retaining general surgeons, preventive medicine, occupational medicine, family medicine, and psychiatrists will remain a challenge over the next 5 years. Wartime demand, perceived inequities in pay comparability between military and civilian providers, and limited student pipelines are contributing factors.

Dental Corps

Dental Corps has difficulty directly accessing and retaining oral surgeons and general dentists because of the pay gap between military and civilian compensation. A general dentist pay package offering significant compensation increases is currently routing through DOD. Additionally, the DOD Health Professions Incentive Working Group will be recommending a $20,000 per year increase in incentive special pay for oral surgeons in fiscal year 2011.

Medical Service Corps

High operational commitments are affecting retention for physician assistants, clinical psychologists and social workers. The new accession and retention bonuses recently approved should have a positive impact on these specialties.

Recruiting for clinical psychologists, podiatrists, and pharmacists is difficult because of the perceived inequities in pay comparability between military and civilian providers.

Nurse Corps

High operational commitments are affecting retention in all of Navy's nurse practitioner specialties.

Current initiatives in place to retain these critically manned/high OPTEMPO communities include RN Incentive Special Pay, Health Professional Loan Repayment Program, and a progressive Duty Under Instruction (DUINS) program for which officers are eligible after the first permanent duty station.

Hospital Corps

The Hospital Corps has been very successful at both recruiting and retaining corpsman.

General SCHOOMAKER. If I could just make one comment——

Chairman INOUYE. Sure.

General SCHOOMAKER [continuing]. From the earlier discussion about the recruiting bonuses.

RECRUITING CIVILIAN PROVIDERS

Army medicine is 60 percent civilian. I—for people who might be listening or reading this account, I'd very much like to encourage people who are looking for a career as a civilian in the medical services of the uniformed services, to come and look at us, to include women who might be looking at—we're experimenting and looking at the potential for job-sharing around a single position, split between, you know, multiple civilian physicians, psychologists, psychiatrists, and the like.

Chairman INOUYE. Thank you.

Senator Cochran.

Senator COCHRAN. Mr. Chairman, thank you.

General Green, I was noticing a newspaper report discussing a medical group at Keesler Air Force Base, in Biloxi, Mississippi, assembling to provide emergency medical service in Chile for the victims of the earthquake there. And the numbers of people who are being treated by this special unit that's flown from our State is in the neighborhood of 3,000 to 5,000 people, and making available care from the Medical Support Squadron that was based in Biloxi, Mississippi.

Have you had any recent report? This is a 2- or 3-day-old report from a newspaper at—the Biloxi Sun Herald in Mississippi.

General GREEN. Sir, that team went to Wilford Hall. They aggregated with their equipment in San Antonio, and left, I believe, late yesterday, are expected to arrive in Chile today. They will be working very closely with the Chileans, in terms of trying to decompress healthcare issues that arise whenever the healthcare infrastructure

has been damaged. We built our EMEDS–25, which is the unit that's gone down there, based on the number of patients that they can actually see. That particular unit that has gone to Chile is an EMEDS–25. I believe it's just over 65 medical folks, and another 20 to 30 support people, that basically help with water and electricity and making sure the hospital has all of its needs met.

The intent is for them to augment the Chilean system. We'll work hand-in-hand with the Chilean doctors. And they will probably, I would guess—before the end of their deployment, probably see in the neighborhood of between 3,000 and 10,000 patients.

We maintain a robust supply channel to get that to them. And you may wonder, How do you see so many patients with so few? And the answer is that, when you're working hand-in-hand with a host nation a lot is possible. As long as you have a good logistics chain and the ability to move patients back into the host-nation hospital, we find that we have tremendous capabilities. And these have been used both here in the States and overseas.

Keesler did a superb job of mobilizing their people in less than 24 hours from the time they were notified. And a very excited group from Mississippi have gone to do this important work for our country.

Senator COCHRAN. Well, we appreciate that. And it's very impressive to contemplate the amount of work and effort that went into this, mobilizing the people, getting everything organized and—it's not just a drive to the neighborhood; it's a long way to Chile. And it's really remarkable, I think. And you're to be congratulated, I think, as a service; and the Air Force personnel who are at Keesler, and those who are volunteering to make this trip, really deserve our highest praise and commendation.

General GREEN. Thank you, sir, I'll pass that to Brigadier General Dan Wyman, our Commander down there.

Senator COCHRAN. Well, thank you.

I wonder, just as a general proposition, the extent to which our services are able to recruit and retain qualified medical personnel to provide healthcare services. When I was in the Navy, we had one medical doctor aboard our ship, a heavy cruiser. And I was impressed, though, by the corpsmen, who really make up the bulk of the people who do the work and provide healthcare services at sea like that, when you're a long way from anywhere. They really do a marvelous job, sometimes with emergencies. I have to admit, I wasn't in a military conflict when I was in the Navy. Some of the ports we visited might have thought we were in a military conflict, but——

Anyway, what is your assessment right now of our ability to retain and train competent people to do these very important jobs?

General SCHOOMAKER. Is that directed to me, sir?

Senator COCHRAN. Yes, sir.

General SCHOOMAKER. To the Army?

Senator COCHRAN. Right.

VALUE OF COMBAT MEDICS

General SCHOOMAKER. First of all, let me just make a comment, that I'm really pleased that you recognize. A lot of people don't recognize the central role that our enlisted medics play in this. The

second largest military occupational specialist—the only larger population is that of infantrymen, 11 Bravos—is the combat medic, the 68 Whiskey. In fact, yesterday, we held a ceremony down in San Antonio, where my headquarters is, with—attended by five of my predecessors, Surgeons General, including now—former Secretary Jim Peake, who was the Surgeon General of the Army before that, and who conceived of the need to better train our medics.

We now have the 68 Whiskey program—very highly trained medics. And, frankly, much of what my colleagues and I have talked about, in terms of success on the battlefield, is owed to our medics. Whether they're Navy corpsmen, who are serving with marines, or our Air Force medics, these kids are just amazing human beings who have—who are truly heroic.

So, I appreciate that you recognized that, and the role that they play.

RECRUITING AND RETAINING OFFICERS

As far as recruiting and retaining other officer-level specialties, we're doing quite well, sir. We had—especially in the Nurse Corps and the Medical Corps, the physicians and nurses—some difficult years in the past, but last year, physician recruitment, through our Health Profession Scholarship Program, which is one of the centerpieces of that program, of bringing in kids interested in going to medical schools under scholarships from the military, has been very successful. That program is absolutely essential to us. It's—in the Army, it's well funded, both for the Active as well as the Reserve component of it. And we're seeing the products of it.

Our graduate health education, and specifically physician graduate education programs, and our nurse graduate programs, I think are essential for retention of those high quality people. If we didn't have those programs, frankly, I don't think we would be doing as well as we do, because we recruit successfully through the scholarship programs or loan repayment programs, but we retain them through offering to them some of the very best training programs for physicians and nurses that exists anywhere in the country.

Senator COCHRAN. Admiral Robinson, I didn't mean to overlook your opportunity of serving the Navy in the position you do. We appreciate your service. And I—what is your reaction to that same question?

Admiral ROBINSON. Senator Cochran, thanks very much.

First of all, the corpsmen are the backbone of Navy medicine. And you noted that—one doctor on your ship, but there were more—there were probably several corpsmen. Today, in our submarine force and surface force, independent-duty corpsmen very often are department heads for the medical departments. So, we actually count on these men and women to give first-rate medical care at sea to a large number of our forces. And they are qualified to do that, and they do a good job, and have been doing that for the last 50 years. So, it's not a new program; it's something that we've had in place, and we need to continue.

The 8,404 corpsmen, who are corpsmen with the Marine Corps, do an outstanding job, both from integrating with the marines, but also from taking care of marines and people in harm's way. And,

unfortunately, the largest number of casualties and mortalities that we have in Navy medicine over the course of the last many years actually is a result of the death of 8,404 corpsmen, my corpsmen who are with the Marine Corps.

So, the point is that the sacrifice and the bravery and the quality of the care that the men and women who are corpsmen and who are enlisted medics give is a testimony to the mortality/morbidity rates coming out of theater, out of the battlefield, and also testimony to en route care, to the surgical care, to the care that's received at Landstuhl, and the care that's received here. So, it's a continuum of care that starts with that combat medic, with that corpsman on the battlefield, that's able to reach out and actually do an effective job.

And recruitment and retention—Navy medicine, I think I almost will parallel completely what General Schoomaker said. We've had some poor years, but recently we have had good recruiting and retention numbers on the Active component side of our physicians. We are down in family practice, general surgery, in terms of critical specialties that we need more of, and also psychiatry, mental health, but we are doing a great job, and I feel very happy that the Health Profession Scholarship Program and several of our other programs are back up and are actually producing quite well.

On the Reserve side, there are some challenges that we're having, and I think that the challenges—we've looked at this, and I think the challenges in the medical recruiting portion may be related to how we changed the recruiting several years; instead of having an Active component and a Reserve component recruiter, we put the recruiters together. And I think that, at that point, as soon as the Active component member was obtained, as it were, I don't know if the emphasis was put on the Reserve component. We separated that out again, and we're going to look at this very hard, but I think we're going to see an uptick in the Reserve component recruiting that's occurring.

That's something that's on my radar screen, but right now, recruitment and retention in medical is all right—and I don't want to overplay this—we're looking hard, but it's okay, and it's better than it's been in the last several years.

Senator COCHRAN. Great. Thank you very much.

Mr. Chairman.

Chairman INOUYE. Thank you.

Senator Murray.

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

This hearing really does come at a critical time. We're in the seventh year in Iraq, and are increasing our operations in Afghanistan. And the Department of Defense continues to see our returning members come home with both visible and invisible wounds of war.

I know that you've all made a lot of progress, but we know our job's not finished. We need to make sure that all of our members and their families have access to healthcare at all times, and we can't forget to—our wounded warriors, our reservists, National Guard and Active Duty servicemembers, as they transition back to civilian life, and make sure that we're meeting all their needs.

To that end, I wanted to ask you specifically about the National Guard and Reserves. They've been called on a number of times to support us, and they're coming home to some real hardships, with the economy that is very difficult for all of us, but particularly for them. Some of them come home to no jobs when they're released from Active Duty, and healthcare becomes an issue for them, as well.

In some cases, the returning National Guard and Reserve soldiers have to live off limited savings or their drill pay to support their families. And, you know, that contributes to greater mental health stress for them. So, I'm very worried about how we're dealing with this right now.

And I wanted to ask all of you what kind of efforts are currently underway to improve access to mental healthcare during the dwell period for our National Guard and Reserve.

Open it up to any of you who'd like to comment.

MENTAL HEALTHCARE FOR RESERVE COMPONENT

General SCHOOMAKER. First of all, ma'am, we share with you the concern about the strain on the Active—the Army National Guard and the Reserves. This period of transformation for the Army, as you know, has been a transition from the reliance on our Reserves as a strategic reserve poised to be mobilized in the event of a strategic threat to the Nation on a large scale, to one of an operational reserve, where they are very much involved in continuous operations and mobilization and deployment.

Our first goal, across the board, in terms of health, dental, mental, and physical care, is at separation and demobilization, to fully explore what problems—and, in the case of dental health, to restore dental health; in the case of behavioral health problems, to comprehensively evaluate how the soldier is doing. And, I think, in the National Guard and Reserves, we still have a way to go with that.

Our Vice Chief of Staff of the Army, General Chiarelli, last year, recognized that access to healthcare for the National Guard and Reserve, who tend to live in sites remote from our installations and in the heartland, often in rural areas, does not have the access to care, even under TRICARE, that we would like. And we have a—he chartered, through Army medicine, a task force, co-chaired by Major General Rich Stone, in the Army Reserves, and Major General Deborah Wheeling, in the National Guard, to bring together leaders in TRICARE, leaders in the managed-care support contracts across the country, and for all—from all the State's Guards and others, to identify our problems in getting access to care, and to improve that. And that's a work in progress, ma'am, but we share your concerns.

Senator MURRAY. Well, particularly now. These Guard and Reserve members are coming home; many of them are living at or below the poverty line, including their drill pay, and they just—they don't have a job and they don't have health insurance. I know we take care of them prior to deployment. I think it's 6 months prior to deployment, they get healthcare. But, they come home, and they don't have anything during dwell time. You're going to call them up again, you know, in a year or two, and that becomes both

a recruitment issue for you, but it's also a real hardship on their families. And what are we doing to look at that?

General SCHOOMAKER. I think the first thing that we've been working on with you all is an extended benefit through TRICARE Reserve Select and other forms of TRICARE coverage, to reduce the benefit—excuse me—reduce the premium load on National Guard and reservists——

Senator MURRAY. During dwell time.

General SCHOOMAKER. Yes, ma'am—so that they can get access to care. There's no question that——

Senator MURRAY. So, is it an issue of budget or is it an issue of policy? What is it that——

General SCHOOMAKER. I think it's a combination of things. It's focus from Commanders. We've got Reserve component National Guard and Reserve commanders now focusing more on their soldiers' comprehensive health benefits when they're in dwell, and putting emphasis on that. It's choices you've outlined, yourself, ma'am, that when a soldier has a limited budget, and part of that is even for a modest premium for a TRICARE benefit, they often choose not to do that. And, frankly, as you know, young people often kind of take risk that they're not going to run into health problems, and so, they forego health benefits, for that reason. And I think, more and more, we're emphasizing the importance and the need for them to retain their medical and dental readiness, even in dwell.

NATIONAL GUARD AND RESERVES

Senator MURRAY. Well, I think it's a policy that we need to look at and really focus on. We're a long ways into the war in Iraq, and, with a lot of returning soldiers, we know that's going to go on for some time, particularly in Afghanistan, and I'm very concerned about that, so I hope we can explore that.

Does anybody else have a comment on that issue?

Admiral.

Admiral ROBINSON. Senator Murray, I think that the TRICARE Reserve Select is part of the answer. And that benefit, if I'm not mistaken, has been extended to the Reserve forces, because, certainly, the beneficiary numbers in the TRICARE system have increased, and I think part of that increase is that.

The second thing is that—and this is only for 180 days—it's only for 6 months, but the Active Duty, Reserve members that are coming off of Active Duty can still be covered, and their families can be covered with TRICARE for that 180-day period.

So, marrying those two with the Reserve Select program and the 180 days can be of some benefit, in terms of getting the care that they need.

In terms of the mental health coverage, on the Navy side the psychological—the Reserve Psychological Outreach Program and the Reserve Psychological Outreach Teams, which consists of about 24 to 25 social workers, are doing a good job of going to the Navy Operational Reserve Centers—the NOSCs are what they're called—and they have actually been reaching out to just under about 20,000 to 25,000 people. They have seen 1,700 people and referred people to mental health coverage. It's a small part, but it's the in-

creased focus on getting out into the heartland areas, the areas away from the medical centers, and also taking care of——

Senator MURRAY. Yup.

Admiral ROBINSON [continuing]. Those people, who aren't seen regularly.

Senator MURRAY. Right. But, we've been talking about this for a long time, so I'm frustrated that we're not doing better than we are today.

Admiral ROBINSON. We are doing better, but we're not doing all that we need to do. I would frame it in, in that direction.

Senator MURRAY. And I agree. I think that's fair. But, we're—we still have a big problem out there.

Admiral ROBINSON. Yes, ma'am, we do.

Senator MURRAY. General.

General GREEN. I think all the services share in their medical continuation, in terms of any problems that are identified from their deployments. We also all have the same survey systems that are applied, regardless—Active Duty, Reserve, or Guard—with the post-deployment surveys and the PDHRAs at about 6 months. We're looking for any problems that may have developed in the interim.

The medical continuation is one of those things where any problem that looks like it's associated with deployment, that they need to remain on Active Duty, we try and get that resolved by extending their orders and keeping them there. And the TRICARE Reserve Select is available to them for 6 months post.

We also have programs that haven't been mentioned here such as the Yellow Ribbon Program——

Senator MURRAY. Right.

General GREEN [continuing]. That are designed to try and help people find services and to ensure that they're getting some assistance. We're looking—the Army, in—particularly, is looking at some telemental-health, in terms of how we can also be of assistance that way. And all the services are looking at these things because we see some of the gaps that you see, and are trying to close those gaps as best we can.

Senator MURRAY. Okay. General Schoomaker, I wanted to ask you about the issue of suicides.

In January of this year, the Army released information that there were 160 suicides of Active Duty soldiers in 2009, 140 in 2008. For Reserve soldiers, you reported 78 suicides; 2009, 57. That increase in military suicides is really disturbing to me. And I think we need to be doing everything we can to make sure that we identify and mitigate the issues that are leading up to these unfortunate incidences. I wanted to ask you, What measures or programs has the Department of Defense instituted to mitigate future suicides? And what are we doing out there?

SUICIDE PREVENTION

General SCHOOMAKER. Ma'am, I think all the services, but certainly the Army, shares with you the concern that we've had about suicides. We've seen an increase, over the last 5 or 6 years, from a suicide rate within the Army that roughly was one-half of the benchmark, you know, age- and gender-adjusted statistics in the ci-

vilian sector, to one that now has risen to be almost in parallel with. It's hard to tell, in the civilian sector, because the civilian-sector numbers that are released by the Centers for Disease Control are 2 years after the fact, so we won't see 2009 statistics until 2011. But, this is a—this is an issue which the highest levels of the Army have taken responsibility for. The Vice Chief of Staff of the Army has chartered a task force. For the past year, they've looked very, very carefully at all factors across——

Senator MURRAY. Is this the National Institutes of Health study?

General SCHOOMAKER. No, ma'am, that's actually an additional piece of this. The STARRS program—the acronym for which I just blocked—but, the STARRS program is a $50 million, 5-year program that the Secretary of the Army chartered last year—with the National Institutes of Health, with University of Michigan, with Johns Hopkins—looking very carefully at all of the factors—what's been described as a Framingham Study that was done in Framingham, Massachusetts, beginning in the 1940s, looking at the risk factors for heart disease, and has changed our whole approach, nationally, to public health measures around heart disease. The same methodology is now being applied to suicide and suicide prevention.

But, within the Army itself, we're very actively looking at all of the factors that go into this rising suicide rate. There is no one single factor we can put our finger on. Roughly one-third of our suicides occur in people who have never deployed at all. Roughly one-third occur in soldiers who are downrange and deployed. And one-third are in those that have deployed once or twice within the last several years.

And the one transcendent factor that we seem to have, if there's any one that's associated with it, is fractured relationships of some sort, either a broken marriage, a girlfriend/boyfriend, even a relationship that might have been forged with the Army itself, as a very tight association a soldier made may develop, and then maybe does something that gets him administratively punished or, you know, nonjudicial punishment, and they go out and kill themselves. And so, we're looking at all of those related factors—alcohol and drug abuse that may be associated with it—because this is an impulsive act, frequently lubricated by alcohol or drugs, and we are, as an Army, very, very focused on how we can improve it.

At the Department level, there's a task force that has been chartered by the Secretary. In fact, Major General Phil Volpe, one of my physicians, is a co-chair of that task force, right now is looking at DOD-wide programs and how we can, in a unified way, take efforts to prevent suicide and better understand it.

Senator MURRAY. Okay. Well, I would like to work with all of you and, you know, have a—get as much information as possible. If we need to be doing more, in terms of support services, outreach, whatever, I think we really need to focus on that issue.

MENTAL HEALTH AWARENESS

General SCHOOMAKER. Yes, ma'am, we welcome it.

Senator MURRAY. Air Force or Navy, either one of you want to comment on what your services are doing to promote mental health awareness or—are either of you doing studies, long term, on this?

Admiral ROBINSON. Studies, I cannot answer. I can tell you that, in terms of the awareness and in terms of trying to do education and training, trying to make sure that we make this an imperative and a leadership imperative for all of our Commanders, making sure that we decrease the stigma of getting mental healthcare, which has been quite pervasive and is really a deterrent to people who need to get care, and also to the establishment in our operational stress programs, both in combat, but also—I'm talking—not in combat, now; I'm talking about operational stress—in noncombat situations, and also our caregivers' operational stress programs, because they often are under a great deal of stress—making sure that we have primary care members—and a great deal of the mental healthcare that is given to individuals, around the country, but certainly in the services, is given by family practitioners and primary health providers, and making sure that they have training and that they understand what is going on.

The dependent—the Deployment Health Clinics, the 17 that we have in the Navy, about one-third of the people that are coming in are coming in for mental health issues. And the nice thing is, no one knows why you're going into that clinic, but we have embedded psychiatrists, psychologists, and primary care members in that clinic, so you can be referred immediately and talk to someone, and get the care that you need.

I think, also, one additional thing, and that is the ACT Program, that we take to the deckplates, as we say; and that is, each man and woman, each person, each shipmate, can do the ACT. The "Ask," "Are you thinking about harming yourself?" The "C" is the "Care," the care to say, "I think you need some help. I think you need to see a chaplain. I think you need to go someplace." And then, the "T" part is the "Treat," and that is to actually make sure that people get to that level.

The continuum of care that we try to give indicates that everyone—every person in the Navy, civilian and Active Duty, in war and out of war—is responsible for their shipmate and is responsible—we're responsible for one another.

Senator MURRAY. General Green.

General GREEN. The Air Force, since 1997, has had a very successful Suicide Prevention Program, basically focused on 11 suicide prevention initiatives, most of that focused on very close focus by leadership, in terms of getting our wingman program out and making certain that everyone understands that this is not acceptable. With those 11 suicide prevention initiatives, we were actually able to decrease our rate below 10, for probably 5 to 7 years—10 per 100,000. Over the last 3 years, we have seen slight increases back to about our 1997 rate. We are also trying to reinvigorate our program. Actually, we work very closely together across the services to do that.

We do have one study that the Air Force has funded, different than the others, because we were very interested, in particular, with civilian suicides, because of some events that have been happening that have made the news out at Hill Air Force Base. And so, we had the RAND Corporation look at some of our initiatives out there to try and create a first-sergeant equivalent, people who could be there and be kind of initial capability to help civilians find

assistance in an area that did not have all the mental health support that it needed. And then, we've also put, in our occupational clinics out there, a mental health social worker to try and assist with some of that.

We did also identify that we have about three times the rate of the rest of the Air Force in two career fields, in security forces and in intel career fields. We are taking a very targeted approach with those career fields to try and do face-to-face interventions with much smaller groups, using some of our video vignettes, similar to that used in our computer-based training. We are also mandating those front-line supervisors will receive specific suicide training.

Because our program's been in place since 1997, it is in our PME schools, it is in our basic training schools. And so, I think we'll continue to have success. Our rates are probably about—not quite one-half of what the other services are. But, we believe our programs are still valid, and we're just emphasizing and trying to focus them where we see problems.

Senator MURRAY. Okay. I really appreciate all of your focus and attention on this. I think it's extremely important.

And I know I'm out of time, Mr. Chairman, and you've been generous.

I do want to submit some questions for the record.

One, in particular, that I want to hear back from all of you on is what we're doing for children of servicemembers today. We have a lot of families out there who have sacrificed a heck of a lot in a very tough economic climate, and I know who bears the brunt often is the kids of those families, and I'd like to hear back from each one of you what you are doing uniquely with our families and what we, as Congress, ought to be doing, or can be doing, to better support the children of the members of our services.

SUPPORTING FAMILIES AND CHILDREN

General SCHOOMAKER. Yes, ma'am. We would love the—to participate in that. As you know, one of the centers of this is in your State, at Madigan Army Medical Center. It's one of our centers for outreach for children.

Ma'am, if I might, real quickly, append the record just to say, before I get hate mail from my colleagues at Uniformed Services University of the Health Sciences, one of the pivotal players in this landmark study on suicide, the 5-year, $50 million study with the National Institutes of Mental Health is the Uniformed Services University of Health Sciences, Dr. Bob Ursano, who is really heading up this project.

Senator MURRAY. Okay. Look forward to hearing much from that.

Admiral.

Admiral ROBINSON. Senator Murray, for your children—and this isn't a complete answer, but a short one, because it actually came from this hearing, 2 years ago, but the FOCUS Program—Families Over Coming Under Stress—which was originally started with Navy in very small groups of mainly Special Ops families who had had such an intense OPTEMPO. And we have now seen some really excellent results with that program, in terms of marriage, counseling. I can't say that all the marriages are successful, but there's

been a reduced rate of divorce, there's been a reduced rate of children involved in drugs and in other acting-out behaviors. It's a program that's focused on spouse and children, and it's been very successful. And it's being incorporated, now, into not only Navy, but also Army and Air Force.

Senator MURRAY. I'd like to get a briefing on that, if you could tell me what you're doing and how it's working——

Admiral ROBINSON. Certainly.

Senator MURRAY [continuing]. And what some of your statistics are. That would be great.

Admiral ROBINSON. I'll be happy to do that.

[The information follows:]

Project FOCUS (Families Over Coming Under Stress) Outcome Metrics

FOCUS has demonstrated that a family-centered targeted prevention program is feasible and effective for military families. Utilizing national and local partnerships, community outreach, and flexible and family friendly skills-based approach, FOCUS has successfully initiated a resiliency training program in collaboration with the military community. FOCUS has demonstrated that a strength-based approach to building child and family resiliency skills is well received by service members and their family members reflected in high satisfaction ratings. Notably, program participation has resulted in 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. Standardization in program implementation provides the foundation for FOCUS program implementation and sustainability to support larger scale dissemination.

Current Service Metrics

Total all FOCUS Services to date at all sites: 92,000.
—Navy: 40,000 (services began March 2008).
—Marine Corps: 50,000 (services began March 2008).
—Army: 2,000 (services began November 2009).
—Air Force: 600 (services began November 2009).

Specific outcomes of program interventions as measured by validated and standard metrics used in psychological health surveys are:

—Pre- and post-intervention levels of overall psychosocial functioning of program participants (both adults and children), suggest a significant improvement. The statistical level of significance is $p < .001$ level.
—Pre- and post-intervention levels of general emotional stress suggest a significant reduction in depression, anxiety, and somatic complaints on the part of adult care givers. The statistical level of significance is $p < .01$.
—Change scores on 6 dimensions of family functioning were found to be highly significant at the $p < .0001$ level of statistical significance. This suggests a marked level of improvement across areas such as behavior control, problem solving, communication, affective involvement and responsiveness, and general level of family functioning.

Project FOCUS surveyed both parents and child participants and found a high level of overall satisfaction with FOCUS services. The average of all respondents on levels of satisfaction is reported below. A rating of 7 was the highest possible rating: 6.54 for "program was very helpful"; 6.59 for consumers being "very satisfied"; and 6.73 for consumers who would "recommended the program to others".

In summary, since Project FOCUS has been in operation, ongoing and multiple assessments of program effectiveness have repeatedly shown that the program is worthy of being viewed as a model program for military families.

Senator MURRAY. Very good.

Admiral ROBINSON. Thank you.

Senator MURRAY. Thank you very much.

Thank you.

Chairman INOUYE. Thank you.

General Schoomaker, Admiral Robinson, and General Green, I thank you very much.

Chairman INOUYE. And we'll now listen to the second panel, a very important one.

I'd like to welcome back Major General Patricia Horoho, Chief of the U.S. Army Nurse's Corps; and Major General Kimberly Siniscalchi, Assistant Air Force Surgeon General for Nursing Services; and I'd also like to extend a special welcome and congratulations to the newly appointed Director of the Navy Nurse Corps, Rear Admiral Karen Flaherty.

I'd like to also extend my congratulations to General Horoho for being selected to serve as U.S. Army Deputy Surgeon General and also as the Nurse Corps Chief.

As all of you know, I did have the privilege of serving in the Army, and spent about 20 months in various hospitals. And at that time, I saw the doctor about once a week, and the nurses 24 hours, 7 days a week. And, as a result, I looked upon them as special angels, in my case. They helped prepare me to get back into life.

Today, you have patients with problems that did not exist in World War II. For example, in my regiment, with all the casualties, there wasn't a single survivor of double amputation, no survivor of brain injuries. But, these are becoming commonplace now, because—for example, in my case, it took 9 hours to evacuate me by stretcher. Today, if it were in Afghanistan or Iraq, I'd be evacuated in about 30 minutes by helicopter. And so, the survival rate is extremely high.

And added to this, you have cell phones, daily telephone calls between husbands and wives, and CNN telling you what's happening out there.

And so, the stress is not only limited to soldiers, airmen, and marines, but also the family.

Do you think that nurses are adequately prepared and trained to serve men and women with problems that didn't exist during my time?

General Horoho.

General HOROHO. Thank you, Mr. Chairman.

PREPARED STATEMENTS

Chairman INOUYE. Your statements have been made part of the record, so——

General HOROHO. I'm sorry, sir?

Chairman INOUYE. Your full statements are part of the record now.

General HOROHO. Okay.

[The statements follow:]

PREPARED STATEMENT OF MAJOR GENERAL PATRICIA D. HOROHO

Mr. Chairman 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 the highest quality care for those who are entrusted to our care.

Last year I promised you an update on the Army Nurse Corps Campaign Plan that we began in October 2008. It became evident that our efforts to transform Army Nursing mirrored the desire of national nursing organizations and their leaders to improve nursing practice in support of the healthcare reform initiative. Today I will share with you some of Army Nursing's accomplishments that are leading national nursing initiatives as well as some of the challenges that we will face in the years ahead.

LEADER DEVELOPMENT: BUILD OUR BENCH

The first priority for Army Nursing is to develop full spectrum Army nurse leaders. Considering our Nation's continuous engagement in overseas contingency operations and the complex clinical challenges our nurse officers face both home and abroad, I challenged my senior leaders to develop training platforms that will prepare our nurses to succeed in any contingency-based operation around the world.

Identifying the need for a clinical transition program for new graduate Army Nurses, the Army Medical Command (MEDCOM) formally fielded the BG (R) Anna Mae Hayes Clinical Transition Program (CTP), named in honor of our 13th Corps Chief, across nine medical centers beginning in October 2008. During fiscal year 2009, 364 new graduate Army Nurses completed this program. Throughout the year, the program was standardized to decrease the variance among the nine program sites. Thus far in fiscal year 2010, over 270 nurses have graduated from the program. Their enthusiastic endorsement of the program usually ends with the question "when can I deploy?"

Our nurses take great pride in wearing the cloth of our nation. After graduating from the Officer Basic Leader Course, the new nurse officer enters the Leader Academy via the CTP. This program is based on the Army leader development strategy that articulates the characteristics we desire in our Army leaders as they progress through their careers. The CTP is a 25.5 week program designed to bridge the baccalaureate education and professional practice of the New Graduate Army Nurse (NGAN). It consists of three formal phases (orientation, preceptorship, and clinical immersion) developed to foster critical thinking, communication, and deployment skills. Incorporated into the phases are a 5-hour monthly didactic seminar, journal club, and research review with a focus on leadership, professional role development, and improvement of patient outcomes. The CTP is congruent with the National College of State Boards of Nursing's intent to require residency programs for new nurses.

Initial review of survey data collected during fiscal year 2009 reveals NGAN positive responses to the following domains of new graduate nurse satisfaction: intent to stay, confidence levels in individual practice, and enthusiasm for the practice of nursing. The responses of the NGANs were similar to the published survey results from civilian clinical nurse transition programs. With the key elements of this program standardized, outcome variables related to risk management (such as medication errors, patient falls, and failure to rescue) can now be evaluated in fiscal year 2010.

The first course that we realigned in support of the Campaign Plan was the Head Nurse Course. It has been renamed the Clinical OIC and NCOIC Clinical Leader Development Course. The renaming is a result of acknowledgement of the critical relationship that exists between the Clinical Nurse, OIC (Officer in Charge) and their clinical right arm—the NCOIC (Non-Commissioned Officer in Charge). As an integrated training platform, this course has had very positive results. It provides our mid-level managers the opportunity to learn the critical skills needed for working as a team, and to master those skills in a simulated environment. This allows participants the opportunity to hone tactics and to learn techniques and procedures and decision-making skills that are used in the clinical environment. The training received in this course promotes cognitive competency and teamwork, and metrics are being developed to examine the program's impact on patient outcomes. Twelve clinical NCOICs from across Army Medicine attended the Head Nurse Leader Development Course as a pilot test October 2009. Due to the success of this pilot test, full attendance of Clinical NCOICs at this course is in the approval process. Both the CTP and the clinical leader development course are designed to prepare clinical leaders to be experts at navigating the complexities of care delivery in any environment.

Through the past year we have leveraged the experience and expertise of our clinical Sergeants Major, as the senior enlisted advisors and subject matter experts on NCO and enlisted issues. They are our primary advisors on policies and regulatory guidance. Their voice and ideals have brought us a "results-based leadership" that has allowed us to excel in our imperatives and adopt a "new paradigm," or view of the world. These NCOs could not accomplish their mission without the hard work and dedication of the men and women of the Army Medical Department (AMEDD) Enlisted Corps. It's through their unrelenting compassion to save and heal, despite hardships and dangers to life and limb that makes them "angels on the battlefield."

We are committed to the growth and development of our NCOs and Soldiers. Therefore, starting in fiscal year 2011 we will fund two senior NCOs to obtain their Masters in Healthcare Administration which will ensure a continuous capability to meet the needs of the 21st Century. In addition, we are developing an Intensive

Care Unit course for our Licensed Practical Nurses (LPN); this additional capability will allow commanders the flexibility to use LPNs for transport of critical patients, improve patient outcomes, and expand practice opportunities.

Finally, the Leader Academy facilitates enhanced career-long development of adaptive full spectrum Army Nurse Corps leaders through the level of Regional Nurse Executive (RNE). We adopted the American Organization of Nurse Executive competencies that include skills such as healthcare economics, and healthcare policy management as well as abilities in outcomes measurement and change management in order to ensure the RNEs have the knowledge, skills and behaviors to help manage the regions system of health. We leveraged George Mason University's "Nursing Administrative Leadership Academy" into our own leader academy as a training platform for our RNEs. We are sending three of our RNEs to the program this summer. We are also selectively using AMEDD courses such as the Interagency Federal Executive and the Executive Skills Course to hone and refine the RNE's abilities as influencers of the delivery of health. We believe the Army Nursing Leader Academy is setting the standard nationally for how nurse leaders are prepared to have an active and influential voice in healthcare, AMEDD, and national nursing policy.

WARRIOR CARE: BACK TO BASICS

Our second strategic imperative is to standardize nursing care delivery systems in order to perfect nursing care at the bedside. We created a Patient and Family centered System of Nursing Care (SOC) that has as its cornerstone standardized nursing practice. This SOC will not only enable the Surgeon General's intent to improve and standardize care from the point of injury through evaluation and inpatient treatment and then return to duty, but will also enable, for the first time, comprehensive measurement and subsequent improvement of nurse-sensitive patient outcomes.

We piloted elements of this SOC at Blanchfield Army Community Hospital, Fort Campbell, Kentucky, in January 2009. After 6 months of monitoring we identified notable improvements in care such that nurse sensitive errors declined, while compliance with quality initiatives increased. During the 6 month pilot period, we found a 44 percent decrease in nursing medication errors and a 100 percent decrease in risk management events. Additionally, patient pain reassessment improved from 90 percent to 99 percent and reporting of critical laboratory values improved from 92 percent to 100 percent. We realized several "quick wins" such as the marked improvement in how nursing staff communicate with patients and physicians. Unexpectedly, we noted improvement in nurse retention metrics including a 24 percent increase in nurses' opinions that they are rewarded for a job well done, and a 23 percent increase in nurses' opinions that nurses are seen as important leaders in their organizations. Overall, nurses reported that they believed that they were being heard, and their opinions valued. One nurse at Blanchfield said "Now I feel like I have a voice in the organization."

Using the data from the Blanchfield pilot, we fully conceptualized the SOC as a three-sided pyramid with one side delineating clinical practice elements, another professional practice elements, and another business practice elements. The pyramid is anchored by the Army nursing triad; Army nurses, NCOs, and enlisted and civilians comprise its base. Next month, select elements of care are being implemented at three medical centers: Walter Reed Army Medical Center, Washington, DC; Brooke Army Medical Center, Fort Sam Houston, Texas; and Madigan Army Medical Center, Fort Lewis, Washington. For one element of the professional practice side of the pyramid, we are implementing an Army nursing creed—it is our nursing ethos and codifies who we are as nurses by articulating what we believe in and value as nurses; it is the heart of nursing practice. It includes Army values and the American Nurses Association Standards of Practice that allow us to define a standard level of nursing care common to all nurses and a standard level of behavior in the professional role.

In April, at the same three hospitals, we are implementing nursing peer review that aligns a business strategy with clinical practice. Peer review is a best clinical business practice that enables us to retain the very best nurses who provide quality care as measured against our professional standards of practice. Peer review is a talent management tool that provides real time, constructive feedback to clinicians to assist with their professional growth which leads to good patient outcomes.

In May, we will implement the Army Nurse Corps Practice Council along with unit-specific governance councils to support the clinical practice side of the pyramid. Governance councils will facilitate decentralized joint decisionmaking by nursing leaders and staff nurses at the frontline of care—the patient/nurse interface. These unit councils will collaborate with the Army Nurse Corps Practice Council to iden-

tify best practices relative to nursing tactics, techniques, and process, and then codify these practices for standard use across Army Nursing. Army Nursing identified two best practices that were incorporated into the SOC. At Tripler Army Medical Center (TAMC), nurses modified environmental and staff behavior factors to tailor inpatient care to provide "Healing Hours." The restorative importance of sleep is well documented, but hospitalized patients report many factors including noise, pain anxiety, light, and interruptions by hospital staff as sleep disruptors. To validate the most common sleep disruptors, TAMC nurses requested input from 227 patients over a 6 week period and received 135 responses. 71 percent of patients reported averaging less than 4 hours of sleep a night during their hospitalization. 62 percent reported their sleep being interrupted by a nurse or provider. With the information gathered, TAMC initiated the Healing Hours concept. Healing Hours are individualized based on diagnosis and requirement for hands-on care. The overall purpose of Healing Hours is to promote rest through consolidation of patient care activities. Ancillary services aligned their services to support this initiative. Pharmacy adjusted routine medication times to coincide with established rest hours. Routine laboratory service rounds do not begin before 0600 hours. Signs are posted on each patient's door to remind all staff of requested Healing Hours. Patients are provided information during pre-admission activities to encourage them to bring comfort items from home; i.e. earplugs, earphones, and eye masks.

At Walter Reed Army Medical Center, senior nursing leadership examined hourly nursing rounds as a measure to improve patient and staff outcomes. A total of 11 intensive, medical, surgical, and same day surgery units participated in the project, where we simultaneously measured outcomes such as patient satisfaction, staff satisfaction, falls, medication errors, and call light use. We compared pre and post intervention efficacy of hourly nursing rounds and found that within 4 months of the implementation of hourly rounds, patient outcomes, such as the use of call lights and patient falls decreased while patient satisfaction increased.

In order to ensure implementation of innovative ways to deliver care to the inpatient, outpatient, and deployed environment, we are also moving forward with implementing team nursing, comprised of RN, LPN, and medics. This aspect of the SOC aligns with The Surgeon General's (TSG) "Come Home to Army Medicine" campaign. This community based primary care will bring healthcare closer to home, standardize business practices, and develop the model for patient centered medical home.

As we begin implementation of the SOC, our nurse researchers have begun the transformation of a geographically disparate one to three person research cells into the Offices of Nursing Science and Clinical Inquiry (NSCI). The NSCI will combine the resources of Research Ph.D. Scientists, Nurse Methods Analysts, Clinical Nurse Specialists, and the new DNP (Doctorate of Nursing Practice) with a robust mission that will provide decision support, evidence-based practice, and research. These NSCIs at each regional medical center will promote a shared vision across Army nursing using shared and capitalizing on shared resources and infrastructure. This change will shift emphasis in focus to capitalize on integration of evidence-based research into practice, improve warrior care, enable leader development and maximize human capital while addressing Army nursing priorities. This fundamental shift will transform Army nursing from an expert based practice to system based care and will provide the impetus to move toward a culture and workforce with the ability to develop research agendas and translate evidence into practice at the bedside. Currently the Army Nurse Corps has an inventory of 33 ANC Research Scientists and two civilian nurse scientists with doctoral degrees. Twenty-one of these are actively working in research assignments.

In 2008, we initiated a comprehensive review of all Army nurse business and clinical processes and associated training and education. The gap analysis revealed a requirement for more advanced degree experienced nurses at patients' bedsides to influence nursing care; specifically, to direct nursing care within a systems-based care delivery model that decreased nursing care variance across the Army Medical Department in order to measure and improve patient outcomes. To that end, we expanded our review to examine the new Doctor of Nursing Practice (DNP) role as a modality for closing the gap. After this review was completed, we recognized the value of placing select DNP's within our NSCIs and the ANC is in the process of making this infrastructure change. This will provide clinical leadership, create a partnership with nurse Ph.D.'s and Nurse Method Analysts, and facilitate practical application of evidence-based research at the patient bedside to ensure evidence-based nursing care.

According to the American Nursing Association (ANA), one of the most significant shifts in health policy is represented in a measure to expand the involvement and authority of advance practice nurses. Army Nursing is also working closely with na-

tional nursing organizations such as the American Academy of Colleges of Nursing (AACN) in leading national efforts to conceptualize a value-add role for DNPs as well as the new innovative clinical nurse leader role.

The Army nursing SOC will require new capabilities while allowing us to better leverage current nursing capabilities. For example, nursing case management is increasingly being recognized as an essential component of healthcare delivery. Case managers provide added value to the multidisciplinary healthcare team. Case managers in Warrior Transition Units (WTUs) are providing care to over 9,000 Soldiers and have facilitated the transfer of over 8,500 Soldiers back to duty or on to become productive Veterans. Warrior satisfaction with case management services has remained at or above 92 percent throughout the year.

The Army Nurse Case Management Course was fielded in December 2008. This course was designed to better prepare case managers in their role, facilitate the successful completion of national certification, and standardize case management services across WTUs, to ensure case managers are effectively trained to perform their mission. Over 300 nurse case managers participated in this web-based program that utilizes adult learning principles that enhance the Army NCM's understanding of case management theory. Students learn about best practices across military and civilian settings, thus gaining knowledge of principles and tools utilized in case management.

Army nursing case management is improving care in primary care settings as well as in our WTUs. Nurses across the country espouse success stories where case management has had a positive impact on patient care. In Alaska, NCMs were working with a 28 year old infantry Soldier undergoing the Medical Evaluation Board process for moderate Post-Traumatic Stress Disorder (PTSD). During one of their sessions they talked about his mother who died at age 34 with colon cancer. Because the case managers had developed a good rapport with the Soldier, he felt comfortable mentioning that he had some rectal bleeding. He was immediately evaluated, determined to have metastatic colon cancer, and underwent a colectomy. The operation saved his life. Subsequently, he was able to medically retire as a healthy, productive veteran.

The strategic end state of this SOC is optimized nursing care delivery systems that wrap capability around AMEDD goals and priorities to achieve the best patient outcomes possible. This capability and functional structure is designed to leverage proliferation of evidence-based care and best practices to support TSG's strategic objectives.

EVIDENCE-BASED PRACTICE: OPTIMIZE PERFORMANCE

Our third strategic imperative is to optimize Army Nursing performance using evidence-based management and evidence-based clinical practice. Evidence-based clinical practice aims to merge best practices from both clinical care and business practices to produce optimal outcomes. These goals are achieved through scientific analysis, data management, and system redesign to support the everyday performance of all our nurses. For example, the Workload Management System for Nursing (WMSN) is a tool that ANC has been using for accurately measuring patient acuity in order to establish manpower requirements in our inpatient care settings. This past year, we initiated the most dramatic update to our WMSN since 1985. Led by talented Army Nurses, the WMSN Refresh and Optimization project will enable us to upgrade our WMSN operating system, integrate and migrate all previously separate servers, update the clinical classification and acuity measures, and develop a software interface for real time reporting tools. This milestone business process improvement will afford our nursing leadership the necessary data to support current and future resourcing decisions.

Another example is the Clinical Information System (CIS) that was developed with input from our clinical and nursing informatics experts that has played a major role in modernizing our electronic health record. This past year included tremendous expansion of the CIS inpatient health record throughout the MEDCOM. The CIS is designed to help nurses and other healthcare personnel collect, record, store and access patient data, as well as data from medical instrumentation and physiologic monitors from a centralized computer system. The impact of a standardized inpatient nursing documentation system cannot be minimized as it not only provides standardized documentation of the patient's history, but allows, through its requirement to enter data fields, standardization of how nurses practice.

Another evidence-based initiative is our collaboration with the Veteran's Health Administration (VHA) on Clinical Terminology Standardization that has resulted in the development of over 2,236 standardized clinical terms. The development of Systematized Nomenclature of Medicine—Clinical Terms and Logical Observation Iden-

tifiers Names and Codes will allow for intra-operable standardized clinical vocabulary to assist both the providers, and the clinical researchers. Future collaboration will allow for a seamless process to add, review, and map new terminology and integrate this into DOD inpatient documentation systems.

Given the magnitude of investment and the substantial military healthcare renovation and construction projects in the National Capital Region (NCR), it is important to examine the relationship between environmental evidence-based design (EBD) features and patient and staff outcomes. COL Petra Goodman, an Army Nurse (AN), has collaborated with investigators from numerous agencies, to include our sister services, military treatment facilities in the NCR and the DOD Patient Safety Center, to develop research protocols in EBD principles and their specific outcomes, including falls, work-related injuries, and hospital acquired infections. There series of studies will provide critical baseline information for future research in EBD.

Implementing 2005 BRAC Law, Army Nurses have been involved from "Day One" in creating the new 1.23 million square foot Fort Belvoir Community Hospital ensuring that the project delivers on its mission to create a World Class Military Health Care facility. DeWitt Army Community Hospital (DACH) nurses, both uniformed and civilian, have provided critical input in the design, development, and implementation phases of this project which includes numerous EBD features such as single bed rooms with family zones, maximized use of natural light, healing gardens and positive distractions, increased HEPA filtration, ceiling mounted patient lifts, walled rather than cubicle spaces, and the use of reduced noise sources and sound absorbing materials. MAJ LaShanda Cobbs, AN, serving as Transition Director for the hospital project until July 2009, provided key leadership in coordinating design concept of operations workgroups, guiding utilization of EBD principles, and developing manning determinations for this state-of-the-art inpatient and ambulatory care center. Looking to the future, DACH nurses will continue to play pivotal roles in implementing integrated bedside IT solutions, the Vocera hands-free nurse call system, creating patient controlled environments utilizing Smart Room Technology, and myriad other operational solutions to maximize EBD features to minimize hospital acquired infections and increase patient safety.

Never before have we relied so heavily on nursing research to infuse nursing practice with evidence-based science. In February 2009, the Triservice Nursing Research Program (TSNRP) invited nurse scientists from all services to meet in order to determine new priorities for TSNRP. Not surprisingly, Force Health Protection was recognized as the number one priority. Deployment research is designed to ask critical questions that cannot be answered other than on the battlefield providing medical care for our service members. Army nurses have led the way with deployment research relative to their strong presence in field environments. There have been 34 nursing led protocols, 27 of those are from ANC researchers and one joint Army/Air Force protocol. A breakdown of these protocols includes a total of 20 protocols on warrior care, including five on Soldier Health, three on Trauma care, and one on Behavioral Health and a total of 14 protocols to study the impact of compassion fatigue and stress on nursing and healthcare professionals. Post Traumatic Stress Disorder (PTSD) is a focal point for many of the studies. COL Kathy Gaylord at the Army's Institute of Surgical Research is conducting three studies to evaluate alternative therapies for treatment of PTSD or PTSD symptoms in burn patients. "Gradual Virtual Reality exposure therapy and D-Cycloserine (a learning enhancer pill) treatment for combat-related PTSD" is a pilot study to determine the effectiveness of virtual reality therapy for service members who have sustained a burn injury requiring multiple dressing changes as a distraction to reduce their pain during these dressing changes. "Cranial Electrotherapy Stimulation (CES) on PTSD Symptoms in Burned Outpatients" is a double-blind randomized control research study is to determine if CES given to service members who have sustained a burn injury and meet PTSD criteria will be effective to reduce their PTSD symptoms and other deployment-related symptoms. ANC research scientists also continue to collaborate with the other DOD agencies, the Department of Veterans Affairs, and universities in support of the congressionally funded studies for research. In the Pacific region, Army nurses established a clinical-academic research partnership between Pacific Regional Medical Command (PRMC) and the University of Hawaii. This first formal academic-clinical nursing research partnership between Tripler Army Medical Center and the University of Hawaii creates a joint vision for the future of nursing and healthcare. This partnership provides the resources and structure that will allow Pacific Regional Medical Command (PRMC)-based nurses and University of Hawaii (UH)-based nurses to ask and answer the clinically relevant military healthcare questions.

Army Nurses, like MAJ Rebecca Terwilliger, are leading the way with an innovative best clinical practice pilot to improve nursing care. She won a $17,532 grant from the March of Dimes to establish a Centering Pregnancy Program for antepartum patients. Participants enroll into a stable group that begins meeting at 16 weeks followed by monthly meetings until 32 weeks, then every other week for the remainder of the pregnancy. The group meets for 2 hours each session and is led by a certified nurse midwife. Benefits of the program include the development of a socialization and support network system while providing 2 hours of education on topics related to pregnancy, childbirth and newborn care. Evidence has shown that the program increases patient satisfaction, increases continuity with a provider and decreases preterm birth rate; for those that deliver prematurely, delivery occurs in gestation and the newborn is at a higher birth weight.

Research is also supporting evidence-based business practices. For example, we used data to evaluate our accession portals and make timely changes on how we recruit, retain, and incentivize nursing personnel to remain a part of our nursing team. The Army Nurse Corps was very successful in recruiting and retaining Army Nurses in 2009. Research, like that being done by LTC Breckenridge-Sproat, AN, titled "Factors Associated with Retention of Army, Air Force, and Navy Nurses" will survey Active Duty Army, Navy and Air Force nurses to explore factors influencing decisions to maintain their active duty status. In the history of military nursing research, there has never been a retention survey using a validated instrument conducted across all three services. Considering the changing market for registered nurses in the United States and the complex factors that influence decisions to remain on active duty, it is important to obtain data to support appropriate strategies to retain military nurses in the Army, Navy and Air Force. The results of this multiservice study will provide the Corps Chiefs from the Army, Navy, and Air Force with a better understanding of factors impacting nurses' intent to stay in the military. The findings should allow administrators to capitalize on specific factors that positively influence nurses to stay in the military and implement changes to ameliorate factors that are influencing nurses to leave the military.

Research is also helping us develop new recruiting strategies, called precision recruiting, whereby we are recruiting experienced medical-surgical and specialty trained nurses. This strategy will provide us with a balanced force of new nurse graduates with more experienced clinical nurses. Leveraging data allowed us to determine the need for precision recruiting, i.e., targeted recruiting of critical low densities. As a result, we increased our recruitment of Nurse Anesthetists, Behavioral Health Nurse Practitioners, Family Health Nurse Practitioners, and critical skills such as Emergency Room and Critical Care trained nursing personnel. These skills are especially in high demand with our nation's continued involvement in overseas contingency operations. Working closely with Accessions Command, we are formulating a recruitment strategy that ensures a consistent pipeline of ROTC, Army Enlisted Commissioning Program (AECP), and Federal Nurse Commissioning Program graduates, balanced with direct accessions of experienced nursing personnel.

Evidence-based processes also allow us to look at who, when, and where we have the greatest attrition and how attrition is impacting the care we provide for our beneficiaries. Incentives, such as Incentive Special Pay, critical skills bonuses, and hiring bonuses have not only allowed us to conduct precision hiring of civilian nurses, but also allowed us to compete with the recruitment market for experienced and well qualified nursing personnel. I want to thank the committee for supporting these initiatives in the past and look forward to your continuing support in the future. In addition we raised and then codified minimum standards for entry into the AECP based on the quality of the nurses this program produces. In the past we have had as high as 14 percent non-completions in the AECP. Data analysis revealed an antiquated admission criteria resulting in candidates who were not adequately prepared to sustain the rigors of the Bachelor's of Science program. The change in admission standards has vastly improved the quality of candidates in the program and will ultimately impact the quality of care we will provide to our warriors and their families.

HUMAN CAPITAL: PORTFOLIO OF TALENT

People are our organizations' most valuable asset and remain one of my top priorities. Success toward our strategic initiatives has been possible only because of the commitment and extraordinary work by the triad of nursing; Active and Reserve component officers, non-commissioned officers, and civilians. Our efforts over the past year in both recruitment and retention of active duty and civilian nurses have positively impacted Army Nursing. Investing in human capital requires a strategic approach to managing the recruited and retained talent so patient outcomes are op-

timized throughout the organization. Subsequently, our fourth imperative is optimizing human capital talent through talent management and succession management planning. One of the ways we are managing talent is by leveraging nursing capability in new ways. A great example of this is the "curbside nursing" concept that clinical nurse midwives implemented at Fort Campbell, KY. In 2009, it became strategically imperative that some type of new Soldiers' health initiative for women's gynecological intervention and engagement was needed to address the backlog of gynecologic appointments. Several Certified Nurse Midwives (CNM) services have actively engaged in leaving the confines of the hospitals and entered what normally has been recognized as a Soldier's clinic. This medical model approach to women's wellness has received laudatory comments noted in Army Provider Level Satisfaction Survey reports across several installations.

To support TSG's strategic priority of implementing a comprehensive behavioral health system of care, BG Steve Jones, Commander, Pacific Regional Medical Command, and I worked together to implement a program to assess the effectiveness of connecting behavioral health resources with soldiers in a virtual encounter. Nursing resources were engaged in validation of the assessment tool as well as serving as a force multiplier through the integration of NCM and 68X, Mental Health Technicians, in the virtual program. Partnered with behavioral health (BH) providers, NCM screen for "at risk" Soldiers face-to-face and virtually with the intent to provide access to BH in remote or isolated locations. Many Soldiers returning from deployment do not need the complex services of the Warrior Transition Unit (WTU), but they do have significant concerns that could impact successful reintegration with families and non-combat environments. Coordinating care and support through the NCM, Soldiers and families are guided to financial, emotional, and physical care to support reintegration. The NCM effort in this Comprehensive Behavioral Health System, led by Amy Earle, RN, mitigates stressors to the Soldier and family by connecting them to services within the community.

At Europe Regional Medical Command, the Maternal Child Nursing section uses a Perinatal Clinical Nurse Specialist to track high risk patients, which resulted in significantly increasing the number of infants that were immunized against Hepatitis-B at birth or prior to discharge as recommended by the Centers for Disease Control. In 2009, LTC Sherri Franklin, Chief of Nurse Midwifery, started a new midwifery program with 3 active duty CNMs at Fort Benning, Georgia. Due to the increased demand for low risk obstetrical care and the size of the post increasing, this planned service will be stabilized at Benning. Planned for 2011, an additional 6 new CNM graduates from accredited mastered prepared programs across the United States will be welcomed as new clinicians.

This year, for the first time in our history, two of the deployed Combat Support Hospitals will be commanded by Army Nurse Corps officers. In 2009, 333 active duty Army Nurses were deployed in support of Operation Iraqi Freedom and Operation Enduring Freedom. This represented a total of 70,589 deployed man days. In 2009, the 6 month (180 days) PROFIS deployment policy was successfully implemented, considerably reducing the adverse affects of long deployments on our nursing personnel. Through the expert coordination of our nursing leaders, nursing staff were rotated at 6 month intervals with no adverse impacts in patient care. However, our low density nurse specialists, to include nurse anesthetists, nurse practitioners, critical care, perioperative and emergency nursing are still experiencing frequent deployments with some nurses completing their second and third deployments. We are conducting an in-depth force structure analysis to determine our objective force structure for the future years.

Our Budgeted End Strength is projected to increase from 3,515 in fiscal year 2010 to 3,580 in fiscal year 2011. In addition, 80 Army Nurse Corps officer authorizations are projected as a part of the Grow the Army strategy. We are modeling for the optimal number of critical care nurses, emergency room nurses and behavioral health nurses needed to ensure sufficient staffing in our CONUS based medical treatment facilities and to continue the theater support that has supported the 93 percent survival rate of our service members injured in our combat theaters. We recognized that many of our specialty nurses transition to advanced practice roles as nurse anesthetists or nurse practitioners but their "loss" from the specialty role was not included in our previous models. Using innovative analytical processes we have identified shortfalls in our training requirements that, when corrected, will increase the available strength of these critical low density nurse specialists. With increased numbers, the adverse impact of frequent repeat deployments will be mitigated. The Army Nurse Corps has always been committed to advanced education as an essential element of quality healthcare. As we face the continuing behavioral health challenges, we are increasing our number of nurses selected for behavioral health nurse practitioner programs. Of note, only the Psychiatrist and the Behavioral Health

Nurse Practitioner has prescriptive authority as Behavioral Health providers. We have recognized that this level of Behavioral Health providers is critical in both garrison and deployed settings to facilitate optimal behavioral healthcare. This year, we will select 5 nurses for attendance in the Psychiatric/Mental health NP program at Uniformed Services University (USU) to start in 2011. In addition, as we transition our advanced practice nurse roles to the future DNP, we will be sending one nurse for a DNP program as a Psychiatric/Mental Health NP.

We rely on the USU Graduate School of Nursing as the strongest educational platform to develop critical talent to provide nursing capability across Army Medicine. A good example of how USU is helping us build new nursing capabilities is the perioperative nursing program. COL (R) Wanzer and LCDR Conrardy, USU nursing faculty, developed a perioperative CNS program marketing brochure and designed a marketing poster for presentation at the 11th Annual Tri-Service Perioperative Symposium in Chicago in March 2009, and along with her fellow researchers Cole Hawker and D. Moultrie, were awarded the 2009 Association of Perioperative Registered Nurses National Research Excellence Award for their research titled: "Factors Associated with Multidrug Resistant (MDR) Acinetobacter Transmission Occurring in Traumatic War Injuries". COL (R) Wanzer was also invited to address Congress during hearings on healthcare reform and presented "The Role of Clinical Nurse Specialist in Health Care Delivery: Today and in the Future." The Psychiatric Mental Health-Nurse Practitioner (PMH–NP) Program was evaluated for its academic content, testing, and overall effectiveness. Changes have been made to the course structure in order to ensure students integrate and apply their knowledge in context of the goals of the program. In addition the Graduate School has signed eleven new memorandums of understandings with new clinical sites. In October 2008, USU chartered a task force to examine implementation of a DNP curriculum to be in line with the American Association of Colleges of Nursing decision to move the current level of preparation necessary for advanced practice nursing from the master's to doctoral level by the year 2015. The results of 8 months of study revealed that USU should take the steps necessary to implement a USU DNP program. This further expands USU's strength as an education platform for Army Nursing so that we can apply a practical application of evidence-based research at the patient bedside to ensure evidence-based nursing care.

Over 60 percent of our organization is our civilian workforce, so our retention efforts continue to be focused on this group. We continue to have unprecedented success in our civilian nurse loan repayment program, with over 41 percent of total Army student loan repayments going to nurses. For fiscal year 2010, 314 applicants were selected to participate in the nurse loan repayment program, the largest number since the program started in 2006. We also recognize that our talented civilian healthcare professionals have unique issues and challenges. To provide support to our civilian nurse workforce, the Civilian Nurse Task Force was chartered in March 2009 to provide a forum for specific discussion on issues related to recruitment, retention, and career progression. This group's hard work resulted in the adoption of a civilian RN career pathway that remains in a working phase today. From this task force, a Nurse Consortium was established, in November 2009, and each medical treatment facility has a civilian nurse representative. This consortium works on key issues affecting satisfaction of the civilian nurse workforce. Current working issues include improving the relationship between civilian and military nurses, recruitment of civilian new graduate nurses, and civilian nurses in senior leadership positions in medical treatment facilities. Our first step to leverage civilian nurse talent at the senior executive level was the selection of Dr. Patricia Wilhem as a member of the Army Nurse Corps Executive Board of Directors. In addition, the "Civilian Connection" link was established on our new, innovative ANC website and is used to post links and information pertaining to civilian nurses. It facilitates a sharing of information not only between civilian nurses but also between civilian and military nurses to enhance professional relationships.

Finally we continue to leverage our retired ANC officers to serve as nurse role models, mentors and subject matter experts and ambassadors for the ANC. COL (R) Jeri Graham, president of the Army Nurse Corps Association (ANCA) in partnership with the ANC conducted the pilot Veteran's Resiliency Program in May 2009. There were sixteen participants with eleven active component combat veteran nurses and five Vietnam veteran nurses. The program was designed to address the issues that returning warrior nurses have after deployment that impact retention. The program was received favorably and with many positive comments to sustain the program in the future.

CONCLUSION

There has been great momentum since I introduced the Army Nurse Corps Campaign Plan to you last year. Our success has been the result of compassion, commitment, and dedication from all members of the triad of nursing. They have inspired me with their pride, enthusiasm, and openness to change. We continue to experience amazing progress in each of our strategic imperatives and we are ensuring that the ANC remains relevant and a force multiplier for Army Medicine.

I continue to envision an Army Nurse Corps in 2012 that will leave its mark on military nursing and will be a leader of nursing practice reform at the national level. The implementation of the standardized Patient & Family Centered System of Care is revolutionizing nursing care in the ANC and ensures that we optimize patient outcomes at every point of care delivery, both home and abroad. It reminds us that our priorities remain the patients and their families. Our common purpose is to support and maintain a system of health. In order to achieve this common purpose, we will let nothing hinder those who wear the cloth of our Nation or those who took an oath to forever save, protect, care, and heal.

PREPARED STATEMENT OF REAR ADMIRAL KAREN A. FLAHERTY

INTRODUCTION

Good Morning. Chairman Inouye, Senator Cochran and distinguished members of the subcommittee, I am Rear Admiral Karen Flaherty, the 22nd Director of the Navy Nurse Corps. Thank you for the opportunity to speak to you today. I also want to express my sincere thanks and appreciation for the hard work and dedication of Rear Admiral Christine Bruzek-Kohler, the 21st Director of the Navy Nurse Corps during this past year.

In his 2009–2010 Chairman, Joint Chiefs of Staff Guidance, Admiral Mullen declared the "Health of the Force" as one of his three strategic initiatives, stating, "Our core responsibility is to win wars while caring for our people and their families. They are the heart and soul of our formations, our fleets, and our air expeditionary wings, and our incredible fighting spirit. As a Nation, we have a solemn obligation to fully support, across the spectrum of need, our service men and women, standing and fallen, and their families."

Today, I will highlight the accomplishments and opportunities facing the Navy Nurse Corps in 2010 as we care for the Health of the Force. The total Navy Nurse Corps, comprised of Active, Reserve and Federal Civilian nurses, number more than 5,500 strong. Working together, we are clinicians and advocates for our patients, we are mentors and leaders for our colleagues, and we are the face of caring and compassion to those affected by armed conflict and natural disasters. My strategy as Director has been focused in three areas: People, Practice and Leadership. It is within these three areas that I would like to highlight our successes and address our current and future efforts.

OUR PEOPLE

Recruitment

Today's Navy Nurse Corps Active Component (AC) is manned at 91.2 percent with 2,837 nurses currently serving around the world. We have already achieved Navy Nursing's Active Component recruiting goal for 2010, for the fourth consecutive year. Reserve Component (RC) recruiting is currently at 16.4 percent of the fiscal year 2010 mission and requires our continued focus. I attribute our recruiting successes to the continued funding support for our accession programs, the local recruiting activities of Navy Recruiters and Navy Nurses, and the continued positive public perception of Service to our Country.

The top three direct accession programs that are favorably impacting our recruiting efforts include the Nurse Accession Bonus (NAB), the Health Professions Loan Repayment Program (HPLRP), and the Nurse Candidate Program (NCP). The NAB continues to offer a $20,000 sign-on bonus for a 3-year commitment and $30,000 for a 4-year commitment; the HPLRP repays student loans up to $40,000 for a 2-year consecutive obligated service, and NCP, tailored for students who need financial assistance while attending school, provides a $10,000 sign-on bonus and $1,000 monthly stipend.

In 2008, Navy Medicine created a recruiting team aimed at increasing the visibility and focus on Navy Nursing recruiting initiatives. This effort provides a Navy Nursing presence at local and national professional nursing conferences and collegiate recruiting events. In collaboration with the Navy Medicine Office of Diversity,

our Nurse Corps Recruitment Liaison Officer coordinates with local Military Treatment Facilities (MTFs) to have diverse Navy personnel attend national conferences and recruiting, increasing Navy's visibility among minority populations. This has allowed us to broaden our reach, and participate in and recruit across a broad range of national nursing conferences. Further, recognizing that America's youth contemplate career choices at a young age, Navy Nurses travel to local community schools and serve as guest speakers and ambassadors for our Corps, the Navy and the nursing profession.

Leveraging current technology, the Nurse Corps Recruitment Liaison Officer uses a combination of social networking media tools, including Facebook and Twitter, and online discussion forums (e.g., BLOGs), to reach students at colleges and high schools, encouraging them to consider a career in Navy nursing. Through these media tools, students ask candid questions and can obtain instant feedback in a mode of communication with which they are comfortable. Additionally, students provide feedback of what is and is not working in the recruiting process. Using this information, we have implemented process improvement strategies to correct any gaps in the recruiting process. One improvement we are implementing in 2010 is an early mentorship program for those entering the Navy Nurse Corps through one of our accession programs. Junior nurses will serve as mentors to guide new accessions from school to their first duty station, providing information on pay, travel, duty stations and transition to "Navy Life." We know that the first impression of the Navy and the Navy Nurse Corps are an important part of subsequent career decisions.

Today, the Reserve Component is 83.6 percent manned with 1,112 nurses in inventory. Last year, the Navy Nurse Corps Reserve Component (RC) met 87 percent of their recruiting goal. Over 48 percent of the accessions were Navy Veterans (NAVETS—nurses coming to the RC from active duty) with the remainder joining the Navy Reserve as direct accessions. Success in recruiting NAVETS is related to the initiation of an affiliation bonus of $10,000 and a policy that guarantees these individuals a 2-year deferment from deployment. Additionally, the establishment of the Career Transition Office (CTO) at Navy Personnel Command has been very successful in identifying those members desiring to move from the active component to the reserve component. The CTO, working in concert with the Reserve Affairs Officer (RAO) and Centralized Credentialing and Privileging Department (CCPD), implemented practices that facilitate a smooth transition with regards to billet assignment, pay and establishment of credentials.

Our reserve recruiting goal for fiscal year 2010 is 165 nurses. A recruiting initiative targeting direct accessions will offer entry grade credit for advanced education and work experience among the critical wartime specialties of Certified Registered Nurse Anesthetists (CRNAs), psychiatric/mental health, emergency room, and perioperative nursing. These initiatives will be expanded to include medical-surgical nurses and critical care nurses as well.

Retention

Retaining Navy Nurses is one of my top priorities. We remain committed to providing a Total Force of Navy Nurses, balanced in terms of seniority, experience, and skills, to provide the very best care to Sailors, Marines and their families. Key efforts have positively impacted retention, including the Registered Nurse Incentive Specialty Pay, a targeted bonus program for undermanned clinical nursing specialties and highly deployed Nurse Practitioners. Our nurses are enriched by being able to practice in both deployed and garrison care settings.

It is our responsibility as Nurse Corps leaders to fully understand all retention issues. We commissioned the Center for Naval Analyses (CNA) in 2009 to conduct a survey and hold focus groups to help us understand the factors that influence career satisfaction and dissatisfaction in the Nurse Corps. We have found that support for families, childcare availability, healthcare, and other benefits such as the Post 9/11 GI Bill play an important role in nurse retention.

Navy Nurses told us they wanted a clinical career ladder. Junior nurses felt they had to leave clinical nursing in order to advance in their careers. They also told us that deployments were fulfilling and had a positive affect on retention. The factors affecting retention are described more as a "pull" away from the military versus a "push" out of the military.

To increase promotion opportunities for senior level positions, we converted a portion of vacant Lieutenant billets to Captain and Ensign billets. These actions also improved the alignment of billets with the number of junior officers being accessed each year. This right-sizing is also occurring for the Reserve Component led by Rear Admiral Cindy Dullea, my Reserve Component Deputy Director. The RC is challenged with personnel gaps in the junior ranks and a larger senior officer force.

These initiatives will ensure we maintain an appropriate balance of highly-skilled experienced nurses with promotion opportunities.

My goal for this year is to increase retention by 50 percent in the AC for those with less than 10 years of service, and to retain the appropriate numbers in each officer rank in the RC. To achieve this goal, we are increasing communication and mentoring across all ranks, developing a clinical leadership model, and creating a user-friendly job-assignments process focused on clinical specialty development. Most importantly, I have asked each Nurse Corps officer to be part of this strategy; people stay in organizations because of the positive influence of their peers and immediate supervisors.

OUR PRACTICE

Clinical Excellence

Clinical Excellence is one of the main tenets of the Nurse Corps Clinical Leadership Model. Our strategy prepares every nurse to practice safe, competent care in any clinical setting, whether in a hospital or clinic, onboard ship or in forward deployed settings. Clinical Excellence is an expectation of the patients we care for and is an integral part of the interdisciplinary healthcare team of Navy Medicine. In 2009, we developed and implemented standardized orientation and nursing competencies across all of our nursing specialties. This creates portability, efficiency and consistency of care across all environments. Our goal is to deploy an electronic standardized procedure manual in 2010 for all facilities to have real time access to state-of-the-art updates to clinical care.

Over the past several years, the Nurse Corps identified eight critical wartime specialties, and developed our manning, training and bonus structures to incentivize nurses to practice within these specialties. Additionally, each Nursing Specialty has an assigned Specialty Leader, a Clinical Subject Matter Expert who understands the nursing practice within each community. These Specialty Leaders are key in the sourcing process for deployment missions, and have been empowered to implement improvement strategies for their specialty communities.

Understanding deployments and the type of care needed by our patients is essential when developing our nurses. For example, the critical care patient in Afghanistan may be required to stay on the ground longer given the environmental challenges impacting medical airlift evacuation. Our staff needs to understand this and add to their portfolio of skills in both acute and chronic critical care nursing competencies. To accomplish this goal, our Specialty Leaders worked with Senior Nurse Leaders at MTFs to create partnerships with local civilian hospitals and military nurses cross-train in local Emergency Departments and Intensive Care Units (ICUs). All Navy Nurses deploying in a critical care role cross-train in an ICU and attend the Essentials of Critical Care Orientation Course, the industry standard for critical care orientation. We are also piloting a "closed-loop" detailing process where nurses who desire to practice in the critical care specialty for their careers, have the ability to be transferred to hospitals that provide critical care nursing. Our goal is to keep these highly-trained critical care nurses working in critical care.

To support the behavioral health needs of our Warriors and their families, the Nurse Corps has increased its inventory of psychiatric/mental health clinical nurse specialists and nurse practitioners. This growth will support the projected growth of the Marine Corps, Blue in Support of Green (BISOG) and the increase in the number of Operational Stress Control and Readiness (OSCAR) teams. We have successfully employed Psychiatric-Mental Health Clinical Nurse Specialists and Mental Health Nurse Practitioners to meet the operational demands of the Psychiatric-Mental health caseload. Looking ahead, we will align our core privileging with our civilian counterparts, deploy mental health nursing assets where needed, and increase the education pipeline to meet this requirement.

Senior Nurses empower their staffs to innovate in hospital, clinic and operational settings, ensuring a culture of clinical excellence is infused at all levels. An example of these innovations is a job sharing initiative in USNH Guam, where two nurses can gain leadership experience, while continuing to excel as clinicians. A Family Nurse Practitioner in Okinawa, created efficiencies, eliminated patient visit backlogs, and increased family satisfaction while maintaining family-centered care. He established a Fast-Track clinic that resulted in a 25 percent decrease in non-urgent care provided by the Emergency Department. Through Clinical Excellence in Practice, our nurses gain the confidence and competencies to ensure that Navy Medicine remains a leader in healthcare.

Nursing Education

I am a fervent supporter of graduate nursing education, research and professional growth of my officers, and am committed to the sustainment and growth of the Tri-Service Nursing Research Program (TSNRP). Each year, approximately 73 officers are selected for Duty Under Instruction, the Nurse Corps' graduate education program. Additionally, nurses are selected to participate in the Johnson and Johnson Wharton Fellow's Program in Management at the University of Pennsylvania, and several Navy-sponsored leadership courses. Clinical specialization matched with leadership experience is key to developing the clinical leader.

The American Association of Colleges of Nursing made the decision to move the current level of preparation necessary for advanced nursing practice from the master's degree to the doctorate-level by 2015 based upon shifting patient demographics, health needs, and changing health system expectations. The Navy Nurse Corps supports a phased approach toward adopting the Doctorate of Nursing Practice (DNP) as the recommended terminal degree for Advanced Practice Nurses, and will utilize a combination of short- and long-term action steps to incorporate the DNP degree option as part of its education strategy. Using existing funding, three nurses will graduate with a DNP in 2012 and the DNP degree will be incorporated into the Nurse Corps Training Plan. As we make the transition to a greater number of DNPs, we will conduct careful reviews of future education funding requirements.

To expand this clinical leadership model to Federal Civilian Registered Nurses, we launched the Navy Graduate Program for Federal Civilian Registered Nurses, the first of its kind in the Uniformed Services, and funded five competitively selected Federal civilian registered nurses to pursue their Master of Science in Nursing degrees. These selected candidates agreed to work a compressed work schedule during the time they are in graduate school and incur a 2-year continued service agreement. This program has been fully funded in 2010, and we are currently receiving applications to select our next class of candidates for Fall 2010. We expect that this new program will retain our current civilian nurses, incentivize new nurses to consider entry into Federal service, sustain Military Treatment Facilities with subject matter experts when military nurses are deployed, and offer new educational growth for our civilian colleagues.

Every military nurse joins the Service with a Baccalaureate degree or higher, thus our Nurse Corps education strategy is focused on Graduate Nursing Education. I thank you for your support of this critical strategy.

Nursing Research

Navy Nurse Researchers assigned to Medical Centers educate nurses, physician residents, faculty, and staff about research design, implementation and evaluation. They facilitate the research process though collaboration with the Nursing Research team, Clinical Investigations and local, national and international academic institutions. More than 15 formal studies are in progress to promote the health and wellness of our Warriors and their families. Additionally, several evidence-based practice projects underway synthesize research literature to create individual evidence-based nursing practice guidelines and ensure practice effectiveness. The "Back-to-Basics Bundle of Care Project" at Naval Medical Center San Diego and the "Electronic Ticket-to-Ride, a Standardized Hand-off Program" at National Naval Medical Center are just two examples of research projects that will increase patient safety and satisfaction, increase efficiency, decrease healthcare costs, and promote positive health outcomes during inpatient stays.

Navy Nurses are accomplished authors, presenters and leaders not only in the field of Nursing, but also in healthcare and medicine. Many have contributed to military, national and international forums as keynote speakers and subject matter experts. Captains Linnea Axman, NC, USN and Patricia Kelley, NC, USN were members of the planning committee for the 2009 Botswana Conference. This conference, co-sponsored by Navy Medicine and Uniformed Services University, identified opportunities for the development of collaborative international research proposals and advancement of the concepts of integrity in research. Commander Michele Kane, NC, USN was the first Nurse Corps officer to provide the keynote address at the 2009 World Congress on Military Medicine. The research conducted by these outstanding nurses is a testament to their expertise, scholarship and commitment to advancing scientific knowledge in the field of medicine.

Among the many nationally recognized award winners for Navy Nurses, Lieutenant Colleen Mahon, NC, USN was recognized as the National Association of Women's Health Obstetric and Neonatal Nursing's Navy Nurse of the Year, and Commander John Maye, NC, USN was selected as the American Academy of Nurse Anesthetists' Researcher of the Year.

Outreach and Partnerships

Navy Nurses, at our MTFs in the United States and abroad, passionately support the professional development of America's future nursing workforce by serving as preceptors, teachers and mentors for local colleges and universities, as well as entire health systems. During Continuing Promise 2009, Navy Nurse Corps officers from the USNS *Comfort* served as subject matter experts providing training in Advanced Cardiac Life Support, Basic Life Support, IV insertion, basic first aid, trauma care, EKG interpretation and basic nutrition to 35,000 host nation medical personnel. Although a U.S. Navy mission, Nurses worked with partners from the Active Component, Reserve Component, Army, Air Force, U.S. Public Health Service, and over 90 nurse volunteers from Project Hope, the Church of Latter Day Saints, and Operation Smile. Additionally, over 40 military nurses from Canada, El Salvador, Netherlands, and France worked side-by-side with us in providing care to over 100,000 patients. Today, the USNS *Comfort* is deployed staffed by caring colleagues providing humanitarian assistance to the people of Haiti.

Navy Nurses deployed to Afghanistan in embedded training teams are teaching culturally and linguistically appropriate public health measures. In response to news of H1N1 outbreaks throughout the world, nurses prepared emergency response plans and training for the local Forward Operating Base (FOB) and Regional Hospital in eastern Afghanistan, well in advance of cases appearing in-theater, and deployed critical counterinsurgency tactics by performing village medical outreaches to the local community members in eastern Afghanistan. These missions improved relationships, increased trust and fostered cooperation with U.S. and coalition forces among the local population.

OUR LEADERSHIP

I believe that leadership at all organizational levels is responsible for ensuring the personnel under their charge are healthy and productive. This is echoed by Admiral Mullen, "As leaders, we must ensure that all receive the care, counseling, training and financial support to become self-sufficient and lead productive and fulfilling lives" (CJCS Guidance, December 2009). My nursing leaders have developed and are implementing an interactive career planning guide useful for mentoring seniors and subordinates at every stage of their careers. This mentoring tool asks pointed self-assessment questions to the officer and the nurse leader to assist both in making the best professional career decisions balanced with professional and personal goals. It guides the nurse leader in assessing the strengths and needs of the officer and balancing them with organizational goals. Blending our officers' clinical excellence, operational experience and leadership develops the highest caliber leaders for Navy Medicine today and in the future. Each nurse is a leader, whether caring for a population of patients, leading a Command, or being the Nursing voice for our Fleet or our Marines. Each day, we have an opportunity to impact the health and well-being of others.

A key role of a leader is to know their people and help them develop the resiliency to be able to handle stressors and life events. Navy Medicine's Operational Stress Control and Care for the Caregiver programs have a direct impact on the health and well-being of the force, deployment readiness and retention. By developing and providing education and training opportunities throughout the service member's career, Operational Stress Control builds resilience and increases effective responses to stress and stress-related injuries and illnesses. We know that caring for service members and their families and experiencing the trauma and stress that they experience can impact our medical staff. Strengthening the resilience of our Navy Nurses will assure they are better equipped to meet the day-to-day challenges of both naval service and their profession.

CLOSING REMARKS

Thank you for providing me this opportunity to share with you the remarkable accomplishments of the Navy's Nurse Corps and our continuing efforts to meet Navy Medicine's mission. On behalf of the outstanding men and women of the Navy Nurse Corps, and their families who faithfully support them, I want to extent my sincere appreciation for your unwavering support.

PREPARED STATEMENT OF MAJOR GENERAL KIMBERLY A. SINISCALCHI

The Total Nursing Force (TNF) is comprised of our officer and enlisted nursing personnel including the Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) components. It is a pleasure to lead and serve alongside

my senior advisors, Brigadier General Catherine Lutz of the ANG and Colonel Anne Manly of the AFRC. Together, we command a total force team delivering evidence-based, patient-centered care and support to meet Global Operations. Our nursing service personnel confront the challenges of increasing commitments and deployments with distinction and professionalism. They support the top priorities of the Secretary and the Chief of Staff of the Air Force to: (1) Continue to Strengthen the Air Force Nuclear Enterprise, (2) Partner with the Joint and Coalition Team to Win Today's Fight, (3) Develop and Care for Airmen and their Families, (4) Modernize our Aging Air & Space Inventories, Organizations & Training, and (5) Recapture Acquisition Excellence. This testimony will reflect how Air Force Nurses, lead, partner, and care every time and everywhere.

EXPEDITIONARY NURSING

Operational capability, the foundation and moral fiber of Air Force nursing, is instrumental in driving remarkable achievements. Air Force nurses and medical technicians at Craig Joint Theater Hospital (CJTH) at Bagram Airfield, Afghanistan provided outstanding nursing care for the highest number of casualties in OEF. CJTH is the only total U.S. staffed Level III military treatment facility in Afghanistan, and offers the most advanced medical capability in the country. CJTH nurses functioned as preceptors for nine Afghan nurses embedded as part of an Afghan Trauma Mentorship program. The Afghan nurses worked side-by-side with Air Force nurses and medical technicians, gaining valuable clinical experience, which they are excited to share with their co-workers to create positive change for the Afghan healthcare system for years to come.

The summer and fall of 2009 at CJTH is summarized through excerpts written by Dr. Zeriold, the "trauma czar", of his time in Afghanistan. "A conflict that had become known as 'The Forgotten War' was suddenly remembered as we entered the Afghan theater. We found a hospital and system in existence for several years that had seen a moderate number of patients. We brought only ourselves; it was a team from all over the United States from all branches of the military. No extra equipment, no new technology, no more medications, gear, or personnel. We were the standard deployment team for this theater. However, the pattern of this war changed. Over the next 6 months, we took care of more than 1,000 trauma admissions and countless medical admissions. The acuity was very high, and injuries were horrendous. A new pattern of war trauma had emerged for this hospital, a pattern that rivals and even surpasses a 500 bed, university based, Level I trauma center. We safely returned to the states 550 injured U.S. service members. We returned them to their families, children, and spouses. We changed the devastated lives of 450 Afghan nationals and won their hearts. I will never forget the bonds we formed with so many. And the kids—my God, I will never forget the kids; reaching out their little hands, with a smile, at the time of discharge as if to say thank you, 'I'll be okay, and can I go home now?' As a result of your dedication and work, this hospital and this team set the theater standard, and broke theater records for caseload, admissions, transfers, and outcomes. We transformed this time, mid to late 2009, into an era never to be forgotten."

CJTH also functions as the primary theater Aeromedical Evacuation (AE) hub, for out of country casualty transport. The Contingency Aeromedical Staging Facility at Bagram facilitated an average of 500 patient movements per month, starting July 2009. "They are the 'Angels of the Battlefield'—medics dedicated to transporting wounded U.S. and coalition service members, as well as locals, to the medical care they need. It's our job to take care of these wounded warriors," said Maj. Dawn Rice, an Air Force Reserve flight nurse and medical crew director assigned to the 451st Aeromedical Evacuation Squadron (AES). "We take great pride in getting people the top-notch care they deserve. Our country and our military will do whatever it takes to get people to the appropriate medical facilities. We want people to know this," she added. "Hopefully, it will give them some comfort when they are outside the wire fighting the enemy."

Air evacuation is a detailed process with the aircrew acting as the most visible link in the chain. The process typically begins at a local level. "The primary mission at smaller field hospitals is simply stabilizing the patient," said Chief Master Sergeant John Trujillo, 451st AES superintendent. "Once the patient is stabilized and can be moved to another more capable hospital, then it's our job to get them there."

While caring for wounded service members is the crew's primary mission, they provide the same level of dedication to all. The squadron recently flew a 9 year-old Afghan girl and her 13 year-old brother from a major hospital at Bagram Airfield to a base in Southern Afghanistan. She had been at the hospital at Bagram for 2 months recovering from injuries received during a mortar attack on her village.

Prior to the United States stepping in, her brother had been tasked with her care, replacing bandages on her legs and overseeing her well-being. As she was brought aboard the aircraft for her flight, nurses from Bagram said their tearful goodbyes while crewmembers gave the children gifts and treats, bringing out their smiles. Looking at the children, the Major spoke about this moment and how it transcended geographical borders and political differences. It was truly a moment of human compassion. The care being given was not just between Americans and Afghans, or adults and children, but between human beings taking care of each other. "This is why we do what we do," said Major Rice softly. "These are the moments we live for," she added with a smile.

Nursing Services are integral to the support of global and home base operations. Day after day, we take the best care of our Nation's heroes at home and abroad. AE continues to be one of the greatest successes in the war on terror, and is the vital link to saving lives. Another example of our AE teams' heroic efforts occurred when a skilled team of medical personnel worked tirelessly to keep a badly burned 23-year old civilian alive. Having already died and been brought back to life by a shot of adrenalin and cardiopulmonary resuscitation, he was carried by litter onto a C–17 medical evacuation flight from Balad, Iraq to Germany. Lieutenant Colonel Belinda Warren tucked a blanket around the patient and inserted numerous tubes to provide vital fluids to his body. "You have to make sure the burn victims don't get cold, replace all the fluids leaking from their burns, and make sure they don't go into hypothermia or get their blood clotting factors out of whack," she said. As an Air Force Reserve Critical Care Air Transport Team (CCATT) nurse, her goal was to make the patient as comfortable as possible. On a return flight to Germany later that month, she learned that he had about a 20 percent chance of survival, a higher rate than usual, and is doing better than expected, given the severity of his injuries.

These critical missions sustain world-class care across the continuum, ensuring our warriors are able to return to the fight with continued healthcare and family support. Since overseas contingency operations began in 2001, over 70,000 patients have been aeromedically evacuated. Year 2009 proved to be a robust one for patient movement. We moved 21,500 patients globally including over 9,000 from the war fronts in Iraq and Afghanistan. Men and women of the 32 Total Force Aeromedical Evacuation (AE) Squadrons were augmented by CCATTs delivering hands-on care in the air. These units are currently staffed at approximately 90 percent, but as the troops in the Area of Responsibility (AOR) increase, additional crews will be needed and are being built to support them.

One of our challenges in developing new AE crews is the training pipeline. It currently takes approximately 6 to 9 months to train each new crewmember. The initial phase of this training takes place at our School of Aerospace Medicine and is standardized for the Total Force. Once the didactic portion of AE is completed, flight nurses and technicians return to their units. The time required for nurses and technicians to be qualified on an aircraft can take an additional 2 to 6 months. The Total Force is pursuing a single standardized Flight Training Unit (FTU) similar to that being used by our pilots. This FTU will standardize the upgrade training process across the Total Force by creating a single level of qualification and will, most importantly, shorten the pipeline to approximately four weeks, creating parity among all AE crews.

Captain Jac Solghan and his Aeromedical Evacuation Liaison Team's (AELT) actions provide a great example of what individuals and teams bring to the fight when put to the test. Within 12 hours of landing at Bastion Joint Operating Base, an improvised explosive device (IED) explosion/multi-collision incident injured 5 Afghan National Army personnel and 12 local nationals. After their initial medical assessments and treatments, Capt. Solghan's AELT responded by providing Afghan patient movement requests for rotary wing airlift. Within 40 minutes, the patients were ready for transport to Kandahar Air Base.

Additionally, Capt. Solghan and his team successfully coordinated with the United Kingdom (UK) Aeromedical Evacuation Control Center (AECC) for the transport of a UK solider that suffered a blast injury that left him with only one functioning lung. Capitalizing on the capabilities of the USAF Lung Team stationed at Ramstein Air Base, Germany, and the technology of a Nova artificial lung, this UK service member was transported in the U.S. Aeromedical Evacuation System to Germany for critical treatment, and then finally to the Birmingham Military Hospital, UK, where he is now doing well. This success story demonstrated a multinational effort of over 1,000 aircrew, ground, and medical personnel.

Capt. Solghan and his team significantly improved the Afghan patient movement system, integrating United States airlift capability with International Security Assistance Force and Afghan hospital networks. They executed the first-ever United

States airlift transport of an Afghan patient to an Afghan hospital and enabled eight new casualty transport routes, increasing inpatient turnover by 70 percent and influencing new joint theater policy. They also initiated joint operations with the Afghan National Army Air Corps, enabling more than 43 patient evacuations with indigenous air assets thus fostering national military airlift capability.

Major Louis Gallo, another Air Force nurse, elevated the level of care delivered to our wounded warriors, by leading the first Contingency Aeromedical Staging Facility at Bagram Air Base, Afghanistan. His team set up tents to stage patients as they waited for flights to Germany. He coordinated the procurement of essential communication equipment and support services needed to sustain operations. Knowing that injured patients needed more than medical care, he contacted the United Service Organization, whose volunteers set up a morale tent within days with supportive and recreational services to aid those awaiting transportation.

HUMANITARIAN

As a result of the devastating earthquake in Haiti on January 12, 2010, the Special Operations Surgical Teams and Special Operations Critical Care Evacuation Teams, assigned to the 1st Special Operations Wing, Hurlburt Field, Florida, deployed with the initial response aircraft and were the first military medical teams on the ground. The intense training and combat experience gained in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) prepared the teams for extremely difficult conditions. They worked around the clock to provide emergency life-saving care to countless American citizens and Haitian Nationals. The teams established treatment areas at the Port-au-Prince Airport and the American Embassy. The Critical Care Nurses provided casualty evacuation of patients both in and out of country as well as pre- and post-operative intensive care unit management. The Nurse Anesthetists assisted in lifesaving surgeries including several amputations, and augmented the ICU.

Our Air Force Nurse Corps mission is "we lead, we partner, we care." These words have never been more relevant as when the nurses and medical technicians of Joint Base McGuire-Dix-Lakehurst repatriated our fellow Americans who survived the horrific earthquake in Haiti. "Over a 4 day period, around the clock, plane after plane, those three words, 'lead, partner, and care,' defined every aspect of the mission we found ourselves involved in," stated Major Robert Groves, Deputy Chief Nurse and Education and Training Flight Commander. He summarized his team's experiences using the Air Force Nurse Corps mission as a backdrop:

—*We lead*.—Every shift had an assigned Nurse Corps officer and Senior Non-Commissioned Officer, an Aerospace Medicine Services Technician, to organize healthcare, mentor colleagues who had never participated in such an operation, and, of course, to provide care to earthquake survivors. Among the major tasks were organizing the treatment areas in the evacuation operations center, inventorying and obtaining supplies, meeting planes, triaging patients, and assisting with patient transport to higher echelons of care.

—*We partner*.—When operational tasks did not involve direct care, one could find nurses and technicians supporting the endeavors of our other Air Force colleagues. We allowed survivors to share their experiences, played soccer with children in the fitness center gym, assisted them to find appropriate clothing at the donation center, helped them pack new suitcases for their trip to families, and provided the use of personal cell phones to call loved ones to let them know they were okay. For some, these were the first words heard from loved ones in the four days following the earthquake.

—*We care*.—Direct patient care came easily and naturally to our nurses and aeromedical technicians. But, it was more than that. From the beginning of operations it was decided that no survivor would be alone while on the ground in our area. While few evacuees required transfer to higher echelons of care, when they did, there was a member of our team assigned to accompany them throughout the process. Many evacuees had not navigated the American healthcare system. To prevent them from being overwhelmed and lost in an unfamiliar system, one of our team remained with them until they boarded flights to their families. Sometimes it involved overnight stays at local hospitals so they had a familiar, encouraging face during their treatment. In the end, we processed 579 evacuees, with 70 needing more extensive medical care and six requiring transport to community medical partners. But, the knowledge, skills and cooperation with each other and our Joint Base mission partners will be a long-lasting experience and will carry fond memories of our military service long into the future. These four days are what our readiness training had adequately prepared us to do. This is what our service is all about.

RECRUITING AND RETENTION

A robust recruiting program is essential to keep the Nurse Corps healthy and ready to meet the complex challenges in healthcare and national security. While we have executed incentive programs to address the nursing shortage, shortfalls continue to be an enormous challenge. Today's nursing shortage is expected to deepen as nursing faculty ages. The capacity for nursing schools to educate sufficient numbers of registered nurses (RN) to meet the future demand is stressed, largely due to the limited number of nursing faculty. On July 2, 2009, the U.S. Bureau of Labor Statistics reported the healthcare sector of the economy is continuing to grow, despite the recession, with more nursing jobs expected to be created in the next decade than in any other single profession. RNs will be in high demand to fill the majority of these positions, as they are the largest component of the healthcare workforce. The BLS projects that nearly 600,000 new RN jobs will be created by 2018. Quality of life and career opportunities, coupled with bonuses, special pays, and other incentives, are critical recruiting tools for Air Force Nursing.

Recruiting fully qualified nurses continues to be one of our largest challenges and our historical and present statistics tell us this will be an issue for years to come. In fiscal year 2009, we accessed 284 nurses against our total accession goal of 350 (81 percent), down 12 percent from what I reported the previous year. National competition to access nurses will continue as many professional employment opportunities exist.

Our Nurse Enlisted Commissioning Program continues to be a superb resource as we continue to grow our own from our valuable enlisted medics. In fiscal year 2009, of 69 applicants, 40 qualified candidates were selected. In fiscal year 2010, we will meet our steady state goal of 50 quotas per year. The graduates from this program are commissioned as Second Lieutenants and will continue to be valuable assets.

As we strive to meet our recruiting goals, NC retention remains challenging. In fiscal year 2009, 267 (almost 10 percent) nurses separated or retired from the Air Force, with 73 percent having 20 years or less time in service and 58 percent being Lieutenants and Captains. With an Incentive Special Pay (ISP) budget increase of $3.3 million compared to last year, our NC ISP is currently in its second year of execution. Seventy-eight percent of our nurses exercised single or multi-year contracts. This year's focus was to increase retention by recognizing advanced academic preparation, certification and experience. In addition, we expanded the number of nurses eligible for ISP by adding additional Air Force Specialty Codes and clinical settings. While the ISP was not a retention bonus out right, we look forward to seeing a positive impact on retention as a result of this initiative.

A number of societal, scientific, and professional developments have stimulated a major paradigm change in graduate nursing education. One major impetus for this change was the American Association of Colleges of Nursing's (AACN) decision in 2004 to endorse the Position Statement on the Doctorate in Nursing Practice (DNP). This decision moves the current level of preparation necessary for advanced nursing practice from the master's degree to the doctorate-level by the year 2015. The U.S. Air Force Surgeon General fully supports AACN's decision, and in response, the Air Force Nurse Corps has researched current practice issues within the Nurse Corps and has developed an implementation proposal for achieving the AACN goals by 2015. Currently, all Air Force Nurse Practitioners are trained through a master's degree program. The Air Force NC recommends a phased implementation approach to meet the AACN intent. Starting in calendar year 2010, the Air Force Nurse Corps proposes a small pool of Nurse Corps candidates to be selected to attend Doctor of Nursing Practice (DNP) programs and by 2015, all students entering the nurse practitioner (NP) career path will graduate with a DNP. In addition, by 2015, all new Air Force NP candidates accessed through the Health Professions Scholarship Program (HPSP) will be prepared at the doctorate level. Recruitment of fully qualified NPs has been a challenge and will likely become more difficult with the increased educational requirements. The Nurse Corps must pursue additional incentives to entice DNPs to enter the Air Force.

OPERATIONAL CURRENCY

Education and training is the foundation of the Nurse Corps competencies and one of our priorities is to ensure currency platforms meet emerging clinical and operational requirements. The Nurse Transition Program (NTP) continues to be one of our many successes with 10 military and two civilian locations. We graduated 158 NTP nurses in fiscal year 2009. Last year; I reported a civilian partnership with the Scottsdale Healthcare System, in Scottsdale, Arizona was on the horizon. I was honored to deliver the commencement address for the second class in December, where we graduated 15 students. We have partnered with an outstanding Magnet

status organization and our new Air Force nurses are getting unprecedented clinical opportunities. At just 6 months, the Scottsdale program is already proving to be a cornerstone in the success of a strong military partnership between Scottsdale Healthcare and Luke Air Force Base, Arizona, located 35 miles east of Scottsdale. From October to December, nurses trained on inpatient units at two Magnet-recognized facilities where they gained hands-on clinical experience and competence in direct patient care under the supervision of nurse preceptors. Their training was further enriched with rotations in peri-operative services, wound care, infusion services, laboratory, pediatrics and the Maricopa County burn unit. The privilege of training in Magnet-recognized facilities is an experience that will prepare our nurses to meet the demands in our stateside facilities as well as in deployed settings around the globe. I am proud of the exceptional work the course supervisors, Majors Deedra Zabokrtsky and Nancy Johnson, have achieved in such a short period of time. The Scottsdale program will begin a steady state of 20 to 25 nurses per class in 2010, making it the largest nurse transition-training site.

The 882nd Training Group at Sheppard Air Force Base, Texas, is instrumental in establishing the largest joint armed services medical education and training center that the world has ever seen. To date, the 882 Training Group spent more than 11,000 hours working side by side with their Army and Navy counterparts to consolidate 15 military enlisted medical technical training courses. These collaborative efforts have allowed the three services to incorporate best practices and build state-of-the-art training platforms that will prepare the next generation of medics for the military's diverse missions. The 882 Training Group began transitioning key and essential personnel in the fourth quarter of fiscal year 2009 and will continue staging instructor staff and equipment to the Medical Education and Training Campus (METC) at Fort Sam Houston in San Antonio through the last quarter of fiscal year 2011 when all courses are projected to be operational. The first METC Senior Enlisted Advisor is Chief Master Sergeant Kevin Lambing, an Air Force Senior Aerospace Medical Technician.

Our enlisted medical technicians, led by Chief Master Sergeant Joseph Potts, are vital to the achievements of the TNF. One of many outstanding Airmen is Staff Sergeant Christopher Brown, a medical technician deployed from the 88th Medical Group for 192 days to Kabul, Afghanistan, where he was assigned to Joint Task Force Phoenix VII. SSgt. Brown received a Meritorious Service Medal in recognition of his superior performance as a medical technician while supporting humanitarian missions, conducting medical evacuations, training Afghanistan medics, participating in military convoys, and setting up an Afghanistan medical clinic. He was the sole medic for a 12-person police mentoring team traveling to various remote areas surrounding Kabul to train Afghan police. Assigned to the Afghan Evaluation Transition Team, he was given 14 Afghan medics to train and prepare to treat patients at a bare base. He participated in the longest convoy in OEF history to move the Afghan Kadack to the bare base in western Afghanistan. SSgt. Brown is a fine example of the many committed Airmen who continue to make our Air Force proud.

In an effort to increase advanced life support capability at bases, we have trained several of our Aerospace Medical Service Technicians to the National Registry of Emergency Medical Technician-Paramedic level. The inaugural class launched last fall graduated 19 students. This initiative helps reduce the number of contract services in our emergency response platforms by growing our own paramedics from our enlisted force. This will also provide a marketable career path outside the military when these individuals retire. We are expecting an annual growth rate of 50 per year with the vision of providing relief for a stressed career field.

Another force multiplier is our Independent Duty Medical Technicians (IDMT). We continue to see a steady increase in our IDMTs as we balance the end strength of our medical technicians. They play an integral role within our Air Force Medical Service as our physician extenders. They are designed to function in a small footprint providing patient care, as well as fourteen other ancillary support functions. The continued efforts to recruit IDMTs have garnered our highest "true" volunteer candidates equaling 24 in the past 10 years. The remainder of our IDMT candidates are gained through the Noncommissioned Officer Retraining Program designed to right size undermanned career fields across the Air Force. Additionally, continuation of the selective reenlistment bonus has aided the recruitment and retention of these valuable assets. Information technology has further enhanced our IDMTs' capabilities. We supply each IDMT with a hand-held Hewlett-Packard iPAQ that is fully loaded with reference materials, thereby increasing access to the most up-to-date medical information without adversely affecting space and weight limitations of their medical bags.

SKILLS SUSTAINMENT

For nearly a decade, the Air Force Medical Service has partnered with high volume civilian trauma centers to prepare doctors, nurses, and technicians to care for combat casualties. Maintaining readiness to care for the complex traumatic injuries seen in war is challenging as most military treatment facilities care for lower acuity patients. To bridge this gap, three Centers for Sustainment of Trauma and Readiness Skills (C–STARS) platforms were established at the R Adams Cowley Shock Trauma Center in Baltimore, at University Hospital Cincinnati, and at Saint Louis University Hospital. C–STARS Baltimore has a surgical and emergency care focus. C–STARS Cincinnati is designed specifically for the clinical sustainment of Critical Care Air Transport Teams. C–STARS St. Louis serves a range of medical and surgical specialties. In 2009, 817 doctors, nurses, and technicians completed vital training at one of these three centers. Since inception, these partnerships have enabled 4,336 Total Force medical Airmen to maintain clinical currency. During their 2 to 3 week tours, participants complete 90 to 100 percent of required readiness skills through hands-on patient care, supplemented by didactics, cadaver labs, training with patient simulations, and field exercises.

In addition to the immersion experience obtained at C–STARS, a complementary initiative was started in 2009 called STARS–P, the Sustainment of Trauma and Resuscitation Skills Program. Personnel assigned to designated STARS–P military treatment facilities at Wright-Patterson AFB, Ohio; Luke AFB, Arizona; Nellis AFB, Nevada; Travis AFB, California; and Wilford Hall Medical Center, Texas, rotate through local civilian Level I trauma centers as part of their normal duty time. For example, medical personnel assigned to Luke AFB, routinely rotate to nearby Scottsdale Healthcare. As a new initiative, we continue to define processes that best match the needs of the military treatment facility and the host civilian institution; however, STARS–P holds great promise as another approach to honing war-readiness skills. These partnerships with civilian medical facilities have proven to be invaluable to maintaining a high state of readiness to deliver quality care to our Soldiers, Sailors, Airmen, Marines, their families and coalition partners.

Another valuable skills sustainment program is the Critical Care/Emergency Nursing (CC/EN) Fellowship. The three fellowship sites, Wilford Hall Medical Center, San Antonio, Texas, St. Louis Hospital, St. Louis, Missouri, and the National Naval Medical Center, Bethesda, Maryland, continue to produce superbly trained nurse clinicians. Many graduates have already employed their new skills at deployed locations in Afghanistan or Iraq, and several stationed at the 59th Medical Wing have returned to one or both AORs for more than one tour. Forty-three percent of the San Antonio Military Medical Center graduates have obtained advanced certification as Critical Care Registered Nurses. As of March 2009, 99 of 313 critical care nurses are Critical Care Registered Nurses. Graduates of these benchmark programs are phenomenal and often light years ahead of their peers. Nurse leaders repeatedly report from the deployed environment that our graduates are the best, "Put into any situation and they simply shine." They have developed critical thinking skills that often exceed those of more experienced critical care nurses.

We received updates from two of our June 2009 graduates, Captain Matthew Howard and Captain Lindsay Erickson, both currently serving at Bagram Air Base, Afghanistan. Their comments clearly highlight their enhanced level of clinical and critical thinking skills. Capt Howard stated, "I in-serviced the staff on ventriculostomies the very first shift I worked. We set a record last month for the most traumas since the war started here, and if we keep going, we will exceed it this month. More importantly, the survival rate is up 3 percent and at a record high."

Capt Erickson stated, "By the end of my second week, a mass casualty situation arose. The unit was full with 16 patients. We moved three non-vented patients to the ward, and quickly acquired six new trauma/burn patients. I started the day with a three-patient assignment and ended up taking one of the new traumas on top of that. It was challenging but I felt very well prepared and took the assignment on without hesitation. No doubt my Critical Care fellowship training prepared me well. One of the burn patients required bladder pressure monitoring. Many of the nurses here aren't too familiar with this, so I volunteered to teach."

The CC/EN Fellowships have set the standard. Our graduates provide the highest quality care, both stateside and in the deployed environment, positively impacting lives on a daily basis. In the area of responsibility, the impact is palpable with a sustained 95 percent survival rate for OIF, and 96 percent survival rate for OEF.

ORGANIZATIONAL STRUCTURE

The Air Force Medical Operations Agency (AFMOA) in San Antonio, Texas is a single support agency that stood up in September 2008 under the command of Brigadier General Mark A. Ediger. Nearly 18 months later, AFMOA has progressed as a robust centralized reach-out, reach-back clinical support hub, collaborating with the major commands to standardize business practices across the Air Force Medical Service in pursuit of "Excellent Healthcare, Clinical Currency." To that end, the AFMOA Surgeon General Nursing Directorate, comprised of three divisions and led by Colonel Leslie Claravall, has concentrated efforts toward developing currency platforms to sustain clinical skills for deployed operations. For example, the Provision of Nursing Care Division, led by Colonel Doug Howard, participated in an "Emergency Department Analysis and Process Improvement Project" in November 2009 and is partnering with emergency services leadership of nine military treatment facilities to employ efficient evidence-based processes. Ultimately, the goal is to increase throughput leading to enhanced patient safety and satisfaction, while providing more experience and opportunity for medics to sustain clinical currency. Other clinical arenas, to include inpatient care and specialty care clinics, will be targeted in the same manner.

Additionally, AFMOA Surgeon General Nursing is contributing to efficient healthcare and clinical currency by building tools to enhance mentoring and information sharing. To illustrate, the Education and Training Division, led by Colonel Lilly Chrisman, was key in facilitating "Mosby on line" as an Air Force Medical Service enterprise-wide reference tool. Modernizing access to the most current edition of a sound clinical reference allows our medics to obtain guidance anytime from any computer, while saving countless dollars by averting the distribution of new hard copies to replace outdated ones across the Air Force Medical Service

AFMOA Nursing Service Resourcing Division, led by Colonel Robert Hontz, was the last division to stand up this summer. This division analyzed nurse resources across the major commands making recommendations to support Air Force initiatives such as the Medical Home Model for patient-centered care, a new Special Needs Coordination Cell to improve continuity of care for special needs family members, and the plus up of mental health nurses to support increasing deployment demands on a stressed career field. The Mental Health Nurse (46P3) and the Mental Health Nurse Practitioner (46Y3P) Air Force Specialty Code (AFSC) is currently staffed at 77 percent for 46P3 and 100 percent for the 46Y3P. The high mobility tempo of this specialty makes it difficult to retain these critically manned mental health nurses. Currently, there are 30 psychiatric nurses in deployment unit type codes increasing to 40 in fiscal year 2010 to meet the career field's rigorous mobility requirements. The entire Air Force Medical Service mental healthcareer field is in the Band "D" Battle Rhythm which requires a 1:2 deployment: dwell time. Seven to eight psychiatric nurses are deployed worldwide in support of OIF and OEF each cycle.

The Air Force Medical Service is taking steps to alleviate the stressors on the mental health nursing career field, and plans are under way to build a formal training program at the David Grant Medical Center at Travis AFB, California. This course will train clinical nurses to become mental health nurses. Additionally, we are pursuing an increase in mental health nurse and mental health nurse practitioner authorizations. Our goal is to place 10 additional mental health nurses in our bedded military treatment facilities to augment the staff caring for our wounded warriors and other beneficiaries. The advanced clinical capability of our mental health nurse practitioners has been lauded by patients as well as other provider staff. The Air Force Medical Service has "grown our own" through the Air Force Institute of Technology program, with 14 of our 15 nurse practitioners having come from our mental health nurse career field.

RESEARCH

Air Force nurse researchers are integral to the joint research conducted in the U.S. Central Command area of responsibility. The Joint Combat Casualty Care Research Team (JC2RT) consists of six Army and three Air Force members with the mission of fostering and facilitating medical research, performance improvement, and evidence-based practice initiatives for the United States Central Command Joint Operations Area: Multi-National Corps—Iraq Theater, U.S. Forces Afghanistan, and Kuwait. In March 2009, the Department of Defense medical research program was initiated in Afghanistan under the direction of Colonel Elizabeth Bridges, an Air Force Reserve Ph.D. prepared nurse. Simultaneously, Lieutenant Colonel Teresa Ryan, also an Air Force Reserve Ph.D. prepared nurse from Keesler AFB, Mis-

sissippi was the senior Deployed Combat Casualty Research Team (DC2RT) researcher at Balad, Iraq.

Colonel Bridges laid the groundwork for the arrival of a team of six researchers (physicians, nurses, a nutritionist, and a physiologist) who arrived in September to Bagram. Currently, Major Candy Wilson, a Ph.D. prepared nurse, from the 59th Clinical Research Squadron at Lackland AFB, Texas is at Bagram. In August 2009, the JC2RT Headquarters office moved from Ibn Sina, Iraq to Bagram, Afghanistan. In October 2009, Lieutenant Colonel Kevin Bohan from the Graduate School of Nursing, Uniformed Services University of the Health Sciences along with SGT Andrew Coggins, a Army laboratory services NCO, established an office in Kandahar to expand the research program. The nurse researchers assigned to the DC2RT identified the following major areas for research: mild traumatic brain injury, management of complex orthopedic trauma, pain management across the continuum of care, and integration of information from the Level II medical facilities and the en-route phase of care, both medical evacuation and aeromedical evacuation.

The teams provide guidance and review for all research conducted in Afghanistan, Iraq and Kuwait. The Ph.D. prepared nurses provide leadership and guidance on scientific merit, design and methodology of research. Each team member is involved in collecting data for a variety of research protocols focusing on combat casualty care. Over 150 research studies have been conducted or are being planned as a result of the JC2RT's efforts. More than 20,000 subjects have been enrolled in research studies. Areas of research conducted by the U.S. military in Afghanistan and Iraq have led to advancements in combat casualty medical care and therapies to include tourniquet application, combat gauze, life saving interventions, en-route care, resuscitation, blood product administration, burns, wound care, post traumatic stress disorder (PTSD), traumatic brain injury, and infectious diseases.

Colonel Bridges, as the first research nurse in Bagram, Afghanistan, from April to August 2009, received Tri-Service Nursing Research Program (TSNRP) funding for a functional hemo-dynamic study in Afghanistan. Since 2006, 34 nursing research protocols have been approved with U.S. Air Force nurse researchers being principal investigators in five of those studies. The overall nursing research themes include warrior care, healthcare delivery, trauma, behavioral health, and nursing/healthcare professional issues. Nursing principal investigators have investigated pain management, functional hemo-dynamics, and StO2 monitor for occult hypo-perfusion, carbon monoxide exposure, women's health, sleep disturbances in soldiers, oral care in the critically ill, retention, recruitment, PTSD, burnout, compassion fatigue, and moral distress in nursing personnel. To date, three Air Force led nursing research protocols are in the final stages of approval by the institutional review board, which researchers by law must submit their research proposal to receive approval before beginning a research study.

As a member of the Joint Combat Casualty Research Team, Major Wilson augmented the Combined Joint Special Operation Forces to provide healthcare for local men, women, children and the Afghanistan National Army. During visits to the villages, Maj. Wilson, a nurse practitioner, along with other healthcare professionals, provided medical care for over 10,000 patients during a 6-day period. The rugged and austere healthcare delivery conditions required medical diagnoses to be made based on patient presentation, without the aid of laboratory or radiology analyses. In addition to the direct benefits of the care provided, valuable and actionable intelligence was gathered on these missions that resulted in improved situational awareness by U.S. forces and directly resulted in saving lives of service members.

The TSNRP Executive Director position transitioned to Colonel Marla DeJong in 2009, the second Air Force nurse researcher to hold this position. The TSNRP is the only program with the primary mission of funding military unique and military relevant nursing research. Colonel DeJong is responsible for facilitating tri-service nursing research to optimize the health of military members and their beneficiaries. The goal of military nursing research is to produce knowledge that further enhances clinical practice, the delivery of healthcare, nursing education, and nursing management. Since its inception in 1992, the TSNRP has funded more than 300 military nursing research studies and several evidenced-based practice projects. Ultimately, application of this new knowledge improves the quality and delivery of nursing practice, promotes the best possible outcomes for patients and families, and informs healthcare policy decisionmakers. With the support of TSNRP funding, the pocket guide, Battlefield and Disaster Nursing Pocket Guide, which I shared during last year's testimony, has been distributed to 15,000 Air Force military nurses and medics to augment readiness preparation.

During 2009, military nurse leaders, researchers, and stakeholders of the TSNRP revised the mission and research priorities to ensure the funding clearly reflects the mission and research vision of military nurses. The current TSNRP research prior-

ities are (1) force health protection, (2) nursing competencies and practice, and (3) leadership, ethics, and mentoring. The TSNRP sponsors Grant Writing Workshops for novice and experienced researchers to learn how to design studies and write high-quality applications that will be competitive for funding. Annually, the TSNRP conducts a Post-Award Management Workshop to inform grant recipients of Federal, Department of Defense, and TSNRP management policies and guidance on grant execution.

Results from TSNRP-funded research impacts nursing clinical practice in deployment resilience, retention, methods to reduce ventilator-associated pneumonia, health disparities, and women's health during deployments. For example, Major Jennifer Hatzfeld who defended her dissertation in 2009, "Assessing Health Disparities in the Air Force" documented the prevalence of health disparities according to race or ethnicity for chronic diseases such as hypertension, high cholesterol, and diabetes among adult Active Duty Air Force members; however, she found no evidence of disparities in the treatment outcomes of patients with these conditions, indicating patients received appropriate medical care.

Numerous mission-relevant studies are in progress. Colonel Bridges' study is designed to evaluate new methods of monitoring patients after hemorrhage on the battlefield. Colonel Penny Pierce, a retired Air Force nurse reservist, and her colleagues have systematically collected comprehensive survey data from deploying troops beginning with the Persian Gulf War and continuing through OEF and OIF. The initial studies focused primarily on military women due to the sociopolitical concerns raised by deployment of large numbers of women, reservists, and mothers of dependent children. Later studies included men and women from the Air Force and Army, enabling researchers to compare findings by gender, military service, and deployed locations. Data collection pertained to physical, mental, and gender-specific health issues. Junior enlisted women and families experiencing economic hardships were particularly vulnerable to work-family conflict. Further, individuals with work-family conflict were at high risk to develop post-traumatic stress disorder. Stressors such as family conflict and organizational issues influenced the physical and mental health of military members and impacted retention. Importantly, these stressors are potentially modifiable. Work is underway to identify interventions that will benefit individuals, families, and the uniformed services.

TSNRP-funded researchers continue to disseminate the results of their studies through peer-reviewed publications and numerous presentations at nursing and medical conferences. The TSNRP co-sponsored the Karen A. Rieder Nursing Research Poster Session at the 115th annual meeting of the Association of Military Surgeons of the United States. Air Force nurses presented 29 of the 90 posters which summarized the results of recent studies, evidence-based practice projects, and process improvement activities. Colonel Bridges, for example, recommended interventions to prevent complications during en-route care of casualties transported by Critical Care Air Transport Team during OEF and OIF.

In addition to her duties as TSNRP program director, Colonel DeJong is assigned to the DOD Blast Injury Research Program Coordinating Office. She organized and hosted an international, state-of-the-science meeting on blast-related mild traumatic brain injury. The meeting resulted in a thorough assessment of knowledge about TBI and identified the gaps necessary to shape future research. Colonel DeJong also co-chaired the Joint Program Committee for Battle Injury Prevention Research and helped execute the $247 million Battle Casualty and Psychological Health Research Program.

Colonel Karen Weis, another one of our Ph.D.-prepared nurses, co-authored Psychosocial Adaptation to Pregnancy: Seven Dimensions of Maternal Role Development. Colonel Weis also authored a nurse-physician communication assessment tool used in several military treatment facilities, as well as the Methodist health system in Houston, Texas. The instrument assesses perceived barriers to physician-nurse communication enabling focused attention for improved staffing effectiveness.

Colonel John Murray just completed a chapter entitled, "The U.S. military health system: Meeting healthcare needs in wartime and peacetime", to be included in Policy & Politics in Nursing and Health Care. As the Director of Education, Training & Research, Joint Task Force, National Capital Region—Medical, he developed Joint-level DOD Assurance and Issuing authority for research within the National Capital Region. Colonel Murray is a member of the Department of Veterans Affairs (VA) National Research Advisory Council and the VA workgroup for Research on Educational Interventions for Health Professionals.

Lieutenant Colonels Patricia Bradshaw and Karen O'Connell, and Majors Susan Dukes, Brenda Morgan, and Antoinette Shin are near completion of their Ph.D. program. These nurses will be deliberately placed as the Nurse Corps builds research specific locations or "cells".

We recently developed a nursing research fellowship and the first candidate will begin this spring. This 1-year pre-doctoral research fellowship will focus 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.

The desire for evidence-based nursing care is at the forefront of the nursing staff at the 59th Medical Wing, Wilford Hall Medical Center, San Antonio, Texas. Newly hired nurses are oriented to the benefits of nursing research and evidence-based practice during nursing orientation. The deliberate promotion of nursing research has resulted in three nurses developing protocols for funding from TSNRP.

Nursing staff from the 88th Medical Group, Wright-Patterson AFB, Ohio, have submitted three research grants this year and are participating in two nursing studies. Major Bonnie Stiffler, the primary investigator for the study, "Barriers to Screening Mammography for Medical Treatment Facility Enrolled Beneficiaries," is conducting telephone interviews to identify barriers to obtaining provider recommended mammography. The goal is to identify barriers to care and then develop methods to minimize or eliminate the barriers. Colonel Robie Hughes is the primary investigator for a funded multi-site study titled, "Air Force Nurse Transition Program Student Quantitative Medical Simulation Performance". This study will be the first formal study conducted at the nine Nurse Transition Program sites during a simulated medical scenario evaluating nurse performance from this established 11-week training program.

STRATEGIES FOR THE FUTURE

I am proud to report that we have created a Master's Degree in Flight Nursing with an Adult Clinical Nurse Specialist focus and concentration in Disaster Preparedness. This program, the first of its kind in the country, was designed and ready for students in just 3 months. We partnered with Wright State University-Miami Valley College of Nursing, Dayton, Ohio and the Health and National Center for Medical Readiness Tactical Laboratory at Calamityville. Graduates from this program will gain expertise in Flight Nursing as well as emergency and disaster preparedness from military and civilian perspectives. Our first candidate will begin in the spring. The unique and diverse curriculum will meet Homeland Security Presidential Directive #21 and include advanced clinical courses in acute and chronic health issues for the adult population with an emphasis in flight and disaster nursing. The Flight Nursing component will address symptom management and stabilization during air transport. In addition to the classroom training, students will be connected with a preceptor in an active flight nursing setting with both fixed and rotary aircraft at the 375th, Scott AFB, Illinois and Care Flight at Miami Valley Hospital, Dayton, Ohio. Students will be exposed to tragic scenarios to illustrate the impact disasters place on the health and safety of individuals and families. A former 54-acre cement plant in Ohio is being developed into an all-hazards disaster and training facility. This site will be incorporated into joint civilian and military training programs to provide a realistic venue to simulate natural and man-made disasters. Upon completion of this rigorous program, graduates will be eligible to take the Adult Health CNS and American Nurse Credentialing Center certification exams.

The Graduate School of Nursing at the Uniformed Services University Health Sciences (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. As they move toward their vision of being a nationally recognized academic leader, while on the forefront of a nurse and nurse educator shortage, the Graduate School of Nursing was asked to collaborate with the Federal Nursing Service Chiefs to increase the cadre of baccalaureate-prepared military nurses, through creative partnerships with existing schools of nursing. One of Uniformed Services University Health Sciences' top initiatives is to work with civilian nursing institutions to address the military nursing shortage and assist the Department of Defense to identify strategies to encourage and incentivize potential applicants to enroll in baccalaureate nursing programs. USUHS plans to develop and deploy a comprehensive survey to assess the willingness of potential student populations to consider accepting an undergraduate nursing education in return for a commission as a Nurse Corps officer in the Armed Forces with a subsequent service obligation. The targeted populations will include students in nursing school programs, qualified applicants who are not accepted for admission to nursing school due to space limitations, associate-degreed registered nurses, second career nurses, and enlisted service members with a desire to be commissioned as a nurse corps officer. Data from these surveys will be analyzed to identify and quantify perceptions of potential nurse applicants towards military service.

As I reported last year, we developed Master Clinician roles to afford our most clinically experienced senior nurses with advanced academic preparation to remain at the bedside without sacrificing promotion opportunities. We have 20 Colonel positions identified across our military treatment facilities and are diligently working to fill these authorizations in fiscal year 2010.

WAY AHEAD

Nursing, the essential healthcare profession, is highly valued for providing skilled, evidence-based quality care to Airmen and their families. We continue to arm our nursing service personnel with the necessary skill sets through education, training, and research to meet the challenges of operating in the ever changing global environments.

Nurse recruitment and retention continues to be our focus as we develop academic partnerships, sustain our accession programs, reward clinical practice through incentive specialty pay, and enhance nursing capabilities through advanced academic preparation such as the Masters Degree in Flight Nursing and our DNP implementation plan.

We look forward to the future. By being actively engaged in nursing research, we are generating the knowledge necessary to guide Air Force and Joint nursing operations. Through the synergy of our AD, ANG, AFRC, civilian, and contract forces, coupled with the collaborative relationships of our sister Services and civilian partners, we are prepared to meet emerging challenges with strength and confidence. Air Force Nursing stands ready today to embrace the challenges of tomorrow as we lead, partner, and care, every time, everywhere.

Mister Chairman and distinguished members of the Committee, it is my honor to be here with you today representing a dedicated, strong Total Nursing Force of nearly 18,000 men and women. We sincerely thank you for your tremendous support for Air Force Nursing.

CARING FOR WOUNDED, ILL AND INJURED

General HOROHO. Sir, I absolutely believe Army nurses are prepared for those types of injuries. But, it has proven a challenge. You know, years ago, if you asked whether or not Army nursing provided rehabilitative nursing, we didn't. Post-9/11, absolutely. That's one of our core competencies. And we've worked hand in hand—when we talk about Army nursing, we talk about our Active component, our Reserve component, our National Guard, our medics, and our civilians. All three of those are critical to ensuring that we're being able to meet the needs of our patients on the battlefield in—both in our stateside facilities.

So, when you talk about whether you have the capabilities, every single one of our medics are highly trained, and that's where we've got that life-sustaining care that's given at the point of injury, and then they're immediately evacuated back either for our forward surgical teams or back to our combat support hospitals. And then, in 36 hours, those critically injured patients will be seen at Landstuhl Regional Medical Command, and then further evacuated to our major—our nine other major medical centers.

And so, we've spent the very first year, in 2008, of really looking at every single competency needed to be able to support an expeditionary force, and then we've spent this past year changing the way that we leader-develop, changing our competencies, and actually changing how we assign our nurses. So, instead of assigning based on authorizations, we actually assign based on capabilities, so we know where the needs are, what type of capabilities are needed, and then we make those assignments across the Army Nurse Corps.

Chairman INOUYE. Admiral.

Admiral FLAHERTY. Yes, sir.

The Navy Nurse Corps has added a number of programs to keep our staff well trained. As the war began, we saw new injuries and new types of injuries that perhaps we had not cared for before.

We also have a workforce that had been deployed and had been at war, and come back with significant skills. So they are part of the training pipeline. They are training each other about what they saw, what they've been able to care for, and what now is needed.

We've partnered with our civilian organizations to get our nurses to some intensive intensive care unit (ICU) care and also some emergency medicine care, because we know they—the corpsmen on the battlefield—are the ones who are providing that wonderful support for that young marine or that young sailor or that young soldier.

So, do we have all the answers? No, sir. Are we well prepared and well positioned to go forward with the future of what we see in the injuries? Yes, sir. We have training dollars, we have people in the pipeline for master's programs, and we are doing all that we can to make sure that that's shaped appropriately.

Chairman INOUYE. General.

General SINISCALCHI. Senator Inouye, thank you for your question.

Sir, our focus has been on lifelong training, starting from novice through expert. Our nurse transition programs provide us an opportunity to take nurses, right from their bachelor of science degree program, into a transition program that focuses on building clinical competency. And as they progress throughout the professional continuum, we have very robust programs for skill sustainment, for just-in-time training. We've partnered with our sister services on developing critical care, trauma, and emergency room fellowships. It's a 12-year—or, a 12-month fellowship that prepares our critical-care nurses to go into intensive-care settings in the deployed—in deployed operations, and have the advanced skills that they need to take care of our wounded who have traumatic injuries.

We're focusing on mental health specialties. We are in the process of developing a Mental Health Training Program, at Travis Air Force Base in California, which will help us to grow our own. As we recognize the increased need for behavioral health, we can take our clinical nurses and put them through this educational program, at Travis, which will help to grow mental-health nurses. USUHS has developed a Mental Health Nurse Practitioner Program, and they have a unique focus in preparing mental-health nurse practitioners with the skill set they need to meet the challenges with our wounded warriors and their families.

Our critical care educational programs, our Nurse Anesthetist Program, our nurse practitioner programs, are very, very robust, and our focus has been on developing partnerships with civilian universities and with USUHS so that, throughout the continuum, we can allow our nurses—afford our nurses the opportunity for advanced clinical preparation and training. I had testified last year that we had started a new role for master clinicians, and this role allows us to grow clinical experts with advanced experience and advanced academic preparation, and allow them to continue to compete for promotion and function at the bedside as true clinical leaders and clinical experts.

We realize the increased challenges our flight nurses face with critical-care—movement of critical-care patients. And so, we've recently partnered with Wright State University, in Dayton, Ohio, to establish the first of its kind master's program in flight nursing, with a focus on adult health clinical specialists and homeland defense and disaster preparedness. And we are proud to say that our first student begins this fall.

Chairman INOUYE. Thank you very much.

All of you heard Senator Murray set forth a few numbers. The suicide rate among service personnel is the highest in 28 years—about 35 percent higher than the general population of the United States. And, surprisingly, over one-third have never been deployed. It was assumed that they were afraid of combat, but over one-third, never been deployed.

As I pointed out, nurses spend more time with their patients than doctors because of the nature of their work, but do you believe that our program to attack this problem is adequate? Suicides.

SUICIDE PREVENTION

General HOROHO. Yes, Mr. Chairman.

One of the things that, when we've looked at the psychological health in suicide prevention is, we really looked at it through the lenses of each member of the team, because each healthcare provider and ancillary support provides a critical skill set when they're interacting with our patients; and not just our patients, but also with their family members.

We've taken the focus of looking at a holistic, kind of, comprehensive view. The Army has been very much engaged, over this past year, of looking at a behavioral health system of care that looks at taking that capability and, How do we surge that across Army medicine, push that into theater by using the electronic virtual behavioral health, so that we establish that relationship while your warriors are deployed?

We also have very robust behavioral health and psychological support for the family members. One of the examples that we're doing right now is with the family members of 5–2 that are deployed. In preparation for them redeploying back, we have already partnered with TriWest, as well as with the local civilian communities and our military health providers, to start providing that support with the reintegration process now, in dealing with issues now, before waiting for those families to reintegrate together.

So, it's really looking at a comprehensive piece of all of our clinical assets, to be able to impact patient outcomes. We have a long way to go, but I believe with the partnering that we've established with our civilian community leaders in healthcare, as well as with our sister services, so that we ensure that we are looking at this from a comprehensive perspective.

Chairman INOUYE. Admiral.

Admiral FLAHERTY. Thank you. As we look at suicides, we look at both the Navy and Marine Corps numbers, and Navy medicine and Navy nursing are playing a key supporting role to our line colleagues. The line runs our program, and we are there in a supporting role. And as our Surgeon General talked about, often it's

relationship—fractured-relationship issues that happen either at home or with a girlfriend, a boyfriend, et cetera—or partners.

So, we need to pay attention to that, and we believe the core component of our programs really rests on resiliency. And how do we build internal resiliency for young men and women who, quite honestly, are quite strong, the military families are very resilient, but it's the stresses of the deployments that often can cause that fracture—so, how do we have our eyes on that? How do we care for each other? And it is, as the SG talked about, it is that shipmate. And I see you today, and I know that you're not the same as you were yesterday; you're not as funny as you were yesterday, perhaps. What's going on? That should be the first red flag to ask the question, "How are you doing?"

When people are uncomfortable about asking specific intrusive questions, you can ask, "How are you sleeping?" Because someone's sleep patterns and their sleep behavior often is a predictor of stress. So, getting our arms around the stress and understanding that.

I believe we don't need a specialist to have that conversation. I believe the Navy nurse has every single skill that they need to have those conversations with people to talk about how well they're doing. What are their relationships? How are they feeling? And that is the backbone of some of the programs that we've put in place.

So, it's resiliency, sir. It's operational stress control. For the Navy, we talk about "staying in the green." We travel into—we look at a stoplight; green, yellow, orange, and red. Red means that I'm fractured and I need, probably, some intervention and support. I want to stay in the green; I want to be healthy, I want to eat right, I want to feel well, and I want to be able to do all the things that matter or are important. And we, as Navy support colleagues, try to help people stay in the green.

If you get to the yellow, we can get you back to the green. If you get to the orange, we can still get you back to the green. We want to keep you there, so that you stay well and healthy.

Chairman INOUYE. General.

General SINISCALCHI. Sir, prevention of suicide begins with building a strong wingman culture. Resiliency is key to prevention of suicide. And in February, our Air Force senior leadership supported Lieutenant General Green's plans for providing targeted, tiered, resiliency training for our high-risk groups.

And as we look at the tiered resiliency training, the focus is on instilling resiliency and building that wingman culture throughout an entire career. It begins with foundational training and it continues throughout a career, focusing on groups that are identified as high risk. And as we identify groups that are high risk for risk of suicide, then we implement face-to-face training, increased interaction from the Commander, from the front line supervisor, so that we are doing training and instilling resiliency and building that wingman culture in building that team.

Our focus for suicide prevention is on our total force. We're looking across our Active Duty, our Guard, our Reserve, and our civilian force for suicide prevention.

Chairman INOUYE. To close this hearing, may I call upon the nurses, if they so feel, to make their statements.

General Horoho.

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

General HOROHO. Mr. Chairman, distinguished members of the subcommittee, it is an honor and a great privilege to speak before you today on behalf of the nearly 40,000 Active component, Reserve component, National Guard officers, noncommissioned officers, enlisted, and civilians that are Army nursing.

It has been your continued tremendous support that has enabled Army nursing, in support of Army medicine, to provide the highest quality of care to those that are entrusted to our care.

Last year, I promised you an update on the Army Nurse Corps campaign plan that we began in October 2008. Leader development has always been one of the Army Nurse Corps' foundations, but as we move the Corps forward, we realize the need to develop a strategy to provide overarching, longitudinal training programs to ensure that we are building leaders for the future. A major initiative is the Leader Academy, a virtual construct designed to facilitate and enhance adaptive, full-spectrum Army Nurse Corps leaders.

We also determined that there were nurses that needed a standardized clinical transition program to ensure success as they move from academics to nursing practice. In October 2008, the Army Medical Command formally fielded the Brigadier General Retired Anna Mae Hay Clinical Transition Program, named in honor of our 13th Corps Chief and the first female officer in the Army across nine medical centers. During fiscal year 2009, 364 new graduate Army nurses completed the program, and so far this year over 270 have completed this program.

The program is designed to ensure that we develop and foster critical thinking, communication, multidisciplinary teambuilding, and deployment skills. The first training and educational platform that we realigned to support our transformation was a head nurse course, and we named it the Clinical Nurse OIC and NCOIC Leader Development Course, as a result of recognizing the critical relationship that exists between the clinical nurse, the officer in charge, and the noncommissioned officer (NCO) in charge. The course provides our mid-level managers the opportunity to learn the essential skills to execute sound clinical and business practices.

We are equally committed to the growth and the development of our NCOs and soldiers. In fiscal year 2011, we'll fund two senior NCOs to obtain their master's in healthcare administration, to ensure that we continue to meet the needs of the 21st century.

We are also developing an intensive care course for our licensed practical nurses that will give Commanders the flexibility to use LPNs for transport of critical patients, standardized knowledge, and expand practice opportunities.

Finally, the Leader Academy facilitates enhanced, care-long development through the level of our regional nurse executives. We adopted the American Organization of Nurse Executive Competencies to ensure the RNE has the knowledge, skills, and expertise to help manage their region's system of health. We're trans-

forming Army nursing through the development of a nursing care delivery system, in order to perfect nursing care at the bedside. The patient and the family centered system of care has, at its cornerstone, standardized nursing practice. The standardized system of care will enable us to increase quality of care, reduce resources, and ensure standardization and stability of providing quality patient care. This is in support, and will allow the surgeon general's intent to improve healthcare delivery through standardization from the point of injury through evaluation and return to duty.

The system of care will not only standardize nursing practice, but will also enable, for the first time, comprehensive measurements and improvement of nurse-sensitive patient outcomes, while leveraging evidence-based care and practices. Our efforts to transform Army nursing mirror the national initiatives to improve nursing practice in support of healthcare reform.

In January 2009, we piloted elements of the system of care at Blanchfield Army Community Hospital at Fort Campbell, Kentucky. After 6 months of monitoring this program, the outcome measures showed an increase in nurse and patient satisfaction, an increase in critical lab reporting and pain reassessment, a decrease in nurse turnover, and a decrease in patients that left without being seen in our emergency room, as well as decreases in medication errors and risk management events.

Select elements of the system of care are initially being implemented at three of our medical centers. For example, Tripler Army Medical Center has been using healing hours as a goal to promote rest and increase healing through consolidation of patient-care activities and then tailoring the provision of care for each of our individual patients.

The Army Nurse Corps is aligned with our seven other Corps within the Army in support of Army medicine to foster evidence-based practice. At every patient touch-point, we're ensuring that evidence-based practice is the foundation that supports the delivery of care. We're aggressively realigning expert clinical capability to surge as a bridge between research and clinical practice.

In February 2009, the Tri-Service Nursing Research Program (TSNRP) invited nurse scientists from all services to meet and to determine new priorities for TSNRP. Not surprisingly, force health protection was recognized as the number one priority.

Deployment research is designed to ask critical questions that cannot be answered other than on the battlefield, and Army nurses are leading the way. There have been 34 nursing-led protocols; 27 of those are from Army Nurse Corps researchers and one joint Army-Air Force protocol. The focus has been on warrior care, soldier health, trauma care, and behavioral health.

We also rely on the Uniform Services University Graduate School of Nursing as the strongest educational platform to develop clinical talent.

There has been great momentum since I've had the honor of introducing the Army Nurse Corps campaign plan to you last year. Our collective success has been the result of compassion, commitment, and dedication. I'm inspired by the pride, enthusiasm, and openness to change that I see across the Army Nurse Corps.

We continue to experience amazing progress in each one of our strategic imperatives, and we're ensuring that the Army Nurse Corps remains relevant and a force multiplier for the Army medicine, the Army, Department of Defense, and our Nation.

I continue to envision an Army Nurse Corps in 2012 that will leave its mark on military nursing and will be a leader of nursing practice reform at the national level. Our priority remains the patients and their families, and our common purpose is to support and maintain a system of health. In order to achieve this common purpose, we will let nothing hinder those who wear the cloth of our Nation, and those who took the oath to forever save, protect, and heal.

The Army Nurse Corps is committed to embracing the past, engaging the present, and collectively, continuing to work to envision our future.

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

Thank you, sir.

Chairman INOUYE. Thank you very much, General Horoho.

Now may I call upon Admiral Flaherty.

STATEMENT OF REAR ADMIRAL KAREN FLAHERTY, DIRECTOR, NAVY NURSE CORPS, DEPARTMENT OF THE NAVY

Admiral FLAHERTY. Yes, sir. Thank you Chairman Inouye.

And thank you for the opportunity today to highlight the accomplishments and opportunities facing the Navy Nurse Corps in 2010 as we care for the health of our force.

Our Navy Nurse Corps, comprised of Active, Reserve, and Federal civilian nurses—many are here today in the room—are 5,500 strong. My priorities, as Director, have been focused in three areas: people, practice, and leadership.

Our Active component is manned at 91 percent, with 2,837 nurses currently serving around the world, and we have already achieved our recruiting goal for 2010. The top three direct accession influences that are favorably impacting our recruiting efforts include the nurse accession bonus, Health Professions Loan Repayment Program, and the Nurse Candidate Program.

Today, the Reserve component is 83 percent manned, with 1,112 nurses. Last year, the Navy Nurse Corps Reserve component met 87 percent of their goal. Over 48 percent of those accessions were nurses coming to the Reserve component from Active Duty.

We are continuing to focus closely on all the many pathways to achieve this goal. Leveraging current technology, the Nurse Corps recruitment liaison officer offers a combination of social networking media tools, including Facebook and Twitter and online discussion forums, to reach students at colleges and high schools, encouraging them to consider a career in Navy nursing. We have found that students have many thoughts, they have questions, and starting this discussion early is essential.

Retaining Navy nurses is my top priority. Key efforts have positively impacted retention, including the registered nurse incentive specialty pay, a targeted bonus program for undermanned clinical

and nursing specialties and our highly deployed nurse practitioners. My goal for this year is to increase retention by 50 percent in the Active Duty component for those with less than 10 years of service, and to retain the appropriate number in each officer rank in the Reserve component. We want our nurses to accept orders to a second and a third duty station, and begin early planning for their long career.

I believe it is our responsibility, as Nurse Corps leaders, to fully understand all of the retention issues. In 2009, we commissioned the Center for Naval Analysis to conduct a survey and hold focus groups to help us understand factors that influence career satisfaction and dissatisfaction within our Nurse Corps. Our nurses told us they wanted us to be more understanding of family needs, career moves, and clinical advancement. We also learned that deployments were professionally fulfilling. We will do all that we can to make the required changes to impact this retention.

Clinical excellence is one of the main tenets of the Nurse Corps clinical leadership model. In 2009, we developed and implemented standardized orientation in nursing competencies across all of our nursing specialties. Over the past several years, the Nurse Corps identified eight critical wartime specialties and developed our manning, training, and bonus structures to incentivize nurses to practice within those specialties. Each nursing specialty has an assigned specialty leader who is a clinical expert and understands the nursing practice within each community. We work closely together to embrace practice trends and future requirements.

Understanding the deployments and type of care needed by our patients was essential when developing our nurses. To accomplish this goal, the specialty leaders work with senior nurse leaders at the military treatment facilities to create, again, the partnerships with our local civilian hospitals. Our military nurses are cross-trained in local emergency departments, as I mentioned, and in intensive care units. This is just one example of what is possible.

We know that the wars have created both visible and invisible wounds, and our warriors and our families have experienced stress. To support the behavioral health needs of our warriors and their families, the Nurse Corps has increased its inventory of psychiatric and mental health clinical nurse specialists and nurse practitioners. This growth will also support the projected expansion of our Marine Corps. I believe that every nurse, as I've stated, has the ability to understand the unique needs of their patients, and offer support and guidance at every encounter.

I am a fervent supporter of graduate nursing education, research, and professional growth of my nurses, and am committed to the sustainment and growth of the Tri-Service Nursing Research Program. Each year, approximately 73 Nurse Corps officers are selected for duty under instruction or graduate education program. Fields of study include behavioral health, anesthesia, family practice, research, and critical care.

The American Association of Colleges of Nursing has made the decision to move the current level of preparation necessary for advanced nursing practice from the master's degree to the doctoral level by 2015. The Navy Nurse Corps supports a phased approach toward adopting the doctorate nursing practice (DNP), and will uti-

lize a combination of short- and long-term steps to incorporate this degree at options part of our education strategy.

Using existing funds, three nurses will graduate with a DNP in 2012, and the DNP degree will be incorporated into the Nurse Corps training plan. As we make the transition to a greater number of DNPs, additional education funding will be required.

To expand this clinical leadership model that we have so well achieved over the last number of years to our Federal civilian registered nurses, we launched the Navy Graduate Program for Federal Civilian Registered Nurses, the first of its kind in the uniformed services. We expect that this new program will retain our current civilian nurses, incentivize new nurses to consider entry into Federal service, and sustain military treatment facilities with clinical experts, when our military nurses are deployed.

We have funded five competitively selected Federal civilian registered nurses to pursue their master's of science in nursing. We are currently receiving applications to select our next class of candidates for the fall 2010.

Navy nurses at our military treatment facilities in the United States and abroad passionately support the professional development of America's future nursing workforce by serving as preceptors, teachers, mentors for local colleges and universities, as well as entire health systems.

Navy nurses deployed to Afghanistan in embedded training teams are teaching culturally and linguistically appropriate public health measures. In response to the news of H1N1 outbreaks throughout the world, those nurses prepared emergency response plans and training for local forward operating bases and regional hospitals in eastern Afghanistan, well in advance of the cases appearing in theater. And they deployed critical counterinsurgency tactics by performing village medical outreaches to the local community members in Afghanistan.

I believe that leadership at all organizational levels is responsible for ensuring that personnel under their charge are healthy and productive. My nursing leaders have developed and are implementing an interactive career-planning guide, useful for mentoring seniors and subordinates at every stage of their careers, because we do ask people to change and move into different jobs.

A key role of these leaders is to know their people and help them develop the resiliency to be able to handle stressors and life events. Navy medicine's Operational Stress Control and Care for the Caregiver Programs have a direct impact on the health and well-being of the force, deployment readiness, and our retention. We know that caring for service members and their families and experiencing their trauma and stress can impact our medical staff. We must be prepared to care for ourselves, to be able to care for others.

Chairman Inouye, thank you. Thank you, again, for the opportunity—providing me this opportunity to share with you the remarkable accomplishments of our Navy Nurse Corps and our continuing efforts to meet Navy medicine's mission.

On behalf of the outstanding men and women of the Navy Nurse Corps and their families who so faithfully support them, I want to extend my sincere appreciation for your unwavering support.

Thank you.

Chairman INOUYE. Thank you, Admiral.

Admiral FLAHERTY. Yes, sir.

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

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

General SINISCALCHI. Chairman Inouye and distinguished members, it is an honor to represent the Air Force Nurse Corps.

Our total nursing force is comprised of Active Duty, Air National Guard, and Air Force Reserve officer and enlisted nursing personnel.

It is a pleasure to serve alongside my senior advisors: Brigadier General Catherine Lutz, Air National Guard; Colonel Ann Manley, Air Force Reserve; and Chief Master Sergeant Joseph Potts, our Active Duty enlisted career field manager. Together, we lead a total force team delivering evidence-based, patient-centered care to meet global operations.

On behalf of our total nursing force, sir, thank you for your outstanding support. Your unwavering commitment to our Tri-Service Nursing Research Program, and your continued support of our Nurse Corps Incentive Special Pay Program is genuinely appreciated.

Nursing is integral to the support of global operations. Day after day, our nurses and technicians provide care to our Nation's heroes at home and abroad. Operational capability is the foundation and moral fiber of Air Force nursing.

As an example, Lieutenant Colonel Zierold, from Salt Lake City, Utah, led a trauma team at Bagram, Afghanistan. In his words, "Over a period of 6 months, we took care of more than 1,000 traumas and countless medical admissions. The acuity was high and the injuries were horrendous, but we safely returned 550 injured U.S. servicemembers to their families, children, and spouses. We forever changed the lives of 450 devastated Afghan nationals, and we won their hearts. And the kids; we will never forget the kids. At the time of their discharge, they reached out their little hands and smiled, as if to say, 'Thank you. I'll be okay.'"

On this side of the globe, no one could have anticipated the total devastation that took place on January 12, when our Haitian neighbors experienced the massive earthquake. Special Operations surgical teams and critical-care evacuation teams deployed with the initial response aircraft, and were the first military medical teams on the ground. Our critical-care nurses worked around the clock, providing casualty evacuation of patients in and out of theater, as well as pre- and postoperative surgical and intensive care. Our anesthetists assisted in lifesaving surgeries and augmented the surgical and critical care teams.

The vital link, sir, to saving lives, is our aeromedical evacuation capability. These critical missions sustain world-class care across the continuum. Since operations began in 2001, over 197,000 patients have been air-evac'd. In 2009 alone, we moved 21,500 patients globally. Our superb flight nurses, technicians in critical care air transports teams have rightfully earned the title, "Angels of the Battlefield." One such Battlefield Angel, Captain Jack Solgen, of

Ballston Spa, New York, and his team successfully coordinated with the United Kingdom Aeromedical Evacuation Control Center for the transport of the British soldier with a traumatic pneumonectomy that Lieutenant General Green had mentioned.

Two weeks ago, I had the opportunity to personally meet the lung team based at Ramstein Air Base, Germany. They passionately shared their experience of the emergency use of cutting-edge lung-support technology in saving the British soldier's life. This success story demonstrates a multinational effort of over 1,000 aircrew, ground, and medical personnel.

The flexibility and responsiveness of today's aeromedical evacuation system demands educated and experienced flight nurses with enhanced clinical capability and disaster management expertise. I am proud to report that we created a master's degree in flight nursing with adult clinical nurse specialist focused in concentration in disaster management. This program—first of its kind—was designed and ready for students in less than 6 months. We partnered with Wright State University, in Dayton, Ohio, to strategically develop this program, and, as I mentioned earlier, our first student will begin this fall.

We continue our commitment to provide the best care possible to our men and women in harm's way. It's imperative to advance operational medicine through research. Doctorally prepared nurses are integral to advancing multidisciplinary research. In March 2009, the Department of Defense Medical Research Program was initiated in Afghanistan, under the direction of Colonel Elizabeth Bridges, Air Force Reserve, Seattle, Washington, while Lieutenant Colonel Teresa Ryan, Air Reserve, Biloxi, Mississippi, was a senior nurse researcher in Iraq. Research conducted in Afghanistan and Iraq has led to important advancements in combat casualty medical care and therapies. Our nurse researchers provide leadership and guidance on scientific merit, design, and methodology.

I am pleased to report that we developed a nursing research fellowship. Our first candidate will begin this spring. This 1-year predoctoral fellowship focuses on clinical and operational research.

One of our valuable skill sustainment programs is the Critical Care Emergency Nursing Fellowship. Our graduates provide the highest quality of care, both stateside and in the deployed environment, saving lives on a daily basis.

To mitigate the increased demands on mental health nurses, we continue to recruit, educate, and train internally. Currently, 93 percent of our mental health nurse practitioners are Air Force Institute of Technology graduates. A formal mental health nurse training program is being developed at David Grant Medical Center, at Travis Air Force Base in California, to help train clinical nurses to become mental health nurses.

Increasing our advanced life-support footprint, we have started several—we have started training several of our aerospace medical service technicians at the National Registry of Emergency Medical Technician Paramedic level. The inaugural class started and graduated 19 students, and we are programming for 50 students annually.

A robust recruiting program is essential to keep our Nurse Corps healthy and ready to meet future challenges. While we have exe-

cuted incentive programs to address the nursing shortage, we still have shortfalls. In 2009, we assessed 284 nurses against our total accession goal of 350, for an overall 81 percent.

Our Nurse Enlisted Commissioning Program continues to be a reliable platform to assess nurses. In 2009, fully—40 qualified candidates were selected. In 2010, we will meet our steady-state goal of 50 quotas annually. Assessing fully qualified nurses continues to be challenging. While the recruitment of novice nurses is going well, the limiting factor is their depth of clinical expertise. Our Nurse Transition Program advances the clinical skills of these new nurses through direct patient care under the supervision of seasoned nurse preceptors. The transition program continues to be one of our many successes, with eight military and two civilian locations. We graduated 158 nurses in 2009.

Last year, I reported that a civilian partnership with Scottsdale Healthcare System in Arizona was on the horizon. This past December, I had the honor to deliver the commencement address for the second graduating class. Air Force nurses are gaining unprecedented clinical opportunities as a result of our transition programs.

As we strive to meet our recruiting goals, we continue to focus on the retention of our experienced nurses. In its second year of execution, the Incentive Special Pay Program is positively impacting retention. Seventy-eight percent of our nurses accepted a single- or multiyear contract. With a $3.3 million increase, this year's focus is to improve retention by recognizing advanced academic preparation certification and experience.

Through the Tri-Service Nursing Research Program, my colleagues and I commissioned the first-of-its-kind joint research study designed to quantify factors impacting recruitment and retention. An associate investigator for each service will ensure service-specific and across-service initiatives are identified and validated for use in shaping future strategies.

A number of scientific, societal, and professional developments stimulated a major change in requirements for licensed practitioners. The American Association of Colleges of Nursing endorsed the position statement on the doctorate in nursing practice. This decision moves the level of preparation for advanced practice from the master's degree to the doctorate level by 2015.

With Lieutenant General Green's full support, we developed a phased implementation plan, starting in 2010. As I reported last year, we developed master clinician roles to afford our most clinically experienced senior nurses with advanced academic preparation, to remain at the bedside, without sacrificing promotion. We are diligently working to retain and field these authorizations.

As we reflect, sir, on the achievements of the past, and the challenges of the present, we look forward to the future. By being actively engaged in education, training, and research, we are generating new knowledge and advancing evidence-based care necessary to enhance interoperability in nursing operations across our services.

Through the synergy of our Active, Guard, Reserve, civilian, and contract forces, coupled with the collaborative relationships with our sister services and civilian colleagues, we are prepared to meet emerging challenges with strength and confidence.

Air Force nursing stands ready today to embrace the challenges of tomorrow, as we lead, partner, and care, every time, everywhere.

Mr. Chairman and distinguished members, it is my honor to be here with you today, representing a dedicated, strong, total nursing force of nearly 18,000 men and women.

Thank you, sir.

Chairman INOUYE. I thank you very much, General.

ADDITIONAL COMMITTEE QUESTIONS

General Horoho, Admiral Flaherty, and General Siniscalchi, on behalf of the subcommittee, thank you very much for your testimony, and especially for your service to our Nation. And, through you, the subcommittee wishes to thank those under your command for their unselfish service.

Thank you very much.

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

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

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

O–7 AND O–8 NURSE CORPS BILLETS

Question. RADM Robinson, what mechanisms are in place to ensure the continuation of both an O–7 and O–8 billet for the Navy Nurse Corps?

Answer. Currently Navy Medicine has two designated billets for Navy Nurse Corps, one for an O–7 (Rear Admiral Lower Half) and one for an O–8 (Rear Admiral Upper Half). Our practice has been to have both of these billets manned. Currently, Rear Admiral (lower half) Elizabeth Niemeyer holds the O–7 billet and Rear Admiral (upper half) Christine Bruzek-Kohler holds the O–8 billet. RADM Bruzek-Kohler has plans to retire in the Fall of 2010. At the time of the 2010 DOD Congressional Testimony, results of the fiscal year 2010 O–8 Selection Board have not yet been released.

CBOC

Question. Admiral Robinson, the Army is planning to open 22 Community Based Primary Care Clinics in 14 different market areas to provide better access for the thousands of beneficiaries who live off post. Have you looked into a similar concept for the Navy and do you plan to promote the Army clinics to Navy personnel and their families serving near them?

Answer. A number of primary care practice models, including those from the Federal and private healthcare sectors, were evaluated as Navy Medicine developed the Navy Primary Care Model called Medical HomePort. Navy Medicine is launching a phased implementation of Medical HomePort across the enterprise as the practice standard for primary care. The initial phase will include NNMC Bethesda, NMC Portsmouth, NMC San Diego, NH Bremerton, NH Jacksonville, NH Lejeune, NH Pendleton and NH Pensacola. NHC Quantico will also be part of the first phase during fiscal year 2010.

Medical HomePort utilizes a dedicated team of medical providers and support staff designed to increase access to care. The increased access aims to provide continuity for beneficiaries with their provider team, and we expect will improve the health of enrolled patients through preventive health practices, integrated mental healthcare and chronic disease management. We plan to closely monitor the Healthcare Effectiveness and Data Information Set (HEDIS) outcomes for the sites selected for implementation.

In addition, this program will allow enrolled patients to access to their healthcare team 24/7 through secure messaging, schedule appointments through patient-preferred modes, and tailored education to their learning style.

Navy personnel and their family members who reside within the catchment areas for the Army Community Based Primary Care Clinics would be notified of their en-

rollment options for those facilities via the Tricare Managed Care Support Contractor (if a Navy medical facility is not available within the area).

DCOE CHAIN OF COMMAND FOR INSTALLATION REPAIRS

Question. Admiral Robinson, I am very interested in the growing number of medically focused centers of excellence in the military and how the Department intends to ensure the appropriate level of attention and allocation of resources are devoted to the issues we are faced with today and also those we might encounter in the future. The current centers are focused around known critical areas of concern that impact both the Department of Defense and the Department of Veteran's Affairs: hearing loss, vision, extremity injury, traumatic brain injury and psychological health. Some of these centers will be located on the Walter Reed National Military Medical Center Campus. What will be the chain of command for responding to each Center's needs like fixing medical equipment or fixing a leaky roof? Will it be the medical center's responsibility or Naval Installation Command?

Answer. Any Center of Excellence located on the Walter Reed National Military Medical Center Campus will fall under the control of the Medical Center Commanding Officer and his or her chain of command. Center of Excellence facility repairs will be the responsibility of the Medical Center Commanding Officer and will be resourced through the Defense Health Program (DHP).

NAVY MEDICINE INTERACTION WITH SAFE HARBOR

Question. Admiral Robinson, a tremendous amount of attention has been devoted to the care of our wounded warriors. The two main Navy programs designed to meet the needs of wounded service members are the Navy's Safe Harbor and the Marine Corps' Wounded Warrior Regiment. Navy Medicine works cooperatively with these programs to develop comprehensive recovery plans. How are the Services interacting with private sector care providers to ensure they have the necessary information on those Service programs relevant to their patients?

Answer. Navy's Safe Harbor and the Marine Corps' Wounded Warrior Regiment were designed to take care of the non-medical needs of our wounded Sailors, Marines and Coast Guardsmen. Their role is to provide information and assist with access to the resources necessary to support the non-medical needs of our wounded warriors as they recover, rehabilitate, and reintegrate. Coordination of care when individuals transition from military treatment facilities to civilian care is accomplished through the Medical Care Case Managers (MCCMs) and the clinicians caring for the patients. Exchange of medical information occurs through provider to provider communication. Assistance in transition of medical care to the private sector is provided by the MCCM who remains engaged with the patient until they successfully establish a new care provider. Understanding the unique needs of the Reserve Component with regards to transition of care, especially transition of mental healthcare, Navy Medicine established the Psychological Health Outreach Program. This program is specifically designed to provide an additional layer of support to Reservists making their transition to private sector or VA care.

FUNDING A WORLD CLASS FACILITY

Question. Admiral Robinson, there is a tremendous amount of focus on the establishment of the new Walter Reed National Military Medical Center at Bethesda. One of the latest developments is the effort to make it a "World Class" Facility and to produce a master plan for the campus to accommodate those changes. While Congress anxiously awaits the delivery of the master plan later this month, I am very concerned over the expected price tag for these additional projects that haven't been budgeted. As I understand it, this could cost upwards of $800 million from operation and maintenance and millions more in military construction. As these projects are being evaluated by the Department, are they also determining how these projects will be funded and by which Service?

Answer. To carry out the 2005 BRAC law, JTF CAPMED was established to oversee the realignment of Walter Reed Army Medical Center to the new Walter Reed National Military Medical Center in Bethesda and Fort Belvoir Community Hospital. JTF CAPMED reports to the Secretary of Defense through the Deputy Secretary of Defense. Due to the alignment of JTF CAPMED as an independent DOD entity, Navy Medicine does not direct JTF CAPMED on construction or other priorities, nor are we planning for future operation and maintenance requirements, since that by definition belongs to JTF CAPMED. These emerging priorities and requirements are driven by many things, all of which are outside Navy Medicine's budget process. As part of our mission to ensure that our Wounded Warriors receive the care they need and deserve, Navy Medicine is in regular communication with JTF

CAPMED and continues to provide support as necessary. Because of this regular communication Navy Medicine is aware of the unique challenges facing JTF CAPMED, to include the projected increase of financial requirements. However, specific details of these challenges or the financial requirements cannot be defined or defended by Navy Medicine.

RECRUITING FOR THE RESERVES

Question. Admiral Robinson, each Service faces unique medical personnel recruiting challenges but it appears all are having significant difficulties in the reserve component. Could you explain what this is attributable to and what efforts are underway to improve recruitment and retention for the reserves?

Answer. Length and frequency of mobilizations are main reasons given for recruiting challenges.

The financial and professional implications of being absent from a medical/dental practice, individual or group, for a period of time, are significant. Loss of patient base, medical staff, and support staff all contribute to these difficulties. The benefits and compensation for service do not adequately compensate for these losses.

Initiatives currently underway are specific to Corps and specialty.

Medical Corps.—Recruiting is focused on Critical Wartime Specialties (CWS) that are currently manned below 80 percent. In addition to a Loan Repayment Program and stipend, physicians who meet the CWS criteria are offered a bonus of $25,000 per year, for a maximum of 3 years. Prior service physicians who do not meet the CWS criteria may receive a $10,000 lump sum bonus for a 3 year drill obligation. However, this has not attracted enough applicants to alleviate shortfalls. We're currently considering establishing an accession bonus for Non-CWS Direct Commissioned Officers which could potentially attract eligible candidates.

Dental Corps.—Reserve Dental Corps has a $10,000 lump sum affiliation bonus for prior service General Dentists for a 3 year drill obligation. Overall manning in this community is at 100 percent; however, oral surgeons are in high demand and are manned at only 43 percent. Dentists who are interested in serving in the Navy as maxillo-facial surgeons can qualify for a Loan Repayment Program, stipend, and a CWS bonus of $25,000 per year, for a maximum of 3 years. However, this has not attracted enough applicants to alleviate shortfalls. We're currently considering establishing an accession bonus for Non-CWS Direct Commissioned Officers which could potentially attract eligible candidates.

Medical Service Corps.—Current recruiting incentives for clinical psychologists, physician assistants, and environmental health officers include the Loan Repayment Program, stipend, and a CWS bonus. Navy veterans (NAVETS) may be eligible for an affiliation bonus of $10,000.

Nurse Corps.—Current recruiting incentives for Nurse Corps officers in CWS include stipend, Loan Repayment Programs, or CWS bonuses for the following communities: Psychiatric Care, Perioperative, Certified Registered Nurse Anesthetists and Mental Health Nurse Practitioners. An affiliation bonus of $10,000 is available to Navy veterans for all sub specialty programs. In February 2010, we began offering a $10,000 accession bonus for direct commission officers for medical-surgical, maternal infant, critical care, and neonatal intensive care unit nurses.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

NURSE RECRUITING

Question. Nurses significantly contribute to the healthcare of our service members and their families. It is important that we maintain appropriate levels of highly trained nurses capable of performing a wide range of healthcare functions.

a. With the maintained high operations tempo of combat in Iraq and Afghanistan, and the increasing requirements for healthcare for the service member and their families, are you able to maintain the required level of nurses?

b. Are there enough nurses entering the military to ensure quality of care for the service members and to maintain the legacy of superb leadership in the future?

c. What are you doing to prepare nurses for senior leadership roles and responsibilities?

Answer. a. Retaining Navy Nurses is one of my top priorities. We remain committed to providing a total force of Navy Nurses, balanced in terms of seniority, experience, and skills, to provide the very best care to Sailors, Marines and their families. Key efforts have positively impacted retention, including the Registered Nurse Incentive Specialty Pay, a targeted bonus program for undermanned clinical nursing specialties and highly deployed Nurse Practitioners. Our nurses are enriched by

being able to practice in both deployed and garrison care settings. My goal for this year is to increase retention by 50 percent in the Active Component (AC) for those with less than 10 years of service, and to retain the appropriate numbers in each officer rank in the Reserve Component (RC).

b. Nurse Corps AC manning is 91 percent, with 2,837 nurses in inventory. We have already achieved the Nurse Corps AC recruiting goal for fiscal year 2010, marking the fourth consecutive year we have met our accession goal. Nurse Corps RC manning is 83.6 percent, with 1,112 nurses in inventory. As of late March 2010, we have met 25 percent of the RC fiscal year 2010 mission of 165 nurses, and we remain focused on this area. I attribute our recruiting successes to the continued funding support for our accession programs, the local recruiting activities of Navy Recruiters and Navy Nurses, and the continued positive public perception of service to our country. A recruiting initiative targeting direct accessions will offer entry grade credit for advanced education and work experience among the critical wartime specialties of Certified Registered Nurse Anesthetists (CRNAs), psychiatric/mental health, emergency room, and perioperative nursing. These initiatives will be expanded to include medical-surgical nurses and critical care nurses as well.

c. In addition to sequential assignments to clinical and administrative leadership roles with increasing scope and responsibility, Navy Nurses are eligible and encouraged to pursue leadership training at all stages of their career. Leadership education starts with a 5-week long Basic Officer Development School (ODS) at Newport, Rhode Island before the officer receives their first military assignment. At the mid-grade career level, nurses are encouraged to complete the Basic Medical Department Officer Course (BMDOC), followed by the Advanced Medical Department Officer Course (AMDOC). Subsequent to completing these two courses, Nurse Corps officers are highly competitive for nominative assignments to the Interagency Institute for Federal Health Care Executives, MedXellence, and Capstone Courses. Nurse Corps officers interested in senior leadership and executive medicine positions are encouraged to obtain their Executive Medicine Additional Qualification Designation (AQD) through the Joint Medical Executive Skills Institute (JMESI). Mid and senior-level Nurse Corps officers compete for opportunities to attend the Navy War College through distance learning programs or residence assignments.

MENTAL HEALTH AWARENESS

Question. The Army has partnered with the National Institute of Mental Health (NIMH) to conduct a long-term study of risk and protective factors to inform health promotion and suicide prevention efforts in late 2008.

What is the Navy doing to promote mental health awareness?

Answer. The Navy Operational Stress Control (OSC) program and USMC Combat Operational Stress Control (COSC) programs are working together to provide Sailors, Marines and their families increased education and awareness to early recognition of those in distress, to mitigate the stigma associated with seeking psychological care and to promote a culture of psychological wellness/health (vice the old paradigm of focusing on mental illness). These programs are Line-led and owned programs, supported by Navy Medicine, designed to provide leaders with tools they can use to recognize and act on early indicators of stress and to understand and use appropriate support resources, including medical and mental health treatment. The end state is a more resilient force. Navy Medicine has developed the Caregiver Occupational Stress Control (CgOSC) program to specifically address our caregivers who are often more prone to adhering to a "code of silence" pertaining to acknowledging personal stress-related issues. A multimedia (print, digital and social media) marketing campaign is underway to further mitigate stigma and increase awareness to resources. Additional mental health awareness initiatives include Project Focus—Family's Overcoming Under Stress; Combat and Operational Stress First Aid (COSFA); BUMED/Navy Chaplain Corps annual Professional Development Training Seminar's on Combat and Operational Stress Control for deploying Sailors/Marines as well as a family-focused seminar; and Navy Returning Warrior Workshop's.

Question. Is the Navy conducting long-term studies similar to that of the Army and NIMH?

Answer. Navy Medicine is conducting a number of studies to investigate the longitudinal health experience of deployed military personnel. The Naval Health Research Center (NHRC) in San Diego, California, is the lead agency for the Millennium Cohort Study, which is the largest prospective health project in military history. It is designed to evaluate the long-term health effects of military service, including deployments. The study, which was launched in 2001, currently includes almost 150,000 participants and has already documented a number of risk factors for PTSD and depression following deployments. Other studies are focused on specific

Navy and Marine Corps subgroups. For example, the Marine Resiliency Study is a collaboration between NHRC, the San Diego VA, Headquarters Marine Corps, and the National Center for PTSD, is collecting psychological and physiological data on Marine Corps Infantry personnel before and after combat deployments to identify both subtle and overt indices of combat stress. The Marine Resiliency Study documents the incidence of combat-related psychological disorders as well as risk factors for disorders. NHRC is also collecting longitudinal data on Navy and Marine Corps personnel before and after separation from military service. The goal of this effort is to identify factors associated with successful readjustment of Veterans to civilian life. In another effort, the Behavioral Health Needs Assessment Survey (BHNAS) is an ongoing series of surveys and focus groups conducted with Sailors in combat zones to identify rates and causes of psychological problems.

MENTAL HEALTH ASSETS AND SERVICES FOR FAMILIES

Question. Family Readiness and support is crucial for the health of the services. The health, mental health, and welfare of military families, especially the children has been a concern of mine for many years. This also includes education, living conditions, and available healthcare.

Are you meeting the increased demand for healthcare and mental health professionals to support these families? If not, where are the shortfalls?

What improvements have been made with respect to the children of soldiers and meeting their special requirements? What programs have you implemented to assist the children with coping with frequent deployments, re-integration, and other stresses of military families?

Answer. Since the beginning of Overseas Contingency Operations, Navy Medicine has increased mental health assets across the enterprise to meet the increasing needs of service members and their families.

To meet the specific needs of families, we have implemented several programs targeted at the types of challenges families face as a result of deployments and injuries to the service member.

Examples of these programs include:

—FOCUS (Families Over Coming Under Stress) is a family-centered resiliency training program based on evidenced-based interventions that enhance 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. FOCUS has demonstrated that a strength-based approach to building child and family resiliency skills is well received by service members and their family members reflected in high satisfaction ratings. 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. In June 2009, the Office of the Secretary of Defense Child and Family Policy determined FOCUS as a best practice program and requested the support of BUMED to expand to select Army and Air Force sites for services. To date over 97,000 service members, spouses, children and community providers have received services on FOCUS.

—Navy Fleet and Family Support Centers (FFSCs) offer a wide-range of services to families to include pre- and post-deployment programs.

—Ombudsmen/Navy Regional Family Support Liaison; Navy Expeditionary Combat Readiness Center's (ECRC) Individual Augmentee (IA) Family Readiness Program.

—The Reserve Psychological Health Outreach creates a Psychological health "safety net" for Navy and Marine Corps Reservists and their families. It improves the overall Psychological Health and resiliency of Reservists and their families, and identifies long-term strategies to improve Psychological Health support services. In addition, Psychological health Outreach Teams have been in place at Navy Reserve Component Commands since fiscal year 2008.

—Returning Warrior Workshops provides 2 day workshops designed to support reintegration of deployed Reservists and their family using a weekend-formatted program that includes assisting families in identifying issues during post-deployment, providing resources for issues resolution, sharing common experiences in a comfortable setting, honoring sacrifices endured, and engaging family members and service members with process improvement.

TRANSITION OF WOUNDED WARRIORS TO THE VA

Question. In the recently released Department of Defense budget guidance, it states that "caring for our wounded warriors is our highest priority: through improving health benefits, establishing centers of excellence, and wounded warrior initiatives."

What system do you have to ensure the transition of wounded warriors from Department of Defense to the Department of Veterans Affairs is completed without any unnecessary problems?

Answer. To ensure the transition of Wounded Warriors from Department of Defense to the Department of Veterans Affairs is completed without any unnecessary problems, Navy Case Management (both medical and non-medical) work collaboratively with Federal agencies including the VA. This collaboration includes multidisciplinary team meetings with Navy and USMC Recovery Care Coordinators, Federal Recovery Coordinators, Non-Medical Care Managers, Medical Care Managers and VA Liaisons, patients and their families in developing Recovery Care Plans.

Question. What do you consider a successful transition and do you follow-up with the service members to ensure there are no problems even after they have been released from Active Duty?

Answer. A successful transition is one that results in the service member and his/her family's needs being met to their satisfaction. Navy Medicine Medical Care Managers provide a warm hand off of the medical case management of an individual to VA Medical Care Managers when an individual transitions from Active Duty to Veteran status. This hand off ensures smooth transition of the medical needs of the Sailor/Marine. Navy Safe Harbor and Wounded Warrior Regiment Recovery Care Coordinators and the Federal Recovery Coordinators assigned to these wounded warriors, provide a lifetime of individually tailored assistance designed to optimize the success of the injured service member's recovery, rehabilitation and reintegration activities. Their involvement with the individual continues through and beyond the transition period.

MENTAL HEALTH STIGMA

Question. General Casey recently stated that the number of Army soldiers who feel there is a stigma for seeking mental healthcare has been reduced from 80 to 50 percent. This is a significant improvement, but there is much more work to be done.

Despite the reduced number of soldiers who feel there is a stigma, are more service members coming forward to seek treatment?

Answer. Yes, Navy Medicine has experienced a 30 percent increase in outpatient mental health encounters for Sailors and Marines over the past 2 years. Greater data analysis is required in order to correlate the impact of reduced stigma and increases in demand.

Question. What actions are the services taking to continue to reduce the stigma and encourage service members to seek treatment?

Answer. Prior Navy Medicine "innovations" that have now become the norm include operationally embedded mental health providers, integration of Mental Health Care into primary care, Psychological Health Outreach Coordinators and use of our Deployment Health Centers as destigmatizing portals of care. Navy Medicine has also developed the Caregiver Occupational Stress Control (CgOSC) program to specifically address our caregivers who are often more prone to adhere to a "code of silence" pertaining to acknowledging personal stress-related issues. Another innovative program is the multidisciplinary team assessment of every patient that is medically evacuated from theater to identify potential cognitive and psychological health issues. Access is increased in a non-stigmatizing manner by providing this assessment to all patients without need for consult or self-referral. Follow on care is provided as indicated utilizing all members of the multidisciplinary team. The Navy Operational Stress Control (OSC) program and USMC Combat Operational Stress Control (COSC) programs are working together to provide Sailors, Marines and their families increased education and awareness to facilitate early recognition of those in distress and to help combat the stigma associated with seeking psychological care. A multimedia (print, digital and social media) marketing campaign is also underway to further mitigate stigma and increase awareness to resources.

Question. Does your plan include the mental health of families, and if so what is that plan?

Answer. Yes, Navy medical care is "patient and family centered care". The psychological health of our families is crucial in maintaining a health fighting force. Navy Operational Stress Control (OSC) is developing specific Family OSC curriculum in collaboration with our life educators from Fleet and Family Support Centers. Project

FOCUS (Families Over Coming Under Stress) is a family-centered resiliency training program based on evidenced-based interventions that enhance understanding, psychological health and developmental outcomes for highly stressed children and families. Navy Medicine has partnered with the Navy and Marine Corps Public Health Center and USMC COSC to develop and pilot a Family component to the USMC Operational Stress Control and Readiness (OSCAR) program.

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

NAVY MEDICINE USE OF SOFTWARE

Question. DOD renewed its contract with a Vermont medical firm, Problem-Knowledge Couplers (PKC), last fall. DOD licenses 95 standard PKC tools and six custom tools used for deployment and readiness medical processes. PKC is presently including the six custom tools into a single "CHART" smart-questionnaire, migrating these tools from a Windows to a web-based interface, and preparing a set of web-based medical history questionnaires for patients to complete online prior to the medical encounter.

DOD has not yet issued a Department-wide policy on how the Services are to employ the CHART tool. How does your Service plan to use CHART? Will you issue a policy directing how it is to be used, since employing it will substantially change the workflows of Service medical practitioners?

As for the medical history questionnaires, the use of this tool by the Services will put DOD in the very forefront of medical information technology innovation. Can each of you describe how your Service will direct the use of these questionnaires, educate your medical professionals about their existence and value, and track and oversee their full integration into patient contact processes?

Answer. PKC couplers in their current configuration are in use at a limited number of locations for routine screenings such as the annual Periodic Health Screening. The current version of the tool does not represent an ideal configuration for efficient use with our current systems.

CHART is currently undergoing testing for use with our current systems. Once the testing is complete the tool can be examined for routine use as a screening tool by both clinical and technical experts. Once the technical examination is complete, Navy Medicine will consider how CHART can be best utilized.

Once Navy Medicine decides how CHART may be used, web based training as well as live training at our individual treatment facilities can be utilized to train the healthcare team.

DEFENSE CENTERS OF EXCELLENCE

Question. Would you each describe the relationship of your Services to the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury? How do you share and receive information and support from these Centers? How timely are they in responding to requests from support from your Services?

What is the relationship between your Services and the centers of excellence directed by the 2008 and 2009 National Defense Authorization Acts related to hearing loss and auditory system injuries, military eye injuries, and traumatic extremity injuries and amputations? How mature are these organizations, at what level are they staffed, and do you find that those staffing levels are sufficient to support the needs of your Service in each medical area?

Answer. Navy Medicine works collaboratively with the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury and its component centers: Defense and Veterans Brain Injury Center (DVBIC); Center for the Study of Traumatic Stress (CSTS); Center for Deployment Psychology (CDP); Deployment Health Clinical Center (DHCC); National Center for Telehealth and Technology (T^2); and the National Intrepid Center of Excellence (NICoE). Navy Medicine provides staffing to the DCoE, but also has been working to ensure that Navy Medicine professionals—clinicians, researchers, educators and program managers—are working collaboratively with the DCoE staff to improve their important research, education and outreach efforts. We are encouraged by the work of the DCoE and look forward to working with ASD (HA) and the other services to determine the best organizational structure and way forward. Preliminary work is underway in support of the ASD (HA) plan to designate each of the Services with lead operational support responsibilities for one of these Centers: Navy—Vision Center of Excellence; Army—Center of Excellence for Traumatic Extremities and Amputations; and Air Force—Hearing Center of Excellence. ASD (HA), along with the Services' Surgeons General,

are in the process of evaluating organizational models to best support the DCoE mission.

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

MENTAL HEALTH PROFESSIONALS

Question. DOD has a critical shortage of mental healthcare professionals. During review of the Fort Hood incident where the alleged gunman, Major Hasad, U.S. Army psychologist, is charged with the deaths of 13 victims, reports show discrepancies in documentation and counseling as it related to his professional abilities and behavior. Suggestions were made that he was kept on active duty with no negative reprimands because he had diversity as a Muslim to our nation's service despite his failure to perform. What is DOD doing to recruit more mental health workers and to ensure they are quality healthcare professionals?

What are the roadblocks to meeting the shortage of mental health professional?

Answer. Navy Medicine has been successful in hiring civilian and contract mental health providers. The difficulty is the long training pipelines required to access and train our military mental health providers. The majority of our military mental providers are either trained in-house, through student pipelines or both. For example a Psychiatrist training pipeline includes 4 years of medical school, 1 year of internship and a 3 year Psychiatry residency. These long training timelines impact our ability to replace and increase our inventory of military Psychiatrists with any expediency. Clinical Psychologists and Social Workers were recently approved by Navy for accession bonuses beginning in February 2010. We believe these new bonuses will impact direct accession of fully trained Clinical Psychologists and Social Workers.

Question. What is being done to reduce the stigma and provide enough care givers so soldier and their families do not suffer in silence?

Answer. Navy Medicine has focused much attention on reducing stigma and ensuring that an adequate number of mental health professionals are available to care for our beneficiaries. Mental health providers are routinely embedded with our operational units, both ashore and afloat. Seventeen Deployment Health Centers (DHCs) were established in fiscal year 2006 as non-stigmatizing portals of care in high Fleet and Marine Corps concentration areas. The DHCs augment existing MTF resources with an additional 170 multi-disciplinary contract positions, including psychiatrists, psychologists, and social workers, and provide a robust capability to screen, evaluate, and treat Service members for deployment related health concerns. In a major initiative, efforts are underway to integrate mental health providers into our Primary Care Clinics, further improving access and reducing stigma. Additional mental health providers have been hired in recent years to support a host of other programs, including psychological health outreach and family support and counseling. The Navy Operational Stress Control (OSC) program and USMC Combat Operational Stress Control (COSC) programs are working together to provide Sailors, Marines and their families increased education and awareness to facilitate early recognition of those in distress and to help combat the stigma associated with seeking psychological care. Navy Medicine has developed the Caregiver Occupational Stress Control (CgOSC) program to specifically address stress in our caregivers.

Question. How is Navy Medicine integrated into the suicide prevention programs to ensure mental health services are getting to those who need it before it is too late?

Answer. Navy Medicine personnel (military and civilian) are required to receive annual awareness training to improve ability to recognize risk factors, warning signs, and protective factors related to suicide and know how to assist someone in need to get care. Medical facilities and all Navy commands must have written crisis response plans with consideration of safely reaching, engaging and transporting an individual in acute risk to care. Navy suicide prevention is part of a comprehensive effort in the Navy to educate Sailors, families, and leaders to recognize and act on early indicators of stress and to understand and use appropriate support resources, including medical and mental health treatment.

WOMEN'S HEALTH: CERVICAL CANCER

Question. Cervical Cancer is preventable. In 2009 over 11,000 American women were expected to be diagnosed with cervical cancer and over 4,000 women were expected to die from the disease. More than one-half of women who die from cervical cancer have never been screened or have not been screened in the past 5 years.

Human Papillomavirus (HPV) testing is an approved and widely accepted test to search for cells that have the potential of turning cancerous. Research has proven that when performed together with cytology screening, it increases detection of abnormal cell changes by 30 percent. National medical organizations and insurance companies have determined screening of HPV testing and cytology screening at the same time as the standard of care, however Tricare has deemed HPV testing authorized only after a negative cytology exam.

What is Navy medicine doing to ensure its female patients are receiving the highest quality of cervical cancer screening available?

a. What is the percentage of female patients who receive current standards of screening within the required timeframes?

b. Is HPV tests available at all Navy MTFs?

c. What is Navy medicine doing to increase prevention efforts of their female patients from developing cervical cancer?

Answer. Navy Medicine is dedicated to ensuring that all patients receive the highest quality of care. All female patients who present for care have the opportunity to be screened for cervical cancer, following the guidelines of the USPSTF (United States Preventive Services Task Force).

(a) The percentage of female patients who are screened is 85.9 percent (December 2009—the most current data from the Population Health Navigator). To put this figure into context, the civilian HEDIS Benchmark for 75th percentile is 84.6 percent and for 90th percentile is 87.8 percent, so we fit in with national norms. Our true measure for cervical cancer screening is actually a little higher, as our current data systems are not able to exclude women who have had a hysterectomy and no longer need to be screened. All active duty patients are screened according to guidelines; however, for our family members and other non-active duty beneficiaries, we can screen only those who present for care.

(b) Yes. HPV testing and vaccinations are available through all Navy MTFs.

(c) Navy Medicine is very proactive in providing patient education regarding cervical cancer through both patient/physician discussions and community public health outreach efforts via various media formats. The HPV vaccine is available for all beneficiaries in accordance with recommended guidelines.

QUESTION SUBMITTED BY SENATOR THAD COCHRAN

VA SHARING AGREEMENTS

Question. Admiral Robinson, the Department of Defense and the Department of Veterans Affairs are establishing joint ventures in hospitals that are co-located around the country, in hopes to achieve efficiencies with combined personnel and shared resources, thus eliminating duplication. Currently, as you know, the Navy and the VA are working on a joint venture in North Chicago, where the plan is to operate the facility with a single civilian staff under the VA, operating out of one combined facility.

The Air Force and the VA are also working toward a joint-venture between Keesler and Biloxi, but have adopted a different model than the North Chicago model. I understand the Air Force has stated that not every joint venture will be applicable to every location, and thus the Air Force is not inclined to follow the North Chicago model. One of these reasons might be due to the different mission focus between the two locales. For example, the North Chicago facility supports mostly non-deployable personnel (Navy recruits) and serves as a schoolhouse for medical trainees. In Keesler, many of the medical Airmen deploy in their respective Air Expeditionary Force rotations (AEF) and for humanitarian missions, as needed.

Admiral, what are your thoughts regarding the joint venture in North Chicago? In your opinion, is total consolidation between the Navy and the VA the best answer for meeting the Navy mission at Great Lakes?

Finally, do you believe this is the model of the future for other Navy-VA joint ventures? Or will the Navy look at other models of implementation, depending upon the mission at that location?

Answer. The total consolidation between the Navy and the VA in North Chicago will allow Navy Medicine to meet our mission in Great Lakes. The fully integrated joint venture in North Chicago is a model that has evolved over 10 years of expanding and developing extensive resource sharing between the two Departments.

Prior to plans for consolidation in North Chicago, the Navy was moving forward with programmed replacement ambulatory care center to replace the aging Navy hospital. Simultaneously, discussions were taking place within the VA to close their North Chicago facility and reassign the workload to both Milwaukee and Chicago

Veterans facility. A decision was made to explore a joint Federal solution to combine both the Navy-VA healthcare missions, which would provide a more cost effective solution to meet the healthcare needs of a wide array of active duty, veterans, and dependent beneficiary populations. This combined healthcare project is in its 10th year of evolving from planning to operational status with many of the integration challenges having been addressed such as the reconciliation process and the IT solutions for interoperability.

The current demonstration project will commence October 1, 2010 and is expected to extend efficiencies gained through local consolidation and use of a single chain of command, as well as single systems for personnel, logistics, and financial management. The Department of Veterans Affairs, North Chicago will be the lead executive department. Following review of the financial and personnel systems, workload and patient satisfaction surveys, this fully integrated facility may become the model for future DOD and VA operations where appropriate. Navy Medicine, the Department of Defense and the Department of Veterans Affairs are already establishing joint ventures with the goal of eliminating duplication.

QUESTIONS SUBMITTED BY SENATOR ROBERT F. BENNETT

CHIROPRACTORS

Question. I'm pleased that TRICARE has worked over the past few years to expand chiropractic care for service members. Indeed, I have heard one of the top complaints of returning soldiers has been the type of neck and back pain that chiropractic care would seemingly address. Given the strains placed upon our soldiers in theater, what consideration (if any) has been given to commissioning chiropractors, such that they can be deployed and provide care for our soldiers abroad? Are there any obstacles currently in place that would prevent you from doing so?

Answer. Approximately 25 percent of entrants to the Navy Medical Corps currently have the Doctor of Osteopathy degree. The manipulation skill set is available in this group of physicians who are widely deployed in support of theater operations. More importantly, these physicians along with orthopedic surgeons and sports medicine physicians are more versatile in their use in theater and at home.

Additionally, physical therapists, now doctorally prepared, also have the skill set necessary to address neck and back pain as well as the full spectrum of other musculoskeletal complaints widely experienced by deploying service members. Physical therapists are deploying with service members, and there is a desire to expand this availability.

The Navy Medical Department prefers to use full spectrum physicians and physical therapists rather than limited spectrum providers to meet the needs of its beneficiaries.

CHIROPRACTORS AT MTFS

Question. In fiscal year 2009, Congress required that 11 new Military Treatment Facilities be staffed with chiropractors by the end of last fiscal year. I have listed the specific locations of those positions that were announced below. To my knowledge only 4 have opened up—what is the status of each of those 11 new positions?

Air Force

1st Special Operations Medical Group, Hurlburt Field, Florida.

Army

Irwin Army Community Hospital, Fort Riley, Kansas.
Lyster Army Health Clinic, Fort Rucker, Alabama.
Bayne-Jones Army Community Hospital, Fort Polk, Louisiana.
Bassett Army Community Hospital, Fort Wainwright, Alaska.
Landstuhl Regional Medical Center, Germany.
Grafenwoehr Army Health Clinic, Germany.

Navy

Naval Health Clinic Quantico, Virginia.
Naval Branch Health Clinic Groton, Connecticut.
Naval Hospital Lemoore, California.
U.S. Naval Hospital, Okinawa, Japan.

Answer. Navy Medicine currently has contract chiropractors at NHC Quantico, NBHC Groton, and NH Lemoore. NH Okinawa presently does not have a chiropractor. Additionally Navy Medicine has contract chiropractors at NH 29 Palms, NH Beaufort, NH Bremerton, NH Camp Lejeune, NH Camp Pendleton, NH Pensacola,

NHC Cherry Point, NHC Great Lakes, NHC Hawaii, NMC Portsmouth, NMC San Diego and NNMC Bethesda.

QUESTIONS SUBMITTED TO LIEUTENANT GENERAL ERIC B. SCHOOMAKER

QUESTIONS SUBMITTED BY SENATOR BYRON L. DORGAN

Question. My staff has made repeated requests for this report. In response I have received a letter acknowledging my request, and repeated assurances that the review is in process.

Does the Department of Defense intend to complete a review of TRICARE standards for residential treatment centers, including the 24 hour nursing requirement? When will the report be complete?

Answer. Yes, the review has been completed and TRICARE is working to modify certain requirements related to the certification of residential treatment centers, including those setting standards for overnight medical care in such settings. However, to fulfill the requirements of the report, the Department must change our regulation on standards. The timeline for the report is predicated on how soon the regulation can be changed. As soon as the report is completed, it will be sent to all the appropriate Committees.

Question. On March 17, 2009, the Federal Register published a final rule on the inclusion of the TRICARE retail pharmacy program as part of the DOD for the purpose of the procurement of pharmaceuticals by Federal agencies. This program requires pharmaceutical manufacturers to provide, at minimum, a 24 percent discount on prescription drugs. The final rule estimated the resulting savings to the Department of Defense would be over $12 billion in fiscal years 2010–2015.

Is DOD on track to obtain the estimated savings? Are all drug manufacturers complying with the requirements? If not, what steps are being undertaken to ensure that the Federal pricing is obtained?

Answer. Yes, the Department is on track to obtain savings on prescription drugs. However, the initial Independent Government Cost Estimate (IGCE) done in 2008, relied on 2007 data from Pharmacy Data Transaction Service. The IGCE also based several significant assumptions on data published by CBO that was from 2002 and 2003, a period which experienced higher inflation and price changes than what was seen in 2006 and going forward. Therefore, the IGCE based on these assumptions and data available at that time and calculated a initial savings rate of 35 percent. This calculation of 35 percent was proved incorrect due to the inaccurate data used.

In order to have an accurate calculation of the savings, in February 2010, the Pharmacy Operations Directorate (POD) provided information to OMB Budget Officials concerning differences between the projected savings of the Federal Ceiling Price (FCP) program and our recalculations of projected savings based on actual refund data to date. The corrected calculations, provided by the POD in February 2010 using actual data, yielded a rate of 28 percent. It is anticipated that our FCP refund estimates will continue to be refined as we have more experience with the program, receive additional quarters worth of refunds, and develop more precise methodologies for determining future refunds. As of August 27, 2010, fiscal year 2010 total collections (DHP/Non-DOD/MERHCF) for pharmacy rebates were $664 million.

Yes, almost all manufacturers have opted in for all of their drugs for purposes of preserving preferred uniform formulary status and no manufacturer has opted out of the program. If that were to occur, the most likely outcome would be to switch to another drug in the drug class. In the unlikely event that this would not be medically sufficient, DOD could use the preauthorization, transition, and waiver/compromise processes under the Final Rule to ensure that patient needs are met.

QUESTIONS SUBMITTED TO LIEUTENANT GENERAL CHARLES B. GREEN

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

COMMUNITY BASED PRIMARY CARE CLINICS

Question. General Green, over the years the Air Force has transformed its medical care more toward clinic based rather than large military treatment facilities. Are there lessons learned from your experience providing care in a clinic setting that the Army would find beneficial as they plan to open 22 Community Based Primary Care Clinics?

Answer. A solid business plan is required to ensure long term viability of the clinic. Enrollment based clinics drive different practice than a fee for service clinic that requires many procedures to cover the operating costs. Most medical care is provided in the outpatient arena, which meets the majority of our beneficiaries' needs. We have learned the importance, particularly in free-standing outpatient clinics, of providing patients a Medical Home with good access to their provider, continuity of care and a relationship with a Family Health Team. Family Health providers require specialty care resources to complete the spectrum of healthcare delivered for patients with disease and injury. Specialty consultation can sometimes result in fractionated care, particularly when it requires referral outside the medical treatment facility. The central tenet of the Air Force Medical Service's Medical Home is a focus on referral management, disease management, and a team approach to healthcare to ensure coordinated care that anticipates each patient's needs over time. We are also working to expedite the flow of relevant research information from the medical journals to our providers' desktops to improve medical management.

Another important effort is that the Air Force has hired 32 full-time behavioral health providers to embed in our primary care clinics to facilitate mental health treatment in the primary care setting. Research shows that over 70 percent of physical complaints have a psychological component and the vast majority of psychotropics are prescribed in primary care. Via this program, mental health providers are embedded in Primary Cares to provide consultation and brief intervention to our beneficiaries, who often do not seek or follow through with specialty care. This program streamlines the process for beneficiaries, providing brief mental health intervention when and where needed.

HEARING CENTER OF EXCELLENCE

Question. General Green, I am very interested in the growing number of medically focused centers of excellence in the military and how the Department intends to ensure the appropriate level of attention and allocation of resources are devoted to the issues we are faced with today and also those we might encounter in the future. The current centers are focused around known critical areas of concern that impact both the Department of Defense and the Department of Veterans Affairs: hearing loss, vision, extremity injury, traumatic brain injury and psychological health. Since the Air Force will likely be the executive agent for the Hearing Center of Excellence, can you detail the role you believe the Air Force should play in developing the operational and research requirements as well as resourcing the Center to meet those needs?

Answer. The establishment of a Hearing Center of Excellence is well underway. The Hearing Center of Excellence is positioned to roll out the necessary programs to connect, coordinate and focus the Department of Defense (DOD) and Veterans Affairs (VA) tracking, clinical care and research efforts for each injured military member and our expanding population of auditory disabled veterans.

In October 2009, the Air Force was designated as the lead component and is standing up the Hearing Center of Excellence in partnership with the VA, Navy, and Army. The Executive hub will be located in San Antonio at Wilford Hall Medical Center within the 59th Medical Wing.

The Hearing Center of Excellence office will be comprised of a lean cadre of staff working as an administrative hub leveraging technology to create and sustain a network of regional treatment facilities. This network will provide coordinated research and treatment. The Center staff will include a cadre of otolaryngology, speech and audiology professionals from within DOD, VA, and civilian settings. Wilford Hall Medical Center is an ideal site for the Hearing Center of Excellence hub. With ten Air Force, and five Army otolaryngologists and nine audiologists, Wilford Hall is the most robust clinical otolaryngology and audiology department in the DOD and VA systems.

Wilford Hall is integrated with Brooke Army Medical Center in Graduate Medical Education in otolaryngology and audiology. The Wilford Hall/Brooke Army Medical Center partnership provides support for the Audie Murphy and Central Texas VA hospitals, and provides didactic and surgical training support for the University of Texas at San Antonio Medical School. This local support underpinning the Hearing Center of Excellence hub will ensure success as links with regional DOD and VA facilities are developed. The BRAC-directed coalescence to the San Antonio Military Medical Center construct will provide convenient, top-quality platforms that are critical for focused clinical and research activities.

The Wilford Hall otolaryngology department has a strong legacy and understanding of deployment medicine supporting special operations, aeromedical evacuation, and humanitarian roles and is keenly aware of the ongoing dichotomy faced

by our troops between hearing protection and the essential need for optimal situational awareness and communication. Wilford Hall audiology has a solid deployment and research foundation and a working relationship with the Army medical facilities, the VA system, and the Institute for Surgical Research. They have established collaborative teaching and research ties with the Navy, acclaimed universities, and national and international industry leaders. The San Antonio military medical community supports Fort Hood, the Army's largest armored post, the Center for the Intrepid, all Air Force entry-level enlisted training and the new Medical Education and Training Campus on Fort Sam Houston.

Since the designation of the Air Force as lead component for the Hearing Center of Excellence, the Interim Director has worked with the tri-service/VA working group to draft the concept of operations and to direct and define the functional needs for the hearing loss and auditory injury registry. The lead component structure is supporting cross-talk between the DOD Centers of Excellence and will lead to well coordinated efficiency of operations by sharing many functions.

WILFORD HALL CLOSURE

Question. General Green, you are dealing with the closure of Wilford Hall in San Antonio, Texas resulting in a combined medical facility with the Army. Please detail for the subcommittee how each Service is integrating and coordinating the various approaches to military medicine and serving their unique populations?

Answer. The Base Realignment and Closure (BRAC) 2005 Law, Business Plan 172, states that we are to "realign [not close] Lackland Air Force Base, Texas, by relocating the inpatient medical function of the 59th Medical Wing to the Brooke Army Medical Center, Fort Sam Houston, establishing it as the San Antonio Military Medical Center and converting Wilford Hall Medical Center to an Ambulatory Care Clinic." With your support, we are on track to meet the BRAC deadline to transition all inpatient care to the Brooke Army Medical Center and establish a combined San Antonio Military Medical Center. The 59th Medical Wing's Ambulatory Care Clinic is also a critical component of this integrated military health system in San Antonio. To ensure we appropriately realign and integrate clinical operations, the Military Health System is modernizing these key facilities. The result will be the efficient and effective provision of world-class military medicine within the greater San Antonio area.

We are capitalizing on prior collaboration and expanding new agreements. To ensure integration manner we are mixing resources at the market level to provide best value military healthcare for San Antonio. Examples are integration of graduate medical education under the San Antonio Uniformed Services Healthcare Education Consortium; fully integrated department leaders; collaborative basic and clinical biomedical research; and a San Antonio Healthcare Advisory Group to facilitate privileging, clinical business operations, healthcare management, and strategic planning. Efforts are ongoing with regard to governance structure, but our vision is a Service lead of the joint hospital and the joint ambulatory surgery facility, each staffed by both Army and Air Force personnel, similar to the Landstuhl Regional Medical Center model.

The Army and the Air Force have worked diligently to integrate operations and improve military medicine delivery, while meeting the needs of each Service's beneficiary population and sustaining the readiness skills and focus of the military's medical force.

HEALTH PROFESSIONS SCHOLARSHIP PROGRAM

Question. General Green, the Health Professions Scholarship Program is one of the best mechanisms to recruit medical personnel into the Services. This program provides 4 years of tuition, books, and a monthly stipend, yet only 25 percent of all graduates of this program stay in the Service after the initial 4 year commitment. After spending hundreds of thousands of dollars training these medical professionals, how can we do a better job of retaining them in either the Active component or in the Reserves?

Answer. Retaining healthcare professionals beyond completion of their initial Health Professions Scholarship Program obligation is both multi-faceted and complex. Although the current economic climate may assist in some regards to some specialties, data from "exit surveys" consistently indicates that the prolonged war efforts in Afghanistan and Iraq and the associated requirement for more frequent and/or extended deployments plays a significant role in influencing whether a service member will remain in uniform beyond his/her initial service commitment. We continue to seek mechanisms to create more pay equity with private sector salaries. New authorities for special pays are helping.

To assist in retention of personnel, we also perform active mentorship with the Developmental Team of each Corps. Considering the member's professional experience, clinical expertise, and preferences for education/training and future assignments, the Corps leadership is able to evaluate their potential as leaders and clinicians and to guide them to future success as a valued Air Force officer and skilled member of the medical team.

NURSE CORPS PROMOTIONS

Question. LTG Green, what are the potential adverse effects of the Nurse Corps Chief's non-sequential promotion from O–6 to O–8? What actions have been considered to mitigate these effects on the Chief of the Nurse Corps? Has any consideration been given to the possibility of allocating an O–7 billet to the Nurse Corps to ensure that the Corps Chief is afforded the opportunity to properly transition to the rank of Major General?

Answer. Force developing our colonels and considering only those colonels with 26–29 years of service provides a more seasoned senior officer and decreases the potential for transition challenges. However, we would certainly welcome the opportunity for another pinnacle position for Nurse Corps force development and transition to the second star.

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

RECRUITMENT OF MENTAL HEALTH PROFESSIONALS

Question. DOD has a critical shortage of mental healthcare professionals. During review of the Fort Hood incident where the alleged gunman, Major Hasad, U.S. Army psychologist, is charged with the deaths of 13 victims, reports show discrepancies in documentation and counseling as it related to his professional abilities and behavior. Suggestions were made that he was kept on active duty with no negative reprimands because he had diversity as a Muslim to our nation's service despite his failure to perform.

What is DOD doing to recruit more mental health workers and to ensure they are quality healthcare professionals? What are the roadblocks to meeting the shortage of mental health professional?

Answer. We are currently assessing new and emerging mental health requirements and determining the best mix and number of mental health providers required to meet future needs. As recruiting fully qualified psychologists, psychiatrists and mental health nurses remains challenging, the Air Force has focused on developing our own pool of mental health professionals. In addition to highly regarded social worker, psychology and psychiatry residencies, we are proposing to establish a mental health nurse training program at Travis Air Force Base, California. Additionally, the Air Force has consolidated our special pay programs to optimize accession and retention incentives.

Question. What is being done to reduce the stigma and provide enough care givers so Airmen and their families do not suffer in silence?

Answer. The effort to reduce stigma has been part of the suicide prevention program since the program's inception in 1997. We have shown, and spread the word, that 95 percent of patients self-referring to mental health treatment experience no adverse impact on career or military status such as occupational restrictions or discharge actions based on fitness for duty or security concerns. The numbers of mental health visits have increased steadily over the last 5 years, suggesting a greater willingness for individuals to seek care.

In addition, the Air Force has leveraged several resources for non-medical counseling in order to decrease stigma and ease an Airman's access into less formal counseling settings. Examples include:

—Airman and Family Readiness Centers across the Air Force use Military Family Life Counselors, who can see individuals or couples with "mild" problems without the need to document or come in to a clinic.

—TRICARE Assistance Program is a pilot project of online counseling available to adult family members and Airmen.

—Military OneSource counselors are available for non-medical counseling by self-referral through a toll-free number, also without medical documentation.

—In a growing number of Air Force Medical Treatment Facilities, mental health providers are available in primary care to see patients who may not otherwise seek mental healthcare or for those with minor problems such as sleep difficulties which may not require formal mental healthcare.

Question. How is Air Force medicine integrated into the suicide prevention programs to ensure mental health services are getting to those who need it before it's too late?

Answer. The Air Force Suicide Prevention Program Manager falls under the Surgeon General's office ensuring full engagement of the medical resources in preventing suicide within the service.

The Air Force has integrated behavioral health providers within our primary care clinics, allowing our members to access initial mental health services without a separate appointment in a mental health clinic. For many Airmen these initial behavioral health interventions within primary care may be sufficient to address their needs. For others who may require more sustained treatment, initial contacts within primary care serve to ease their concerns and facilitate the transition to traditional mental healthcare.

When a suicide does occur, medical providers review all care provided to the individual to look for potential improvements in the Air Force medical system that may prevent similar incidents in the future.

Within our primary care system our Airmen complete annual personal health assessments, in addition to health assessments triggered by deployments. The assessments provide an opportunity for our medical providers to identify possible mental health concerns and risk for suicide and refer to mental health services as necessary.

CERVICAL CANCER

Question. Cervical Cancer is preventable. In 2009 over 11,000 American women were expected to be diagnosed with cervical cancer and over 4,000 women were expected to die from the disease. More than one-half of women who die from cervical cancer have never been screened or have not been screened in the past 5 years.

Human Papillomavirus (HPV) testing is an approved and widely accepted test to search for cells that have the potential of turning cancerous. Research has proven that when performed together with cytology screening, it increases detection of abnormal cell changes by 30 percent. National medical organizations and insurance companies have determined screening of HPV testing and cytology screening at the same time as the standard of care, however TRICARE has deemed HPV testing authorized only after a negative cytology exam.

What is Air Force medicine doing to ensure its female patients are receiving the highest quality of cervical cancer screening available?

What is the percentage of female patients who receive current standards of screening within the required timeframes?

Are HPV tests available at all Air Force military treatment facilities?

What is Air Force medicine doing to increase prevention efforts of their female patients from developing cervical cancer?

Answers: Just to clarify TRICARE does cover the assessment of women with Atypical Squamous Cells of Undetermined Significance cells detected upon initial pap smear (Source: "Tricare Policy Manual Pathology and Laboratory Chapter 6 Section 1.1. E. Human Papillomavirus testing" (CPT1 procedure codes 87620–87622)). TRICARE states that human papillomavirus (HPV) testing is authorized after a positive cytology exam.

As of December 2009, 81.99 percent of women 24–64 years old (continuously enrolled in a military treatment facility (MTF)) have completed cervical cancer screening in accordance with Healthcare Effectiveness Data and Information Set methodology and the minimum screening recommendations from the American Academy of Family Physicians and the U.S. Preventive Services Task Force. The National Committee for Quality Assurance median score is 82 percent. The U.S. Preventive Services Task Force (USPSTF) concludes that the evidence is insufficient to recommend for or against the routine use of HPV testing as a primary screening test for cervical cancer. Rationale: The USPSTF found poor evidence to determine the benefits and potential harms of HPV screening as an adjunct or alternative to regular pap smear screening. Trials are underway that should soon clarify the role of HPV testing in cervical cancer screening.

Cervical cancer screening is available at all Air Force medical treatment facilities and all Air Force medical facilities send specimens to Wilford Hall for routine screening. HPV testing capabilities includes Reflex HPV testing for specimens showing atypical cells, i.e., "ASCUS PAP," and direct HPV testing of specimens when ordered by a provider.

The Air Force Medical Service utilizes a multi-pronged approach for cervical cancer prevention. HPV vaccination is available to all eligible patients according to Food and Drug Administration guidelines. Health risk assessments (Web HA) are

completed as part of the Preventive Health Assessment for Active Duty personnel. The tool identifies individuals at potential risk for sexually transmitted infections (e.g., HPV) and provides risk-reduction messaging "alerts" to patients and healthcare teams. Education and questionnaires on risk factors are addressed during routine clinical visits for all patients. Cervical cancer screening is a focus metric of Air Force Surgeon General Executive Global Look. Cervical cancer screening surveillance/outreach is provided with use of the Military Health System Population Health Portal and provides MTFs provider level reports for cervical cancer screening rates and women overdue. MTFs are able to use this data to encourage patients to remain current on screening guidelines. Cervical cancer screening with availability of HPV testing is available at all MTFs.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

MENTAL HEALTH AWARENESS

Question. The Army has partnered with the National Institutes of Mental Health (NIMH) to conduct long-term study of risk and protective factors to inform health promotion and suicide prevention efforts in late 2008.

What is the Air Force doing to promote mental health awareness?

Answer. The Air Force has implemented wide-ranging efforts to promote mental health awareness and decrease stigma in our service. Many of these efforts have roots in our suicide prevention program, which was launched in 1996. At this time, we marshaled the capabilities of all our helping agencies, mental health, family advocacy, chaplains, family support centers and others within what we called an Integrated Delivery System (IDS). The goal continues to be to provide comprehensive efforts at the base level to meet the needs of our communities. Our suicide prevention program created a way for these IDS members to get into our units and talk about issues that stress the force. By bringing these discussions to the units and focusing community efforts in reducing stressors we enhanced awareness of these issues. We integrated suicide prevention within our professional military education to help leaders understand the mental health factors that may contribute and leaders' roles in addressing these. We have continued to build on these efforts with our personal health assessments, which regularly ask our Airmen about potential mental health needs, and we review responses that indicate risk and make appropriate referrals for care as necessary.

The Air Force has published a Leaders' Guide for Managing Personnel in Distress, which provides straightforward guidance to supervisors and other leaders how to assist their subordinates in accessing the appropriate services. This tool helps leaders see their role in helping to manage the personal needs of their subordinates, and to discuss these issues in a productive manner.

We have also developed specific programs for Airmen throughout their careers. The Air Force Landing Gear Program was designed to help Airmen cope with the stressors of deployment and redeployment. This program, which is currently being revised to encompass enhancing resilience for all our Airmen, has been complemented by the creation of Deployment Transition Programs to facilitate the smooth reintegration of our Airmen who have experienced the most stressful deployment experiences. Air Force leadership continues to explore new ways to ensure our Airmen understand that their mental health is as vital to the success of our mission as their physical health.

Question. Is the Air Force conducting long-term studies similar to that of the Army and NIMH?

Answer. The Air Force has been conducting research on suicide prevention for many years. When the Air Force initiated its comprehensive suicide prevention program in 1996, we partnered with the University of Rochester and Dr. Kerry Knox to carry out research on the effectiveness of these efforts. The first findings of this project were published in the British Medical Journal in 2003 and showed the effectiveness of our suicide prevention initiatives. The results demonstrated that our broad community-based efforts were not only associated with a 33 percent decrease in suicides, but also with decreases in a wide range of other problematic behaviors such as domestic violence, accidental death and homicide. This research led to the AF program being included in the Substance Abuse and Mental Health Services Administration's list of the only 10 Evidence Based Practices for the prevention of suicide.

The Air Force suicide prevention program has continued this partnership with Dr. Knox, who has another study in press that will show continued compliance with the

Air Force suicide prevention program, is associated with continued lower rates of suicide.

The Air Force Suicide Prevention Program is also engaged in a number of other studies with researchers at the Uniformed Services University of the Health Sciences to examine case data on past suicides, including data collected through our Suicide Event Surveillance System, and the Department of Defense Suicide Event Report and Personal Health Assessment data to look for factors that may allow us to better identify those at risk for suicide. Recent efforts in this area have allowed us to identify career fields that appear to be at greater risk for suicide, allowing leadership to target additional prevention efforts at these groups.

The Air Force has also been collecting data on new recruits entering the Air Force regarding their past behavioral history. This appears to show promise in allowing us to identify, from a recruit's earliest days in the Air Force, those Airmen who may be at higher risk for a variety of problems. The Air Force is now exploring ways to reach out to these Airmen to improve their ability to cope with the rigors of military life.

Finally, the Air Force is in discussion with the Army and National Institutes of Mental Health to see how the Air Force may be able participate in this important study as it moves forward.

FAMILY READINESS AND SUPPORT

Question. Family Readiness and support is crucial for the health of the Services. The health, mental health, and welfare of military families, especially the children, has been a concern on mine for many years. This also includes education, living conditions, and available healthcare.

Are you meeting the increased demand for healthcare and mental health professionals to support these families? If not, where are the shortfalls?

Answer. The Air Force has had an increase in utilization of mental health services over the past 5 years both at the military treatment facilities and through the TRICARE network. In response to this growing use of mental health services, Military and Family Life Consultants were added at the Airmen and Family Readiness Centers to provide additional non-medical counseling resources for Airmen and their families to address issues such as stress management and relationship issues. In addition, the Air Force added 97 clinical mental health billets to perform clinical duties under the Director of Psychological Health. The Air Force also has hired 32 full time Behavioral Health providers to embed in primary care clinics to facilitate mental health treatment in the primary care setting.

Question. What improvements have been made with respect to the children of Airmen and meeting their special requirements?

Answer. In fiscal year 2009, 1,926 Air Force families received Family Advocacy Strength-Based Therapy Service (FAST Service). FAST is a family maltreatment prevention service for families who do not have a maltreatment incident but have risk factors for domestic/child maltreatment. Also, the New Parent Support Program (NPSP) services focus on providing education and support to military families related to pregnancy, infant/toddler care, growth and development, and safety. Guidance in the areas of parenting, couple communication and conflict management are provided. Emphasis is placed on assisting families with young children to deal with military lifestyle challenges, with particular emphasis on support before, during and after deployment. The Air Force NPSP screened 13,766 military families for risk of child and/or partner maltreatment in fiscal year 2009. During fiscal year 2008, 13,561 families were screened. During 2009, 18,608 home visits by Registered Nurses and Medical Social Workers were provided to NPSP families, an increase from the 17,470 home visits provided during fiscal year 2008. Services are provided with the goal of preventing child and partner maltreatment. In 2009, 97 percent of families who were at high risk for family maltreatment and received home visitation services did not have a substantiated child maltreatment case in the year following closure.

The Air Force Medical Operations Agency is in the process of standing up a cell to coordinate medical support to families with special needs across the Air Force. The Special Needs Cell will track families with special needs and focus on their medical support during permanent change of station moves.

Question. What programs have you implemented to assist the children with coping with frequent deployments, re-integration, and other stresses of military families?

Answer. Air Force Family Readiness Centers provide assistance to families before, during and after deployments. The programs include advice for parents on talking to their children about deployment and anticipating the concerns of children during deployment. The centers also provide video communication with deployed family

members and other support services. The three Services have established the Uniformed Services Chapter of the American Academy of Pediatrics (AAP). Their website contains an entire section devoted to support of military families. The AAP Military Youth Deployment Support Website has been designed to support military youth, families, and the youth-serving professionals caring for this population (http://www.aap.org/sections/uniformedservices/deployment/index.html). Videos, patient handouts, provider information, blogging website and many more resources are devoted to this area. There are many additional websites and services helpful to military families. A short list is provided below.

Resources for Parents include the following Web Sites: Military OneSource, National Military Family Association, Military Homefront, Military Child Education Coalition, Zero to Three Organization, Hooh4Health, USA4militaryfamilies.org, and Stompproject.org.

WOUNDED WARRIOR CARE

Question. In the recently released Department of Defense budget guidance, it states that "caring for our wounded warriors is our highest priority: through improving health benefits, establishing centers of excellence, and wounded warrior initiatives."

What systems do you have to ensure the transition of wounded warriors from Department of Defense to the Department of Veterans Affairs is completed without unnecessary problems?

Answer. The Air Force has created the Warrior and Survivor Care office which oversees the Air Force Survivor Assistance Program, the Air Force Recovery Coordination Program, and the Air Force Wounded Warrior program in order to maintain continual contact with the wounded, ill or injured Airman and his or her family throughout the entire recovery, rehabilitation, and reintegration process. Professional staff from these programs provides oversight during the member's transition to ensure the recovering service member receives all military and external agencies' benefits and entitlements. The Air Force Survivor Assistance Program (AFSAP) is designed to marshal all available resources in support of family needs when an Airman becomes seriously wounded, ill or injured, or when an Airman dies while on active duty.

At the same time, the AFSAP also provides a systematic structure through which offers of assistance, information and support are made available on the family's terms. The Recovery Coordination Program was designed to address reforms to existing processes within the Department of Defense and the Department of Veterans Affairs (VA). It improves the uniformity and effectiveness of care, management and transition across the Military Departments, as well as transfers to VA Medical Centers, Polytrauma Rehabilitation Centers and civilian providers, through the use of standardized policies, processes, personnel programs and tools.

The Air Force Wounded Warrior Program, through the base-level Airman and Family Readiness Centers, provide enhanced transition assistance services that include one-on-one pre-separation counseling, one-on-one VA benefits and Disabled Transition Assistance Program, and personal assistance in completing and submitting a VA disability claim. Approximately 70 percent of our Air Force Wounded Warrior Program participants suffer from post traumatic stress disorder or other mental health conditions. Many of them also have residual physical problems. We provide ongoing needs assessments pre and post separation to ensure they receive the benefits, entitlements and care they earned. An Information Sharing Initiative is being designed for the sole purpose of ensuring flawless transition and exchange of data between DOD entities and the VA. The DOD-mandated working group is in the early stages of requirements development, and will provide a significant improvement to the Air Forces tracking of wounded, ill, and injured service members. This will result in a refined and simplified transition with uninterrupted medical and non-medical care and support to our Airmen and their families.

Question. What do you consider a successful transition and do you follow-up with the Service members to ensure there are no problems even after they have been released from Active Duty?

Answer. We consider a successful transition when several factors converge to stabilize the wounded, ill or injured Airman and his or her family. This includes continuum of medical care for the member, with no interruptions in care, including continuation of medication; stabilization of family finances, to include receipt of Department of Veterans Affairs disability compensation, military retired pay if retired, or accurate severance pay, if separated. Awareness of benefits and entitlements, and timely and accurate receipt of those benefits plays a big role in the psychological health and perception of the member and his or her family.

Transition is also considered successful when the member and family receive and act on the information provided to meet their personal goals, whether it is to continue working or pursue higher education. We believe that the most successful transitions start at the beginning of the Medical Evaluation Board process and continue through the transition process. The key factor is to keep the member and family informed of what to expect and to normalize their experiences as much as possible. Family integration into the transition process is an important ingredient for a successful transition.

The Air Force Wounded Warrior Program staff is in continual contact with Airmen and their families during the entire process. During the transition process, the wounded warrior counselors coordinate all transition actions between the Air Force and the Department of Veterans Affairs, including disability compensation. Ongoing contacts with the member and family provide the counselors with needs reassessments to ensure all benefits and entitlements are on track even after discharge.

RESERVE COMPONENTS

Question. The Reserves and particularly the National Guard have unique concerns while deployed. It would seem as though there are no near term plans to discontinue the use of our Reserve Component in Iraq and Afghanistan.

How are you determining budget requirements to accommodate the Reserve Component as they need Department of Defense healthcare well into the future?

Answer. Medical care for deployed personnel, to include Reserve Component members, is a joint effort, and the Total Force receives the full spectrum of care to ensure members remain healthy and resilient. As a part of the Joint Team, the Air Force contributes comprehensive medical capabilities at both home station and in the deployed environment. Defense Health Program budget requirements for the Air Force Medical Service are coordinated with and resourced by the TRICARE Management Activity. Key drivers for resourcing include population projections and expected workload. Healthcare workload attributed to Reserve Component members and dependents is accounted for by the Air Force Medical Service. In addition, the fiscal year 2010 President's budget and fiscal year 2011 President's budget requests provided additional resources for wounded, ill, and injured and other enduring healthcare requirements resulting from Overseas Contingency Operations.

MENTAL HEALTH CARE

Question. General Casey recently stated the number of Army soldiers who feel there is a stigma for seeking mental healthcare has been reduced from 80 to 50 percent. This is a significant improvement, but there is more work to be done.

Despite the reduced number of those who feel there is a stigma, are more service members coming forward to seek treatment?

Answer. The Air Force believes that we have seen some success in efforts to decrease the stigma of seeking mental health services. Despite a slight decrease in the strength of our force since 2003 the Air Force has seen a steady increase in the utilization of our of uniformed mental health services. Since 2003 the number of active duty visits to our mental health clinics has increased from 226,000 visits to over 300,000 visits annually. While some of these visits may be associated with screenings for activities such as deployments and security or special duty clearances, the overall trend indicates a greater willingness in our Airmen to seek mental healthcare within our system.

Question. What actions are the Services taking to continue to reduce the stigma and encourage Service members to seek treatment?

Answer. Major steps the Air Force has taken include:

Actively working to decrease stigma through statements from senior leaders encouraging all Airmen to seek help when needed and through efforts to counter myths related to mental health treatment within the Air Force. As part of the annual suicide prevention training, Airmen are presented with data showing that the vast majority of those who self-refer to mental health experience no adverse outcome and their confidentiality is maintained. This is presented to encourage Airmen to seek help early before stress or mental health problems increase to the point that a command directed referral maybe necessary.

Conducting an annual "Wingman Day" at each base. These activities focus on the role all Airmen play in being a Wingman, that is, caring for their fellow Airmen. Wingman day is an opportunity to review the importance of teamwork and helping fellow Airmen perform their best. This includes helping Airmen realize when they may need help and facilitating access to that care.

Integrating behavioral health providers within our primary care clinics, allowing our members to access initial mental health services without a separate appoint-

ment in a mental health clinic. For many Airmen, these initial behavioral health interventions within primary care may be sufficient to address their needs. For others who may require more sustained treatment, initial contacts within primary care serve to ease their concerns and facilitate the transition to traditional mental healthcare.

Publishing a Leaders' Guide for Managing Personnel in Distress provides straightforward guidance to supervisors and other leaders on how to assist their subordinates in accessing the appropriate services.

Establishing Directors of Psychological Health at each base to serve as a consultant to leaders at the base level in addressing the mental health needs present in the community.

Establishing policy to provide greater confidentiality to those Airmen under investigation who are also at risk for suicide. This limited privilege suicide prevention program ensures Airmen under investigation and deemed to be at risk for suicide are protected from information shared in the context of their mental health treatment being used against them in court or in the characterization of discharge.

Question. Does your plan include the mental health of families, and if so what is that plan?

Answer. The mental health of families is of significant concern to the Air Force as family support is essential for effective functioning of our service members. In response to this need for family services, the Air Force added Military and Family Life Consultants at the Airmen and Family Readiness Centers to provide additional non-medical counseling resources for Airmen and their families to address issues such as stress management and relationship issues.

In addition, the Air Force added 97 clinical mental health billets to perform clinical duties under the Director of Psychological Health allowing increased access to care services at the military treatment facilities. The Air Force has also hired 32 full-time behavioral health providers to embed in primary care clinics to facilitate mental health treatment in the primary care setting. In addition to traditional mental health clinic services, the Air Force Family Advocacy program offers Family Advocacy Strength-Based Therapy Service (FAST Service). FAST is a family maltreatment prevention service for families who do not have a maltreatment incident but have risk factors for domestic/child maltreatment. Also in Family Advocacy, the New Parent Support Program services focus on providing education and support to military families related to pregnancy, infant/toddler care, growth and development, and safety.

Guidance is provided in the areas of parenting, couple communication and conflict management. Emphasis is placed on assisting families with young children to deal with military life-style challenges, with particular emphasis on support before, during and after deployment. Military One Source and the Web-based TRICARE Assistance Program are also available for families to utilize for support.

QUESTION SUBMITTED BY SENATOR THAD COCHRAN

JOINT VENTURE KEESLER-BILOXI MEDICAL SYSTEM

Question. General Green, the Department of Defense and the Department of Veterans Affairs are establishing joint ventures in hospitals that are co-located around the country, in hopes to achieve efficiencies with combined personnel and shared resources, thus eliminating duplication. Currently, as you know, the Navy and the VA are working on a joint venture in North Chicago, where the plan is to operate the facility with a single civilian staff under the VA, operating out of one combined facility.

The Air Force and the VA are also working toward a joint-venture between Keesler and Biloxi, but have adopted a different model than the North Chicago model. I understand the Air Force has stated that not every joint venture will be applicable to every location, and thus the Air Force is not inclined to follow the North Chicago model. One of these reasons might be due to the different mission focus between the two locales. For example, the North Chicago facility supports mostly non-deployable personnel (Navy recruits) and serves as a schoolhouse for medical trainees. In Keesler, many of the medical Airmen deploy in their respective Air Expeditionary Force rotations (AEF) and for humanitarian missions, as needed.

General, can you please give your thoughts on the other reasons as to why the current model at Keesler-Biloxi has been so successful and why it is the best model for the Gulf Coast region? Also, are there other Air Force-VA joint venture locations where you think this model is more applicable to improve treatment efficiency and provide quality care?

Answer. The joint venture between the 81st Medical Group, Keesler AFB, Mississippi, and the Gulf Coast Veteran Affairs Health Care System, Biloxi, Mississippi, is relatively new and not yet complete, so assessing their successes at this time is difficult. However, despite the fact they are still in the process of integrating and moving some services, their centers of excellence model is already showing signs of success. Success for this joint venture, as well as any other joint venture model, is largely based on a willingness to work together to ensure the organization keeps the patient's needs as priority one. Communication and commitment to success is essential at all levels of the organization, especially with senior leadership. This commitment is very obvious at the Keesler/Biloxi joint venture as the leaders from both sites are very involved in the operation of the joint venture. Another key factor to success is a commitment to provide services for the other partner that they need for their patient population in the facility vice sending them out to the network—this is true for all partners in the joint venture. An excellent example is the Department of Veterans Affairs providing inpatient mental health services for Department of Defense beneficiaries, and Department of Defense providing women's health services for Department of Veterans Affairs' beneficiaries.

QUESTION SUBMITTED BY SENATOR ROBERT F. BENNETT

CHIROPRACTIC CARE

Question. I'm pleased that TRICARE has worked over the past few years to expand chiropractic care for service members. Indeed, I have heard one of the top complaints of returning soldiers has been the type of neck and back pain chiropractic care would seemingly address. Unfortunately, our servicemen and women from Utah (particularly Hill AFB) are not able to receive this beneficial service that they have been promised because of the lack of approved providers.

Shouldn't all soldiers have an opportunity to receive promised care? What alternatives for chiropractic care are available to airmen and soldiers, such as allowing them to receive private care, the cost of which would be reimbursed for those who are not within 50 miles of such a center, or are unable to be seen within 30 days?

Answer. The Chiropractic Health Care Program is available to Active Duty service members (including activated National Guard and Reserve members) at designated military treatment facilities (MTFs) throughout the United States. This program is currently offered at 60 designated MTFs throughout the United States. There is currently no expansion set for 2010. The Department of Defense considers this program fully implemented, however, if directed to expand by Congress, the Air Force would certainly consider places such as Hill AFB, Utah.

Alternatives to chiropractic care are non-chiropractic healthcare services in the Military Health System (e.g., physical therapy or orthopedics), referred care when care not available in a timely fashion at the MTF, or to seek chiropractic care in the local community at their own expense. Chiropractic care received outside of the designated locations is not covered under the Chiropractic Health Care Program. Major Air Force locations offering chiropractic care are listed below:

Andrews Air Force Base
Barksdale Air Force Base
Davis-Monthan Air Force Base
Eglin Air Force Base
Elmendorf Air Force Base
Hurlburt Field
Keesler Air Force Base
Kirtland Air Force Base
Lackland Air Force Base
Langley Air Force Base
Luke Air Force Base
MacDill Air Force Base
Maxwell Air Force Base
McGuire Air Force Base
Offutt Air Force Base
Scott Air Force Base
Tinker Air Force Base
Travis Air Force Base
U.S. Air Force Academy
Wright Patterson Air Force Base

QUESTIONS SUBMITTED TO REAR ADMIRAL KAREN FLAHERTY

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

BEHAVIORAL HEALTH PROVIDERS

Question. Admiral Flaherty, what innovative, multidisciplinary efforts has the Navy implemented to increase access to behavioral health providers?

Answer. Increasing access to care for Behavioral Health remains a top priority for Navy Medicine. Prior "innovations" that have now become the norm include oper-

ationally embedded mental health providers, integration of Mental Health Care into primary care, Psychological Health Outreach Coordinators and use of our Deployment Health Centers as destigmatizing portals of care. Current innovation efforts are focusing on the use of intensive, outpatient, multidisciplinary group sessions for the treatment of Post Traumatic Stress Disorder (PTSD) and combat related mental health issues. One example of this type of innovative program is the "Back on Track" program at Naval Hospital Camp Lejeune. This 2 week program is built on the foundation of our Operational Stress Control (OSC) curriculum and outcome measures from the program are demonstrating statistically significant decreases in depression symptoms. Another innovative program is the multidisciplinary team assessment of every patient that is medically evacuated from theater to identify potential cognitive and mental health issues. Access is increased in a non-stigmatizing manner by providing this assessment to all patients without need for consult or self-referral. Follow on care is provided as indicated utilizing all members of the multidisciplinary team.

DEPARTMENT-WIDE NURSE RESIDENCY PROGRAM

Question. Admiral Flaherty, I understand that the civilian nursing community has established nurse residency programs in order to better prepare new graduates and novice nurses to care for more complex patients. I am also aware that each military service has implemented similar nurse intern and transition programs. Has there been any consideration on the development of a Department wide Nurse Residency Program?

Answer. The Navy Nurse Corps has Nurse Intern Programs designed to mentor and train new graduates at our three largest medical centers (Naval Medical Center Portsmouth, Naval Medical Center San Diego, and the National Naval Medical Center) and at Naval Hospital Jacksonville. These programs are designed to orient recent graduate and registered nurses with limited clinical experience to the role of professional nursing. Training consists of classroom lectures, simulation lab, seminars, and hands on clinical experience. Classroom subject matter includes physical assessment, pathophysiology, diagnosis, nursing interventions, and general military training. Participants have direct patient care contact in the hospital setting. As medical treatment facilities within DOD merge, I think it is wise for the services to compare core curriculum and outcomes of their programs and blend best practice into a standardized program across the Department of Defense, while allowing for local leeway of program specifics based on individual needs of the local facility.

NAVY NURSE CHALLENGES AT FHCC

Question. Admiral Flaherty, what are the major challenges facing Navy nurses as we move to a joint medical facility with the VA in Chicago, Illinois and how are the two Departments coordinating efforts to eliminate them before this facility becomes operation in the fall of 2010?

Answer. The nursing leadership in both communities has held multiple joint meetings over the past 18 months to communicate information and ideas on issues surrounding the Veteran's Administration (VA)—Navy merge of the joint facility in Chicago, Illinois. Action items have focused on credentialing and privileging, the setting of nursing standards, and staff education and training. We are educating the VA about the skill set of Hospital Corpsman and have joined each other's Executive Committee of the Nursing Staff (ECONS), and are merging toward a joint committee. Last, we are merging the Plan for Provision of Nursing Care between the VA's plan while adding Navy specific components. We are excited about the future possibilities and look forward to sharing our success with others.

NAVY NURSE RECRUITING MECHANISMS

Question. Admiral Flaherty, what are some of the best mechanisms that the Navy has instituted for recruitment and retention that might be beneficial for all services?

Answer. Retaining Navy Nurses is one of my top priorities. Key efforts that have positively impacted retention include the Registered Nurse Incentive Specialty Pay (RN–ISP), a targeted bonus program for undermanned clinical nursing specialties and highly deployed Nurse Practitioners, graduate education programs through Duty Under Instruction (DUINS), and the Health Professions Loan Repayment Program (HPLRP) for baccalaureate nursing education, which assists nurses in reducing their student loan debt.

The Navy Nurse Corps includes both uniformed and civilian professionals. In recent years, we have implemented two very exciting programs to incentivize our civilian nurses to work and stay working as Navy Nurses. Civilian nurses are now allowed to attend the Perioperative Nurse Training Program which will train them

for a new career as Operating Room Nurses. We also introduced the Graduate Program for Federal Civilian Registered Nurses. This program provides opportunities for civilian nurses to obtain a graduate degree in nursing while receiving full pay and benefits of their permanent nursing position. Nurses selected for this program must have served at least 3 years in the Federal civilian service at a Navy Medicine activity prior to applying. While in graduate school they work a compressed work schedule while participating in full-time graduate education. We are confident that these two innovative programs will work to both recruit and incentivize civilian nurses to stay employed as Navy Nurses.

NAVY NURSE CORPS COLLABORATION WITH VA

Question. Admiral Flaherty, has the Navy Nurse Corps engaged in any collaborative nursing research efforts with the Veteran's Administration?

Answer. Yes, one of my Nurse Researchers, Captain Patricia Kelley, is the Principal Investigator on a study titled "Clinical Knowledge Development: Continuity of Care for War Injured Service Member." The purpose of this research study is to gather first person accounts of how nurses learn to care for wounded service members along with service members' memories of their care. This study will obtain interviews from over 250 nurses and 50 injured service members at military hospitals and Veterans Administration Medical Centers. From this study we hope to expand the nurse's understanding of care for the wounded warrior. I am pleased to report that this study was funded by the TriService Nursing Research Program (TSNRP).

QUESTION SUBMITTED BY SENATOR THAD COCHRAN

RESILIENCY IN THE FORCE

Question. Admiral Flaherty, the Navy is in the process of "rebalancing" the force to reduce battle fatigue from multiple deployments and give service members a chance to "reset" mentally and physically in a time of high operational tempo. Specific programs within the Navy include "FIT" for right-sizing the force and the Operational Stress Control Program.

These programs require a great deal of support from medical units within each respective Service. The concern is that while implementing these programs, the high demand, low density medical career fields will remain stressed and unable to reset, as well.

Admiral, can you please comment on if these programs have increased the demand on your nursing corps? Can you also comment on if these same programs are effective in helping medical personnel reset, also?

Answer. The Navy's Operational Stress Control (OSC) program and the United States Marine Corps Combat Operational Stress Control (COSC) programs are line-owned and line-led programs. They focus on leader's responsibilities for building resilient Sailors, Marines, units, and facilities, mitigating the stigma association with seeking psychological healthcare, and promote early recognition of troublesome stress reactions before they develop into stress injuries or illness. Navy Medicine, to include the Navy Nurse Corps, plays a supporting role. Both programs are built on the time-proven leadership continuum and have formal curriculum being delivered at various points throughout a Sailor's or Marine's career. Navy Fleet and Family Support Centers and Marine Corps Community Services are contributing heavily to the Family OSC/COSC modules.

Stress unique to our caregivers, such as compassion fatigue and burnout, requires a more dedicated approach. Navy Medicine has developed the Caregiver Occupational Stress Control (CgOSC) program with the core objectives of early recognition of caregivers in distress; breaking the code of silence related to occupational stress reactions and injuries, and engaging caregivers in early help as needed to maintain mission and personal readiness. The concept of "caregiver" in this context refers to medical personnel (from corpsmen to physicians), clinically and non-clinically trained chaplains, religious program specialists, and family service professionals working within Navy Medicine. The Navy OSC, COSC and CgOSC programs actually enhance Navy Nurses as clinical leaders by leveraging a common framework for recognizing and responding to operational and occupational stress injuries. The increased demand by these programs on the Navy Nurse Corps is negligible because of the foundation of patient and staff education that is a core competency for all Navy Nurses. Anecdotally, we have seen our mid-grade nurses and Hospital Corpsmen rapidly integrate the principles of stress first-aid into their cores skills in a way that enhances their ability to address patient, family, and peer psychological dis-

tress. Their increased competency and skill used when providing complex and challenging care contributes to compassion satisfaction which buffers the adverse effects of compassion, fatigue and burnout.

QUESTIONS SUBMITTED TO MAJOR GENERAL KIMBERLY SINISCALCHI

QUESTIONS SUBMITTED BY CHAIRMAN DANIEL K. INOUYE

0–7 AIR FORCE NURSE CORPS BILLET

Question. Major General Siniscalchi, how would the addition of a 0–7 billet benefit the Air Force Nurse Corps?

Answer. It would provide an additional force development opportunity for the Air Force Nurse Corps. However, all five Corps within the Air Force Medical Service have general officer billets for force development. An added star for the Nurse Corps should not be at the expense of another Corps.

NURSE RESILIENCY

Question. Major General Siniscalchi, as nurses continue to deploy in support of service members world-wide, what efforts has the Nurse Corps made to ensure that we are also caring for our caregivers and instilling resiliency in our nurses?

Answer. The Air Force has continued to monitor the well-being of all Airmen through multiple measures. Among these measures are our Post-Deployment Health Assessments (PDHAs) and Post-Deployment Health Reassessments (PDHRAs) administered following a deployment. Medical career groups (including nurses) are among the top three career groups for self-reported symptoms of post-traumatic stress on PDHA/PDHRA. Air Force leadership supported Lt. Gen. Green's plans to provide targeted, tiered Resiliency Training for higher-risk career groups including the formation of a Deployment Transition Center (DTC) in United States Air Forces in Europe. The DTC is a 2-day resiliency training and decompression stop on a deploying Airman's way home. Included in the 2-day training are JET Airmen and other medics who participate in "outside-the-wire" missions. In addition to the DTC, plans are underway for enhanced pre and post deployment resiliency training for these groups and targeted interventions for high risk groups, with enhanced small group or face to face training. Finally, medics at both Bagram and Balad have a high exposure rate to injury and death, and plans are to implement a resiliency program based on the mortuary affairs model at Dover Air Force Base, Delaware integrating physical, spiritual, social, and psychological resiliency across their deployment.

CIVILIAN NURSE TRANSITION PROGRAMS

Question. Major General Siniscalchi, I understand that the Air Force has established collaborative agreements with several civilian nurse transitions programs. Has any consideration been given to partnering with the Army or Navy Transition programs?

Answer. Consideration has been given; however, we have not "formally" partnered with the Army or Navy nurse residency/transition programs. We have chartered a working group to evaluate our Air Force Nurse Transition Program platform and compare and contrast our program with the Army, Navy and civilian nurse residencies/transition programs. We have an ongoing study to evaluate the performance and effectiveness of our Nurse Transition Programs and to identify potential opportunities for Tri-Service nurse training consolidation efforts.

JOINT MEDICAL POLICIES

Question. Major General Siniscalchi, as the military moves toward more joint medical treatment facilities among the tri-services and the Department of Veterans Affairs, do you see a future in merging Nurse Corps policies for governance, education, training, and the provision of nursing care?

Answer. At those locations that have tri-service and Department of Veterans Affairs nursing, there are opportunities to establish tri-service/Veterans Affairs nursing teams to collaborate efforts for governance, policy development, education and training and the plan for the provision of nursing care. It is, as always, important to note that patient care and advocating for the patient and their family remain a key nursing focus in whatever uniform or setting. There are many similarities in providing nursing care and the emphasis the Services place on the use of Professional Organization policies, education/training and nursing care guidance is a key

link to those similarities. Currently we have tri-service teams in Joint Task Force National Capital Region Medical which are working toward a collaborative approach in providing standardized orientation, education and training of our enlisted medics.

NURSE CORPS RETENTION

Question. Major General Siniscalchi, despite well known shortages in the nursing profession, I see that all three corps expects to meet or exceed their recruiting goals this year. How does the Air Force plan to retain these nurses for follow on tours as the economy improves?

Answer. For those nurses joining the Air Force due to the current economy, we are confident the reasons that made the Air Force an attractive option will also be the reasons they would continue to serve as the economy improves. Initial accessions for fiscal year 2010 consistently speak in positive terms about the benefits of funded graduate education opportunities, professional and collegial relationships within the healthcare team, retirement pension, and continuity for seniority with assignment moves, opportunity for travel and the Air Force as great way of life for their families and children. As we look at retention of our current Air Force nurses, the number of nurses leaving the Air Force in 2009 was the lowest since 2002. Additionally, of the nurses who separate from the Air Force, over one-half are separating to retire after reaching retirement eligibility. In 2009, 59 percent of the nurses who left active duty did so after serving at least 20 years in uniform. With special pay programs such as the Nurse Corps Incentive Special Pay started in fiscal year 2009 to recognize advanced clinical and educational preparation, we hope to see an added benefit of increased retention.

AIR FORCE NURSING RESEARCH INITIATIVES

Question. Major General Siniscalchi, what are some of the Air Force Nursing Research Initiatives that focus on the specific needs of combat veterans?

Answer. Areas of research conducted by the U.S. military in Afghanistan and Iraq have led to advancements in combat casualty medical care and therapies to include tourniquet application, combat gauze, life-saving interventions, en-route care, resuscitation, blood product administration, burns, wound care, post traumatic stress disorder, traumatic brain injury and infectious diseases.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

NURSE CORPS CONTRIBUTIONS

Question. Nurses significantly contribute to the healthcare of our Service members and their families. It is important that we maintain appropriate levels of highly trained nurses capable of performing a wide range of healthcare functions.

With the maintained high operations tempo of combat in Iraq and Afghanistan, and the increasing requirements for healthcare for the Service member and their families, are you able to maintain the required level of nurses?

Answer. Recruiting fully qualified nurses continues to be a challenge. Historical and current statistics tell us this will be an issue for years to come. In fiscal year 2009, we accessed 284 nurses against our total accession goal of 350 (81 percent), down 12 percent from what I reported the previous year. Currently, the recruiting of novice nurses has been successful. At present our recruitment of novice nurses is at 166 percent of our projected fiscal year 2010 goal. While the recruitment of novice nurses is going well, the limiting factor is their depth of clinical experience. Our Nurse Transition Program advances the clinical skills of these new nurses through direct patient care under the supervision of seasoned nurse preceptors.

Question. Are there enough nurses entering the military to ensure quality of care for the Service members and to maintain the legacy of superb leadership in the future?

Answer. Recruiting fully qualified nurses continues to be a challenge. Historical and current statistics tell us this will be an issue for years to come. In fiscal year 2009, we accessed 284 nurses against our total accession goal of 350 (81 percent), down 12 percent from what I reported the previous year. Currently, the recruiting of novice nurses has been successful. At present our recruitment of novice nurses is at 166 percent of our projected fiscal year 2010 goal. While the recruitment of novice nurses is going well, the limiting factor is their depth of clinical experience. Our Nurse Transition Program advances the clinical skills of these new nurses through direct patient care under the supervision of seasoned nurse preceptors.

Question. What are you doing to prepare nurses for senior leadership roles and responsibilities?

Answer. We grow our future leaders through professional military education, encouraging certification in clinical specialties, advanced academic preparation and deliberate force development.

QUESTION SUBMITTED BY SENATOR THAD COCHRAN

RESILIENCY OF THE FORCE

Question. General Siniscalchi, the Air Force continues to "rebalance" the force to reduce battle fatigue from multiple deployments and give service members a chance to "reset" mentally and physically in a time of high operational tempo.

The Air Force continues to work toward Total Force Integration (TFI) to provide the best support possible in a variety of missions world-wide. Multiple deployments, however, do increase the mental and physical stress on the Airman, and many programs have been created in a short time to address these concerns.

However, these programs require a great deal of support from medical units within each respective Service. The concern is that while implementing these programs, the high demand, low density medical career fields will remain stressed and unable to reset, as well.

General Siniscalchi, can you please comment on if these programs have increased the demand on your nursing corps? Can you also comment on if these same programs are effective in helping medical personnel reset, also?

Answer. At this time we have not experienced an increased demand on the Air Force Nurse Corps as a result of current programs. However, we will continue to assess requirements as new initiatives such as Deployment Transition Centers come to fruition.

SUBCOMMITTEE RECESS

Chairman INOUYE. Our next hearing of the Defense Appropriations Subcommittee will be on Wednesday, March 17, at 10:30 a.m., and at that time we'll receive testimony from the Navy and Marine Corps.

And we'll stand in recess.

[Whereupon, at 12:18 p.m., Wednesday, March 10, the subcommittee was recessed, to reconvene at 10:30 a.m., Wednesday, March 17.]