United States Air Force

Testimony

Before the Senate Appropriations Committee, Subcommittee on Defense

Defense Health Programs

Statement of Major General Kimberly A. Siniscalchi, Assistant Air Force Surgeon General, Nursing Services

April 6, 2011

BIOGRAPHY

UNITED STATES AIR FORCE

MAJOR GENERAL KIMBERLY A. SINISCALCHI

Maj Gen Kimberly A. Siniscalchi is Assistant Air Force Surgeon General, Medical Force Development, and Assistant Air Force Surgeon General, Nursing Services, Office of the Surgeon General, Headquarters U.S. Air Force, Rosslyn, VA. As Assistant Air Force Surgeon General, Medical Force Development, she establishes new and appraises existing personnel policy and staffing requirements for 34,000 active duty officer and enlisted medical personnel. Her directorate is responsible for all medical force education and training. As Assistant Air Force Surgeon General, Nursing Services, she creates and evaluates nursing policies and programs for 19,000 active-duty, Guard and Reserve nursing personnel. She interacts with Air Staff, Joint Staff, other services and major commands to ensure the highest caliber of nursing care and personnel.

General Siniscalchi received her commission in 1979 through the Reserve Officer Training Corps program at the University of Pittsburgh, Pa. Her leadership experience includes commanding eight consecutive years at squadron and group levels, and serving Presidents George H. W. Bush and William J. Clinton as the Air Force nurse assigned to the White House Medical Unit. She also deployed as Commander of the 380th Expeditionary Medical Group.

EDUCATION

1979 Bachelor of Science degree in nursing, Duquesne University, Pittsburgh, Pa.
1979 Critical care internship, Allegheny General Hospital, Pittsburgh, Pa.
1980 Medical surgical internship, March AFB, Calif.
1983 Flight nurse training, School of Aerospace Medicine, Brooks AFB, Texas
1984 Squadron Officer School, Maxwell AFB, Ala.
1985 Air Force Recruiting School, Lackland AFB, Texas
1988 Master of Science degree in nursing (clinical nurse specialist), University of Nebraska Medical Center, Omaha
1992 Air Command Staff College, by correspondence
1997 Air War College, Maxwell AFB, Ala.
1998 Medical Executive Skills Course, Bethesda Naval Hospital, Md.
1998 Interagency Institute for Federal Health Care Executives, George Washington University, D.C.
2001 Group Commanders Course, Maxwell AFB, Ala
2003 Executive Skills Capstone Course, Walter Reed Army Medical Center, Washington, D.C.

2004 TRAC 5000 Executive Leadership Program, Midwestern State University, Wichita Falls, Texas
2007 Fundamentals of Systems Acquisition Management, Defense Acquisition University, Fort Belvoir, Va.
2008 Senior Leader Orientation Course, Washington, D.C.
2008 USAF Senior Leadership Course, Center for Creative Leadership, Greensboro, N.C.
2008 Health Care CEO Course, The Wharton School, University of Pennsylvania, Philadelphia
2009 Capstone Asia/China Course, National Defense University, Fort Lesley J. McNair, Washington, D.C.

ASSIGNMENTS

1. August 1980 - January 1981, nurse intern, USAF Regional Hospital, March AFB, CA
2. January 1981 - October 1981, clinical nurse, Medical/Pediatric Unit, USAF Hospital, Langley AFB, VA
3. October 1981 - February 1982, charge nurse, Primary Care Services, Langley AFB, VA
4. February 1982 - August 1982, charge nurse, Internal Medicine/Emergency Department, Langley AFB, VA
5. August 1982 - October 1983, staff nurse, Surgical Unit, Offutt AFB, NE
6. October 1983 - May 1985, clinical nurse, Intensive Care Unit, Offutt AFB, NE
7. May 1985 - September 1986, Chief, Nurse Recruitment Branch, 3543rd Recruiting Squadron, Omaha, NE
8. September 1986 - June 1988, Chief, Health Professions Recruiting Branch, 3543rd Recruiting Squadron, Omaha, NE
9. June 1988 - July 1989, Clinical Nurse, Intensive Care Unit, Malcolm Grow Medical Center, Andrews AFB, MD
10. July 1989 - June 1990, assistant charge nurse, Intermediate Cardiac Care Unit, Malcolm Grow Medical Center, Andrews AFB, MD
11. June 1990 - August 1993, White House Nurse, Washington, D.C.
12. August 1993 - October 1994, Nurse Manager, Critical Care Services, 55th Medical Group, Offutt AFB, NE
13. October 1994 - January 1996, Chief, Medical Operations Flight, 55th Medical Group, Offutt AFB, NE
14. July 1996 - July 1997, student, Air War College, Maxwell AFB, AL
15. July 1997 - September 1997, Chief, Medical Readiness Logistics Branch, Air Force Medical Logistics Office, Fort Detrick, MD
16. September 1997 - July 1998, Chief, Medical Combat Support Operations, Air Force Medical Logistics Office, Fort Detrick, MD
17. July 1998 - June 2001, Commander, 11th Medical Operations Squadron; Chief Nurse, Bolling AFB, DC
18. June 2001 - July 2003, Commander, 17th Medical Group, Goodfellow AFB, TX
19. July 2003 - July 2006, Commander, 882nd Training Group, Sheppard AFB, TX
20. July 2006 - September 2008, Deputy Command Surgeon, Headquarters Air Force Materiel Command, Wright-Patterson AFB, OH (April 2007 - September 2007, Commander, 380th Expeditionary Medical Group, Southwest Asia)
21. September 2008 - present, Assistant Surgeon General, Medical Force Development, and Assistant Surgeon General, Nursing Services, Office of the Surgeon General, Headquarters U.S. Air Force, Arlington, VA

MAJOR AWARDS AND DECORATIONS

Legion of Merit with oak leaf cluster
Defense Meritorious Service Medal
Meritorious Service Medal with three oak leaf clusters
Air Force Commendation Medal with two oak leaf clusters
Joint Meritorious Unit Award with two oak leaf clusters
Meritorious Unit Award
Air Force Outstanding Unit Award with four oak leaf clusters
National Defense Service Medal with bronze star
Global War on Terrorism Expeditionary Medal
Global War on Terrorism Service Medal
Air Force Expeditionary Service Ribbon with Gold Border

OTHER ACHIEVEMENTS

1987 Outstanding Young Women of America
1988 Outstanding Masters Graduate, University of Nebraska Medical Center Graduate College of Nursing
2008 Distinguished Alumni, College of Nursing, University of Nebraska Medical Center, Omaha

PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS
American Nurses Association
American College of Healthcare Executives
Association of Military Surgeons of United States
Air Force Nurses Association
Federal Nurses Association
Federal Health Care Executive Institute
Sigma Theta Tau International Honor Society of Nursing

PROFESSIONAL CERTIFICATIONS
National Certification in Nursing Administration, American Nurses Association

EFFECTIVE DATES OF PROMOTION
Second Lieutenant Jan. 20, 1979
First Lieutenant Jan. 23, 1981
Captain Jan. 23, 1983
Major Feb. 1, 1990
Lieutenant Colonel Mar. 1, 1996
Colonel Sept. 1, 2001
Major General Dec. 3, 2008

(Current as of September 2010)

Mr. Chairman, and distinguished members of the committee, it is again my honor to represent the over 18,000 members of our Total Nursing Force (TNF). Together, with my senior advisors, Brigadier General Catherine Lutz of the Air National Guard (ANG), and Colonel Lisa Naftzger-Kang of the Air Force Reserve Command (AFRC), along with my Aerospace Medical Service Career Field Manager, Chief Master Sergeant Joseph Potts, we thank you for your continued support of our many endeavors to advance military nursing. It is a privilege to report on this year's achievements and future strategies.

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

Global Operations

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

At a flight nurse and technician graduation ceremony at Brooks City Base in San Antonio, Texas on 29 January 2011, the guest speaker, Army Master Sergeant Todd Nelson, gave a poignant

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

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

Validating this success, a major research study from the Tri-Service Nursing Research Program was concluded this year. This study evaluated the care of over 2,500 critically ill and

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

David Brown from *The Washington Post* reported in November 2010 on Army Sergeant Diego Solorzano, who was injured in Afghanistan, "In any U.S. hospital, Solorzano would be considered too sick to put on an elevator and take to the CT-scan suite. Now he's about to fly across half of Asia and most of Europe…the U.S. military's ability – not to mention its willingness – to take a critically ill soldier on the equivalent of a seven-hour elevator ride epitomizes an essential feature of the doctrine for treating war wounds in the 21st century: Keep the patient moving." Despite the noise, vibration, temperature extremes, and pressure changes, AE and CCATT have truly been the critical link providing world-class care across the continuum from the battlefield to the U.S.

On 28 September 2010, members of the U.S. House of Representatives unanimously passed a resolution honoring the Airmen who support and perform AE. House Resolution 1605 recognizes the service of the medical crews and aircrews in helping our Wounded Warriors make an expeditious and safe trip home to the U.S., commending the personnel of the Air Force for their commitment to the well-being of all our service men and women who help to guarantee wounded service men and

women are quickly reunited with their families and given the best medical care. During a press release, Congressman Mike Thompson stated "These men and women put their lives on the line on a regular basis to protect their fellow Americans." The ability to rapidly move patients from point of injury, to initial intervention, and then on through the system to the U.S. in three days or less for definitive care continues to sustain the lowest mortality rate of any war in United States history.

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

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

In addition to the over 100 AE flyers in the combat environment, over 1,300 nursing personnel support ground missions to include theater taskings such as trauma hospitals, provincial

reconstruction and teaching teams, and forward-deployed and convoy medical missions. Working side-by-side with our sister Services and Coalition Partners enables us to integrate into the Joint environment and support our Secretary and the Chief of Staff's priorities to partner to win today's fight.

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

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

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

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

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

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

nursing from many armed forces from around the world, making the symposium a memorable event for all.

Force Development

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

Our Nurse Transition Program (NTP) continues to be an integral component in developing our new nurses. We graduated 212 nurses in Fiscal Year (FY) 2010 from eight military and two civilian locations. In December 2010, we graduated the third class from Scottsdale Healtcare System in Arizona. This outstanding civilian program has produced 56 nurses since its inception. As a Magnet facility, Scottsdale Healthcare System is one of only 382 hospitals recognized world-wide for nursing excellence. This program provides complex clinical training under a preceptor-led transition model for new graduates. Under the supervision of Lieutenant Colonel Deedra Zabokrtsky, NTP Course Director – Scottsdale, our new nurses are clinically prepared and gaining the confidence to take on their own clinical practice. Program excellence can be noted in a diary entry from one NTP student who had just begun her week in Obstetrics (OB). This student was assigned a patient who was failing to progress in labor and was informed that a cesarean section was believed inevitable. Based on current research, she decided to take an evidence-based approach as encouraged by her preceptor. Garnering support from her fellow nurses and agreement from her patient to try a new approach, a unique plan of care was initiated, to include rotation of the patient's position every 15-30 minutes.

The final result: a vaginal birth of a beautiful baby boy. As the student stated, "This situation has affected the way I will educate my OB patients in the future… the best we can do as nurses is make sure our patients are well informed… this is true for all areas of nursing." This exemplar highlights the critical thinking and sound, evidence-based nursing practice needed from today's nurses.

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

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

As we strive to create full-spectrum leaders and nursing professionals, our recently launched Project Lieutenant is designed to improve skills and reinforce training with increased oversight and mentoring during our new nurses' first year. Over the years, the National Council of State Boards of Nursing (NCSBN) has researched the issues of education, training, and retention of novice nurses and found that the inability of new nurses to properly transition from student into a new practice can have grave consequences. The NCSBN reported that approximately 25 percent of new nurses leave a position within their first year of practice. The increased turnover, consequently, has a potentially negative effect on patient safety and health care outcomes. The NCSBN's Transition to Practice Model provides a way to empower and formalize the journey of newly licensed nurses from

education to practice. Project Lieutenant is our pilot program to support our nurses' successful completion of the nurse residency program and transition into new clinical practice areas. Established at the 59th Medical Wing, Joint Base San Antonio, Texas, Project Lieutenant is leading the charge to deliberately develop our newly graduated NTP nurses through a comprehensive nine month mentoring program. The deliberate development of the novice nurse is in step with the NCBSN's model and will be replicated at several sites to ensure consistent quality of patient care and address the concerns of the new nurse, ultimately promoting public safety and positive patient outcomes.

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

The Uniformed Services University of Health Sciences (USUHS) Graduate School of Nursing recently stood up a Psychiatric Mental Health Nurse Practitioner Program (PMH-NP). This new program has graduated two Air Force advance-practice nurses, with two Air Force students currently enrolled and four more students planned for 2011. The PMH-NP is one of the few programs in the

country that includes psycho-pharmacology and addresses behavioral techniques specifically designed for clinical care of the military population. The program also has specific training in the logistics of delivering health care in military populations and education in Compassion Fatigue/ Resiliency to decrease the risk of mental health issues and burnout.

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

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

entry level to advanced practice will apply also to direct advanced practice nurse accessions. The Health Professions Education Requirements Board (HPERB) allocated nine DNP positions for an August 2011 start. Four of the candidates will go from a master's to doctorate level and five will progress from the baccalaureate level to the doctoral level to meet the new requirement.

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

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

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

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

An ongoing effort in the development of our enlisted members is the transition of our Independent Medical Technicians (IDMTs) and Aerospace Medical Technicians (4NOs) to certified paramedics. This advancement will continue to decrease our reliance on contract emergency response systems and with an end goal of 700 paramedics. In 2010 we certified 46 paramedics,

bringing our total over 200. To enhance the tremendous capability of our IDMTs, our goal is to reach 100 percent within this constrained career field over the next five years.

We believe this advancement in the development of our medics will eliminate the stove pipe that has limited career opportunities within the IDMT specialty field and over the long run enhance career progression for these highly qualified medics. Additionally, our IDMTs are eligible for the selective reenlistment bonus which has aided in the recruitment and retention of these highly valuable assets. Our IDMTs are enlisted professionals who serve as physician extenders and force multipliers and who are capable of providing medical care, often in isolated locations. Senior Master Sergeant Patrick McEneany, who is just one of these valued medics, deployed for seven months as an IDMT to Iraq with a Joint Special Operations task force. As a provider in a remote location, he supervised an urgent care medical clinic, serving a camp of 1,200 individuals. His accomplishments during this deployment included the resuscitation and stabilization of combat traumas and emergencies and the treatment of 1,500 ill and injured patients. Additionally, he evaluated multiple Combat Search and Rescue exercises at forward operating bases to validate the care for Special Operations Pararescuemen. For his efforts, Sergeant McEneany was awarded the Bronze Star.

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

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

Force Management

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

In FY 2008, the long-needed increase in colonel authorizations for the Nurse Corps created a deficit to the grade ceiling. With current personnel and year-group sizes, filling the authorized grades at the senior level remains challenging. In an effort to resolve the persistent grade level imbalances,

nursing leadership has been working closely with the Office of Deputy Chief of Staff, Manpower, Personnel and Services to develop options, to include the possibility of the Defense Officer Personnel Management Act relief. This scenario would allow the colonel grade ceiling to reach allowable guidelines by 2016. The Nurse Corps is continuing to pursue the optimal solution in keeping with the Chief of Staff of the Air Force's direction. These critical Nurse Corps positions are not affected by current Air Force efforts to reduce its endstrength to authorized levels.

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

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

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

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

Patient Centered Care

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

Across the globe, our health care teams are focused on building patient-centered platforms able to perform the full scope of medical and preventive care to our patients at home and abroad. We are committed to the execution of the Family Health Initiative (FHI), the Air Force's pathway to Patient-Centered Medical Home, which provides continuity of care, team work and fosters improved communication; all maximizing patient outcomes. Our Disease Managers and Clinical Case Managers (CCMs) play an integral part in this process. At several locations, our telephone consults have decreased by 21 percent from 2009, and our network referrals to an Urgent Care Clinic have

decreased by 50 percent since the FHI was started. This decrease in urgent care referrals has saved over $174,000 for Joint Base Elmendorf Richardson in Alaska. As well, a set of performance measures developed by the National Committee for Quality Assurance, Healthcare Effectiveness Data and Information Set (HEDIS), is used to measure clinical outcomes since FHI inception. The HEDIS results demonstrated an overall improvement in diabetic screening results and reporting. F.E. Warren Air Force Base, Wyoming reports patient satisfaction is at an all time high of 96 percent for 2010. Additionally, many other sites are reporting similar experiences as a result of this modification in how we care for our DoD beneficiaries.

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

Patient safety remains paramount. For AE, the rate of patient safety incident reports was less than five percent of patient moves. Of note, most of these events were near-miss, meaning the event was prevented and never reached the patient. To strengthen our Patient Safety Program, Air Mobility Command has created an Aeromedical Evacuation Patient Safety Course modeled on the principles of the Department of Defense's Patient Safety Program. Ms. Lyn Bell, a retired Lieutenant Colonel flight nurse and Chief, Aeromedical Evacuation Patient Safety, taught the first class in December

2010. She trained 17 safety monitors from ten total force agencies including AE Squadrons, the Patient Movement Requirements Center and Staging Facilities. This new program focuses on accurately capturing and documenting actual and potential patient safety concerns. It teaches units how to incorporate patient safety into their training scenarios and prepare the units for the high operations tempo in the combat theater. With these continued efforts, we hope to further enhance our culture that protects patients and advances process improvements.

Beginning November 2010 through June 2011, the Air Force Medical Operations Agency (AFMOA), in conjunction with the DoD, is implementing the Patient Safety Reporting (PSR) System in Air Force military treatment facilities worldwide. The PSR provides staff with a simple process for reporting patient safety events using DoD standard taxonomies, which enhance consistency and timely event reviews. The PSR event data will be analyzed for trends and assist in identifying targets for process improvement, both at Air Force and DoD levels.

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

We also recognize our responsibility in caring for victims of sexual assault within our military healthcare system. Medical treatment facilities team with installation Sexual Assault Response Coordinators to deliver care to victims via coordination with Victim Advocates and Medical Specialists. To ensure the integrity of forensic evidence and guarantee access to care, most sexual assault exams are done off-base via a memorandum of understanding with local treatment facilities.

In the deployed environment, seven of eight medical treatment facilities perform exams on-site while one location uses a co-located Army hospital. Upgraded First Responder training has been implemented to increase training efficiency; over 6,000 medics completed First Responder Training in FY 2010.

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

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

This year, Air Force nurses authored more than ten peer-reviewed publications and delivered numerous presentations at nursing and medical conferences. Also in 2010, the TSNRP's *Battlefield and Disaster Nursing Pocket Guide* and clinical practice guidelines were established as the primary

performance criteria for the Air Force Nurse Corps readiness skills verification program. The integration of these evidence-based recommendations will ensure that all nurses are prepared and provide the highest quality, state-of-the art care under operational conditions.

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

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

Neither solution was considered optimal in terms of ensuring clinicians with the right skill sets are available while not reducing the availability of care providers. As a result, of these challenges, the Air Force developed Tactical Critical Care Evacuation Team, or TCCET, to augment these inter-hospital transfers. The current TCCET composition consists of two certified registered nurse anesthetists and an emergency room physician. This team possesses advanced clinical skills to support ventilated patients as well as patients who are hemodynamically unstable. The team can function as a whole or each provider can perform separately to meet the patient or mission needs. The TCCET will augment the Army flight medic, or Air Force pararescuemen on missions, and will also be able to support AE missions or augment the CCATT, if needed.

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

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

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

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

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

Colonel Carlisle found the courage to seek help for her wounds and hidden trauma. She further states "now I am at peace knowing I – we – did the best we could, and the fallen angels were not lost in vain, and America's freedom still reigns." Colonel Carlisle became a spokeswoman for nurses and other medical personnel with post-traumatic stress or other war-related adjustment issues.

Instead of being rebuked by her upper command for openly talking about her experiences, Colonel Carlisle is praised for her efforts to encourage other troubled nurses and medical technicians to see help. Colonel Carlisle helps to show our Airmen that she is a senior officer who has experienced the same feelings they may be having and they should feel comfortable talking about their experiences and feelings. We are changing our culture to promote the building of resilience, facilitate recovery, and support reintegration of returning Service members.

Way Ahead

The United States Air Force Nurse Corps consistently achieves excellence in all that we do. The use of professional clinical judgment in delivering evidence-based care is essential in enabling our Airman and their families to improve, maintain, or recover health, and achieve the best possible quality of life. By partnering with our civilian institutions, Joint, and Coalition partners we are building the next generation of care and capability. As we step into the 21st Century, we are forging our future by addressing our stressors, embracing our professional diversity, and fortifying our Total Nursing Force with education, training and research.

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