

**Not for Publication until released by  
the Senate Appropriations Committee**

**Statement of  
Vice Admiral Donald C. Arthur  
Surgeon General of the Navy  
Before the  
Subcommittee on Defense  
of the  
Senate Appropriations Committee**

**Subject:  
Defense Health Program Budget  
For Fiscal Year 2008**

**7 March 2007**

**Not for Publication until released by  
the Senate Appropriations Committee**

## **Introduction**

Chairman Inouye, Senator Stevens, distinguished members of the subcommittee, I welcome the opportunity to share with you how Navy Medicine is taking care of our nation's Sailors, Marines, and their families across the globe and at home.

Navy Medicine remains steadfast in its commitment to provide care on the battlefield and meet the health care needs of our beneficiaries, active duty, reservists, military retirees, and family members, as our nation continues to be engaged in combat operations fighting the Global War on Terror (GWOT).

We are dedicated to maintaining a healthy and fit force that is ready to deploy and to deploying medical personnel to provide the best health care to our warriors on the battlefield. And when that is not enough, we are committed to restoring the health of those injured on the battlefield.

At the same time, we are responsible for ensuring access to world-class health care for all eligible beneficiaries. Meeting these missions are an exceptional team of military, active and reserve, and civilian health care professionals who perform their duties with the same enthusiasm in deployed settings as well as at our medical treatment facilities (MTF)s.

## **Defense Health Program and Navy Medicine Budget for Fiscal Year 2008**

In recent years, Navy Medicine faced many fiscal challenges and anticipates that some will continue throughout fiscal year 2008. The President's budget for fiscal year 2008 funds healthcare operations; authorizes 1,011 military to civilian conversions; includes funding for the GWOT requirement; and assumes savings and efficiencies in several areas.

Fiscal year 2008 provides funding challenges in that the efficiency wedge increases and certain assumptions regarding savings opportunities may not be borne out in execution. These reductions represent leadership and management challenges, which we must meet. We are vigorously integrating our fiscal challenges, and our military to civilian conversion program, into an ongoing business process review that is designed to make Navy Medicine an efficient, effective care provider.

As you know, the Department of Defense faces tremendous difficulty with balancing the growing costs and long-term sustainability of the Military Health System. We will need to consider all options available to ensure a superior benefit remains available for the long term and we look forward to the recommendations on fiscal and other issues that will come from the Department of Defense Task Force on the Future of Military Health Care that has recently been established with distinguished membership from within the Department, other federal agencies, and the civilian sector.

### **Combat Casualty Care**

We have made significant advances in combat casualty care and have redefined trauma management for military operational medicine. Navy Medicine is continuously assessing its medical capabilities to make improvements resulting in real time adjustments to ensure the right health care capabilities are deployed as far forward as possible. These improvements are based on our experience and lessons learned, and on the requirements mandated by the warfighter. As a result of these improvements, only 2-3 percent of service members who are wounded and who reach medical care within 60 minutes are dying from their injuries.

One of the most important contributors to saving lives on the battlefield, historically and currently, is Navy corpsmen—Navy Medicine’s first responders on the battlefield. The platoon corpsmen are supported by a team of field surgeons, nurses, medical technicians and support personnel in theater, who are supported by medical evacuation teams and overseas MTFs working together with MTFs in the US – this is the Navy Medicine continuum of care.

Combat casualty care is a “continuum-of-care,” which begins with corpsmen in the field with the Marines; progresses to forward resuscitative care; on to theater level care; and culminates in care provided in route during patient evacuation to a military hospital. Medical care is being provided in Iraq and Afghanistan by organic Marine Corps health services units which include battalion aid stations (BAS), shock trauma platoons, surgical companies, and Forward Resuscitative Surgical Systems. Our forward-deployed assets include Navy surgical capabilities located in Al Asad and Taqaddum. These units are the first oasis of care for many warfighters who are seriously wounded fighting insurgents. At Al Asad the majority of the injuries treated have been from improvised explosive devices (IEDs). They provide patient resuscitation and stabilization for helicopter medical evacuations to higher-capability medical facilities, something no other medical unit in the surrounding area can offer.

Sailors at the medical unit in Taqaddum treat the most serious of patients from the entire area of operations, most arriving by helicopter directly from the battlefield. The platoon is staffed by dedicated and highly skilled uniformed medical personnel who stand in harm’s way ready to fight for the lives of our wounded service members.

Changes have been made in the training of the physicians, nurses and corpsmen who first encounter injured service members, as well as to the way certain types of injuries are treated. In addition, new combat casualty care capabilities such as one-handed tourniquets and robust vehicle first-aid kits for use during convoys are being deployed. Navy Fleet Hospital transformation is currently redesigning Expeditionary Medical Facilities (EMFs) to become lighter, modular, more mobile, and interoperable with other Services' facilities in theater.

As EMFs continue to evolve, so do Navy Medicine's Forward Deployable Preventive Medicine Units (FDPMU). These units include environmental health and preventive medicine professionals who play a critical role in force health protection services, including environmental site assessments, water quality analysis, and disease vector surveillance and control. The Marine Corps' remain the FDPMU's primary customer, however, these teams also provide preventive medicine support to Naval Construction Battalions/Seabee Units, Army, and Air Force personnel. Currently, the Navy has four FDPMUs, with teams that have deployed for Operation Iraqi Freedom (OIF).

Navy Medicine's commitment to the warfighter is clearly seen in the combat casualty care provided to injured and ill Marines and Sailors engaged in Operation Enduring Freedom (OEF) and OIF since the beginning of the GWOT.

Navy Medicine is constantly looking at the next steps in improving combat casualty care. Our current efforts center on expansion of our health surveillance, combat and operational stress control programs, and improving care for certain types of injuries such as traumatic brain injury (TBI). Combat casualty care is not limited to the care

received while in theater, but extends to the information and training we provide to service members to prevent physical and mental health injuries before, during and after deployment.

Providing preventive and treatment services as early as possible is the best way to avoid or mitigate the long-term effects of war. Navy Medicine is committed to monitoring the health of deployed service members with the use of pre- and post-deployment health assessments. These assessment tools are designed to identify potential issues of concern, both physical and mental. The program also provides service members information on how to access medical services for any physical or mental health issues that may occur after returning from deployment.

We know that all service members who witness or are engaged in combat will experience some level of combat stress. To specifically address this challenge, Navy Medicine launched the Operational Stress Control and Readiness (OSCAR) pilot project in January 2004, which embedded psychiatrists and psychologists at regimental levels in ground Marine Corps units. The primary goal of this program—to effectively manage operational stress at the tactical level—is central to the readiness of the Marine Corps as a fighting force. To date there are three OSCAR teams, one associated with each of the three active USMC Divisions: 1st MARDIV located at Camp Pendleton, 2nd MARDIV located at Camp Lejeune, and 3rd MARDIV located at Camp Butler (Okinawa). The personnel for the OSCAR Teams are sourced from Navy MTFs or drawn from elsewhere within the Marine Corps structure.

At Navy and Marine Corps bases across the country, Navy Medicine is coordinating with line commanders and their organic medical assets to establish 13

Deployment Health Clinics (DHCs) to facilitate these health assessments. The DHCs serve as a non-stigmatizing point of entry for military personnel with deployment health and/or military readiness needs. These clinics by design will complement and augment primary care services that are offered at the MTFs or in garrison at the unit level such as BAS. Services provided will vary with patient and health concern, but the services will include screening, counseling and initial treatment for family problems, diet and exercise, substance abuse, sexual practices, injury prevention, stress, primary care and mental health concerns. The goal is to provide appropriate treatment for deployment-related concerns in an environment that reduces the stigma associated with the service member's condition. The clinics are staffed to support increased referrals as deploying units return from the theater of operations.

In order for combat casualty care to be effective, Navy Medicine has incorporated service members' families into the care model. We first launched this concept at the National Naval Medical Center several years ago and are now making it part of the way we treat our combat casualties at every Navy MTF. Recent developments in this area include the establishment of the Comprehensive Combat Casualty Care Center (C5) at Naval Medical Center San Diego.

C5 is based on the models for amputee care developed at Walter Reed and Brooke Army Medical Centers, but is expanded to include other types of injuries such as TBI and Post-Traumatic Stress Disorder. C5 will monitor and coordinate the medical care of the service member in and outside of the MTFs. In addition, C5 will provide support to the families in every way possible and focus on ensuring that the service members and their families have a smooth transition to civilian life or continued military service. When

completed, NMCS D will be the Department of Defense's comprehensive combat casualty care "center of excellence" for the west coast.

### **Humanitarian and Joint Missions**

The role of Navy Medicine has played in OEF and OIF illustrates only part of the increased operational tempo of our medical personnel across the spectrum of Navy Medicine in recent years. We have now expanded missions which include humanitarian efforts, missions in support of joint military operations, and a greater role in homeland security.

As demonstrated with the Pakistan earthquake in 2005 and return visits to areas struck by the Indonesian tsunami, America's compassion and generosity are a powerful force of good will. These missions have transformed fear into trust and animosity into handshakes – medical diplomacy – a recognized impact on the GWOT.

The Navy and Marine Corps responded to the earthquake in Indonesia in June 2006 and the medical team treated over 2,000 patients. The earthquake's destruction displaced hundreds of thousands of Indonesians. A mobile medical unit was set up at a local soccer field in Sewon and provided a variety of medical services including surgeries and vaccinations. The vaccination efforts focused on reducing the significant risk of contracting tetanus, a devastating bacterial infection that usually originates from a contaminated laceration.

USNS MERCY (T-AH 19), our hospital ship home-ported in San Diego, completed a humanitarian assistance mission to Southeast Asia last year. MERCY provided direct aid to more than 87,000 people in Indonesia, Bangladesh and the Philippines. MERCY's team included an unprecedented group of volunteers and

professionals, civilians and military, men and women, dedicated to saving lives, restoring hope and spreading good will. The team included a dozen non-governmental organizations (NGOs); US Army, US Air Force, and Public Health Service medical personnel, naval construction forces and medical professionals from Canada, India, Malaysia, Australia and Singapore.

MERCY's deployment was an exciting and important opportunity to bolster security, stability and prosperity—both at sea and ashore—in a region where we have important interests. MERCY's deployment was a model of cooperation and deliberate planning with NGOs and partnering nations. This international collaboration underscores the Navy's commitment and tradition of providing medical and humanitarian assistance where and when needed and added a new dimension to forward presence.

The hospital ship's state of the art operating rooms, CT scan equipment, laboratories and her ability to electronically transfer medical information allowed the staff to consult with physicians in other locations. The international team performed over 1,000 surgeries and cared for over 60,000 patients. MERCY visited 10 locations in four countries and demonstrated the great capability and capacity the ship brings without requiring a significant presence ashore. MERCY's crew played an important role as American good will ambassadors. Their actions demonstrated to thousands of people the true values and ideals we hold as Americans.

Later this year, the Navy plans to deploy our East coast-based hospital ship, the USNS COMFORT (T-AH 20), in support of a humanitarian mission to nations in the Caribbean and Central/South America. In addition, a robust medical staff based out of

San Diego will deploy aboard the USS PELELIEU to the Western Pacific to continue our humanitarian efforts in that region.

Also in 2006, Joint Forces Command (JFCOM) tasked the Navy with providing medical staffing in support of the Army's Landstuhl Regional Medical Center (LRMC) Germany. Upon arriving in November, this group of more than 300 Navy medical reservists and 30 active duty personnel became part of the LRMC team and are providing superior medical, surgical and preventive health care to wounded warfighters returning home. This mission demonstrates how our active duty and reserve components seamlessly integrate the talents and strengths of our reservists to accomplish the mission. This call to meet Landstuhl personnel needs also demonstrates the increased operational requirements and tempo to which Navy Medicine has been responding since the beginning of OEF/OIF.

The Expeditionary Medical Facility Kuwait (EMF-K) is in its third year as Navy Medicine detachments staff the U.S. Military Hospital in Kuwait and its nine outlying clinics. This facility averages over 17,500 monthly patient encounters and is staffed by Navy personnel from 26 medical activities around the world.

U.S. Military Hospital Kuwait is a Level 3 medical facility that provides outpatient, as well as inpatient, care and specialty services such as cardiology, pulmonary, critical care, internal medicine, general surgery, optometry, orthopedics, gynecology, laboratory, pharmacy, radiology, mental health, dental and physical therapy. Between December 2005 and October 2007, over seventy-five percent of troops who came to the facility were able to remain in theater. EMF-K also provides health care to

Department of Defense personnel and Coalition forces stationed in the U.S. Army Forces Central Command area of responsibility—Kuwait, Qatar, Afghanistan, and Iraq.

Joint initiatives are underway across the full spectrum of military medical operations around the world. Navy Medicine is committed to increasing the ways we jointly operate with the Army and Air Force. Ideally, all U.S. medical personnel on the battlefield—regardless of service affiliation – should have the same training, use the same information systems and operate the same equipment because we are all there for the same reason – to protect our fighting forces. It should not matter whether the casualty is a Soldier, Sailor, Airman, Marine, or Coast Guardsman, or what color uniform the medical provider wears. Injured warfighters should receive the same level of care delivered by personnel with the necessary training, equipment and information systems to maximize our efficiency and achieve the best patient outcomes.

### **Medical Personnel and Quality of Care**

On an average day in 2006, Navy Medicine had over 3,800 medical personnel from the active and reserve components deployed in support of Operations, Exercises or Training around the world. While continuing to support our missions we have been challenged to ensure that sufficient numbers of providers in critical specialties are available to fill both the wartime mission and sustain our beneficiaries at home.

Navy Medicine is continually monitoring the impact deployments of medical personnel have on our staff and our ability to provide quality health in our MTFs. We continue to pursue an economic and quality-centered strategy focused on maintaining the right mix in our force to sustain the benefits of our health care system. Together with the network of TRICARE providers who support local MTFs, beneficiaries have been able to

continue accessing primary and specialty care providers as needed. We closely monitor the access standards at our facilities using tools like the peer review process, to evaluate primary and specialty care access relative to the Department of Defense's standard.

Providing quality medical care is Navy Medicine's priority and we earn the trust of our beneficiaries by ensuring our health care providers embrace the highest standards of training, practice and professional conduct. Another means used to ensure quality is our robust quality assurance and risk management programs that promote, identify, and correct process or system issues and address provider and system competency issues in real time. Our program promotes a patient safety culture that complies with nationally established patient safety goals and we have an extensive, tiered quality assurance oversight process to review questions related to the standard of medical care.

Navy Medicine also promotes healthy lifestyles through a variety of programs. These programs include: alcohol and drug abuse prevention, hypertension identification and control, tobacco use prevention and cessation, and nutrition and weight management. Partnering with other community services and line leadership enhances their effectiveness and avoids duplication. We have established evidence-based medicine initiatives and currently measure diabetes, asthma and women's breast health. Soon, we will add dental health and obesity.

### **Recruitment and Retention Efforts of Medical Department Personnel**

Navy Medicine continues to face challenges in reaching the end-strength targets for our medical communities. This has resulted in shortages in several critical wartime specialties. Unfortunately, medical professionals are not considering the military for

employment, especially as civilian salaries continue to outpace the financial incentives available.

We are optimistic that new initiatives authorized in the National Defense Authorization Act for fiscal year 2007 (NDAA FY07) will enable the medical department to address many recruiting issues. Some of the improvements include: increases to the Health Professions Scholarship Program (HPSP), increases in direct accession bonuses for critical wartime specialties, and expanded eligibility for special pay programs.

Our losses have outpaced gains over the past several years and fiscal year 2006 was no exception, ending the year with a 93.5 percent manning across the Navy Medical Department. Our primary concern is attrition within critical wartime specialties. Additionally, concerns over excessive deployments and mobilization of certain specialties, especially in the Reserve Component where Reservists fear the potential loss of their private practice, have been a major deterrent to entering the Navy's medical department in recent years.

As of December 2006, the Medical Corps remained below end-strength targets and continues to experience acute shortages in critical wartime subspecialties. Recruiting challenges continue to exist within the HPSP, the primary student pipeline for medical corps officers. The HPSP met only 56 percent of goal in fiscal year 2005 and 66 percent in fiscal year 2006 for medical students. These shortfalls will be realized in fiscal year 2009 and 2010 with 230 fewer accessions than required. Retention issues continue to be of concern for this community and the effect of increased medical special pay rates offered for fiscal year 2007 will not be known until the end of the fiscal year.

The Dental Corps continues to remain under end-strength (at 90 percent manned), especially in the junior officer ranks where attrition is high and accessions have been a challenge in recent years. The HPSP, also the primary student pipeline for the Dental Corps, met 76 percent of its goal in fiscal year 2006. However, like the Medical Corps, it is expected that program improvements recently approved will have a positive impact on our recruitment efforts. Finally, with regard to dentists, a Critical Skills Retention Bonus (CSRB) was recently approved to grant a \$40,000 contract for two years of additional service to general dentists between three and eight years of service. It is anticipated that this bonus will help mitigate the civilian/military pay gap, making Navy Dental Corps more competitive with civilian salaries, thus improving retention.

The Medical Service Corps assesses to vacancies in subspecialties and success in meeting direct accession goals is largely dependent on the civilian market place. Last year the Medical Service Corps fell short of their direct accession goal by over 30 percent for the second year in a row, directly impacting the ability to meet current mission requirements. Retention of specialized professionals such as Clinical Psychologists and Physician Assistants remains the greatest challenge as deployment requirements increase for these professions. Shortages in these critical wartime communities are being addressed with increased accession goals and a CSRB for Clinical Psychologists. In addition, Navy Medicine is working within Navy to explore other incentive programs for this specialty. The Health Professions Loan Repayment Program has been a successful recruiting and retention tool for hard to fill specialties and is being expanded, as funding will allow, providing recruiting command with additional incentives.

Navy Nurse Corps is the only medical department specialty projecting to meet fiscal year 2007 accession goals. The national nursing shortage and competition with the civilian market and other military services have continued to challenge recruiting efforts for scarce direct accession resources. To counter this, the Nurse Corps Accession Bonus was increased in fiscal year 2007 and the Navy Nurse Corps has continued to shift more emphasis onto its highly successful Nurse Candidate Program (NCP), requesting a permanent increase in new starts for this program and decreasing direct accession goals. Retention rates have slightly decreased, especially among clinical specialties with a high operational tempo.

We met 99 percent of the active enlisted Hospital Corpsman (HM) goal and 94 percent of the Reserve enlisted medical corpsman goal. From January 2006 to January 2007, Navy Medicine retained 52 percent of corpsmen in Zone A, 55 percent in Zone B, and 84 percent in Zone C. HM is slightly below overall Navy retention rates for Zone B, but is improving. The other two HM zones are either at or exceed overall Navy retention rates and exceeds goals set.

The outlook of the medical department shows we have some significant challenges ahead, and Navy Medicine is grateful for Congress' willingness to step in and help when needed. We continue to reach out to universities and medical and dental schools to encourage these students to join us and practice medicine where keeping service members and their families healthy, and not just treating disease, is our primary mission.

### **Research and Development Efforts**

Navy Medicine is actively engaged in the research, development, testing and evaluation of new technologies that improve the health of all beneficiaries, especially those technologies focused on enhancing performance and decreasing injury of deployed warfighters. A significant part of our R&D efforts are aimed at improving the tools available to combat support personnel, as well as disease prevention and mitigation of our forces at home and abroad. Our R&D efforts include specific areas of expertise such as undersea medicine, trauma and resuscitative medicine, and regenerative medicine. We have partnered with the other services and with world-class organizations like the National Institutes of Health.

Navy Medicine's researchers have recently begun phases two and three of Food and Drug Administration (FDA) approved trials for a vaccine developed to stop the adenoviral illness that can make Sailors ill. This illness is caused by viral pathogens, or germs, that can make Sailors sick and causes loss of valuable time in training. The results from this trial, which is led by the Army, could eventually reduce illness in as many as one-fifth of Sailors in basic training. The U.S. Naval Health Research Center based in San Diego (NHRC) has a long history of successful research on respiratory infections, especially adenoviral infections, and NHRC houses the Navy Respiratory Disease Laboratory, making it the ideal partner with the Army research team.

After years of research into malaria, the deadly mosquito-borne infection that kills more than 1 million people very year, Naval Medical Research Center (NMRC) in Silver Spring, MD, will begin human testing on an experimental malaria vaccine. Although there have been no malaria deaths of U.S. military personnel since 2002, when an Army Special Forces soldier died following a mission to Nigeria, the disease can have a

significant negative effect on troop readiness. In August 2003, during a Marine Corps deployment to Liberia, a mission was aborted when 44 percent of the members of the Marine Expeditionary Unit acquired malaria after spending nights at the Monrovia airport.

As I mentioned before, our high combat casualty survival rates are due to the training and commitment of our corpsmen, our willingness to implement lessons learned, and improvements in life-saving technologies. Navy Medicine R&D is evaluating the effectiveness of more than a dozen new hemostatic agents and devices. The outcome of this critical study will drive the Marine Corps selection of the component to be deployed as part of the Individual First Aid Kit that every Marine and Sailor is issued when entering the combat theater. NMRC evaluates the effectiveness of these devices, which are designed for application under battlefield conditions and removal in the operating room. In addition to the Navy and Marine Corps, we expect other services and civilian police departments to benefit from this development.

Navy Medicine is beginning the evaluation of devices that detect the early signs of TBI. We have seen an increased incidence of TBI resulting from exposure to explosive devices in theatre, particularly IEDs. Fielding such a device will allow earlier intervention and treatment that could prevent the longer term, often devastating, effects of TBI. Such devices are designed to detect even mild TBI and indicate to our corpsmen and physicians which casualties require further monitoring and treatment.

Navy Medicine R&D is working side by side with the Marine Corps finalizing development of a critical component of the En Route Care System. Called the MOVES (Mobile Oxygen, Ventilation, and External Suction), this single integrated device

provides a capability for casualty management that reduces the weight and cube over current systems by nearly 75 percent. Because it does not require external oxygen, the device will allow our airlift assets to operate without dangerous high-pressure oxygen cylinders onboard. The MOVES is scheduled for delivery for field testing in fiscal year 2008.

### **Navy Medicine and the Department of Veterans Affairs**

As the number of injured service members who return in need of critical medical services increases, and due to the severity and complexity of their injuries, increased cooperation and collaboration with our federal health care partners is essential to providing quality care. As an extension of Navy Medicine's ability to care for patients, partnerships with the Department of Veterans Affairs' (VA) medical facilities continue to grow and develop into a mutually beneficial association. The VA's Seamless Transition Program to address the logistic and administrative barriers for active duty service members transitioning from military to VA-centered care is at most Navy MTFs with significant numbers of combat-wounded. This program is working well and continues to improve as new lessons are learned.

Navy Medicine and the VA also continue to pursue increased collaboration in resource sharing, new facility construction, and joint ventures. Using our sharing authority, we are rapidly moving toward functionally integrating the Naval Hospital Great Lakes and the North Chicago Veterans Affairs Medical Center and expect to fully complete the project by 2010. This facility will seamlessly meet the needs of both VA and Navy beneficiaries. Other locations identified for future physical space sharing

with the VA include: Naval Hospital Charleston, Naval Hospital Beaufort and Naval Hospital Guam.

Navy Medicine is also exploring new relationships with the VA such as the Balboa Career Transition Center. NMCS D recently entered into an agreement with the U.S. Department of Labor, the VA and the California Employment Development Department to provide quality VA benefit information and claims intake assistance, vocational rehabilitative services, career guidance, and employment assistance to wounded and injured service members and their families. This unique program will successfully coordinate all of the services available to these individuals.

### **Conclusion**

Chairman Inouye, Senator Stevens, distinguished members of the committee, thank you again for the opportunity to testify before you today about the state of Navy Medicine and our plans for the upcoming year.

It has been a privilege to lead Navy Medicine for the last three years as Navy Medicine has risen to the challenge of providing a comprehensive range of services to manage the physical and mental health challenges of our brave Sailors and Marines, and their families, who have given so much in the service of our nation. We have opportunities for continued excellence and improvement, both in the business of preserving health and in the mission of supporting our deployed forces. I thank you for your tremendous support to Navy Medicine.