



Featured column

January, 2005

Navy Medicine Aims For Agility, Innovation

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Navy Surgeon General

Navy Medicine is a vital part of the Navy-Marine Corps team with a dual mission to support and protect our operational forces and provide health care to their family members and retirees. Our highly skilled, combat-ready medical forces keep Sailors and Marines fit to fight. We serve as a defensive weapon system to protect our forces, deter threats and provide medical support in combat and disaster situations. As a community of 60,000 military and civilian health care specialists, we provide economic health care services to preserve the health of our Sailors, Marines, their families and retirees.



As Navy Medicine evolves and changes in response to the new challenges stemming from the Global War on Terrorism (GWOT), we remain clearly focused on our primary mission-Force Health Protection:

- preparing a healthy and fit deployable force;
- deploying medical personnel with our Sailors and Marines to protect them from battlefield hazards;
- restoring health on the battlefield, while providing world-class health care for their families; and
- helping a grateful nation thank our retired warriors with TriCare for Life.

To fulfill this mission of Force Health Protection, Navy Medicine has established five priorities. This article describes these priorities, and illustrates how Navy Medicine is ready to provide Force Health Protection whenever and wherever we are called upon to serve-aboard ship, on foreign soil and here at home.

Priority 1: Maintain Readiness-Aligned And Agile

Appropriately, Navy Medicine's first priority is readiness.

Navy Medicine is committed to strengthening the partnership between operational forces and naval activities ashore with programs focused on curbing infectious diseases outbreaks and reducing occupational injuries. In the operational theater, Navy Medicine significantly advanced medical capabilities with the care provided by First Responders and improved surgical access during the critical "golden hour." By utilizing tailored health services capability packages, such as preventive medicine and mental health, Navy Medicine has been extremely successful in rapidly

deploying to theater and joint interoperability with the Army and Air Force.

Navy Leadership is transforming the Navy and Marine Corps into more capable, flexible and responsive forces, as outlined in its strategic vision, Naval Power 21. Our alignment with Naval Power 21 will be a smaller, agile and technologically advanced Navy Medicine.

Expeditionary Medicine

For the Navy and the Marine Corps of the 21st century, combat operations will no longer rely on massive force-on-force attrition strategies with large shore-based logistics infrastructures. Instead they will rely on technological and information supremacy; smaller, more agile forces; focused logistics and innovative schemes of maneuver. Navy Medicine must be prepared to provide health service support for the new battle space. In some situations this may involve asymmetric warfare, fighting in a "dirty" environment that has been contaminated by biological, chemical or nuclear agents, and dealing with a mix of both civilian and military casualties. An example of Navy Medicine's preparedness is the Expeditionary Medical Facility (EMF). These facilities, with the same capabilities as Fleet Hospitals, are lighter and more mobile. EMFs are the first fully modularized, task organized structure that can be set up in as little as 48 hours.

As EMFs continue to evolve, they will provide robust medical care for major conflicts, low intensity combat, operations other than war and disaster/humanitarian relief operations. As modular expeditionary units, EMFs may be employed independently or in combination with the theater's joint health system for evacuation, medical logistics, medical reporting and other functions.

Forward Deployed Preventive Medicine Units are designed to be flexible and agile to quickly respond to a host of medical contingencies, including weapons of mass destruction, waste disposal, sanitation, food poisoning and contaminated water. These highly specialized units are staffed by preventive medicine physicians, industrial hygienists, hospital corpsmen, environmental and radiation health specialists, microbiologists and entomologists. They have been deployed in Iraq, Haiti and other remote locations around the globe, focused on decreasing disease and non-battle injuries (DNBI) through health surveillance, environmental monitoring and education. Because of the effectiveness of these units, we are currently experiencing the lowest DNBI rate for our deployed forces.

Readiness Assessments

To support the operational mission, the Department of Defense (DoD) is embarking upon a significant transformation in National Defense that requires a renewed examination of medical readiness policy, doctrine and capabilities. During the past few years, revised assessments of threats and risks, significant advances in technology, changes in business practices and lessons learned from recent conflicts have yielded new perspectives and priorities that must be addressed. Navy Medicine is actively participating in this review by making recommendations to standardize casualty estimation models, quantifying the risk of medical capabilities programmed below full requirement and determining the true cost of readiness.

We are also preparing for the Quadrennial Defense Review (QDR), a comprehensive examination of defense priorities, including potential threats, strategy, force structure, readiness posture, military modernization programs and

defense infrastructure. It is expected that the QDR will also focus on terrorism and developing new ways to counter catastrophic, disruptive and irregular threats. A second area likely to be reviewed is post-combat stability operations. It is imperative that Navy Medicine pursue research and force protection initiatives, and develop and resource the necessary health services capabilities to effectively respond to these QDR concerns.

Homeland Defense

Navy Medicine's approach to homeland defense and disaster management has evolved significantly since 9/11. We launched three major initiatives, focusing on the major components of disaster preparedness: staff, supplies and systems.

Using the Strategic National Stockpile as a model, we are planning for additional equipment to enhance local Military Treatment Facility (MTF) capabilities. We have also developed a successful multi-service online medical and emergency management educational tool, as well as an Emergency Management Program Readiness Course that has become the DoD medical training standard.

In order to assess our level of readiness to respond to a disaster situation, the Disaster Preparedness, Vulnerability Analysis, Training and Exercise (DVATEX) program was developed to evaluate and test military, federal and local community responsiveness. DVATEX includes an MTF threat vulnerability and capability assessment, and provides training in medical and operational management.

Collaboration with civilian and other federal hospitals is essential for effective disaster response. The National Naval Medical Center, the National Institutes of Health and the Suburban Hospital Healthcare System in Bethesda, Maryland, formed a disaster preparedness and response coalition which recently conducted a joint disaster drill involving county and municipal emergency response organizations and other members of the local area hospital network.

Relevant Research And Medical Intelligence

People remain the most valuable and vulnerable part of our nation's military strategy. Through scientific discovery and innovation, Navy Medical Research and Development is striving to transform Navy Medicine into a defensive weapon system designed to protect the health and readiness of our people. Uniformed and civilian researchers are seeking affordable solutions to promote health and fitness, protect people from injury and disease, and effectively reduce, manage and rehabilitate casualties.

These technological advances promise to accelerate scientific discovery and develop applications in areas of medicine that have been intellectually challenging and unsolvable for many years. We need to invest in military medical research and development and continue to build cooperative relationships with the other military services, federal and local agencies, universities and industry. At the same time, we must continue improving the business practices of our research and development programs.

Priority 2: Provide Quality, Economical Health Services

Through careful business planning, Navy Medicine has aligned MTF operations to support quality, cost-effective health care. Our focus is the preservation of health, and the prevention of disease and injury-not just periodic, episodic disease care management. Our primary beneficiary population is healthy active duty Sailors and

Marines. Navy Medicine strives to obtain long-term value through disease prevention and increased quality of life.

Guided by Navy Medicine leadership, last year each MTF developed a comprehensive business plan focused on improving population health, while meeting operational readiness requirements. These plans emphasize areas such as pharmacy management, clinical productivity, implementation of evidence-based medicine, advanced access, seamless referral management and contingency planning. Navy Medicine is creating a system enabling MTF commanders to monitor their performance in these areas. This will allow hospital commanders to balance measures of operational readiness, customer satisfaction, internal efficiency and human capital development.

This year each MTF business plan includes a preventive health initiative with the goal of exceeding national measures of breast health promotion, long-term asthma management and control of diabetes. Navy Medicine leadership has developed guidelines for these Navy-wide efforts, conducted a business case analysis, and created a web-based Population Health Navigator to monitor performance in these areas. Next year we are expanding our efforts to address obesity, lack of exercise and tobacco use, thereby reducing the risk of long-term disabling illness.

Priority 3: Shape Tomorrow's Force

In concert with Navy leadership's emphasis on Human Capital management, Navy Medicine has embarked on a rigorous campaign to ensure we shape tomorrow's Navy medical force by retaining, training and recruiting the best.

Navy Medicine is deployed afloat and ashore in five geographic regions, providing preventive medicine, combat medical support, health maintenance, medical intelligence and operational planning. This operational tempo, along with the nature of casualties from Operation Iraqi Freedom, has created new demands for medical personnel in terms of numbers and specialty mix. Emerging missions such as humanitarian operations, regional maritime security, detainee care and homeland defense place additional requirements on shaping the medical force of the future. In the future, our uniformed personnel will participate in increasingly complex joint environments, and move efficiently between forward deployed settings and fixed facilities. We must be proficient and productive at the right cost.

Managing Manpower Costs

We are analyzing our military and civilian communities of medical and dental providers to ensure we meet operational requirements at optimal efficiency. As we forecast skill needs and identify talent gaps, we are focused on achieving a relevant sea-centric uniformed component and an agile



Hospital corpsman 1st class Jay Ferguson calls for relief while performing cardio pulmonary resuscitation on a patient aboard USS NIMITZ in support of OIF.

(Navy photo by photographer's mate 3rd class Elizabeth Thompson)

civilian workforce which fully supports shore activities. We are consolidating five medical job classifications into a single Surgical Technician specialty, and merging our separate enlisted Hospital Corpsmen and Dental Technician specialties into a single rating. Additionally, the highly specialized skills required of dialysis, cardiovascular and dermatology technicians will be provided by civilians.

In 2004, we successfully integrated our dental and medical facilities to reduce command and control infrastructure and administrative overhead costs. Over 95 per cent of our dental and medical treatment facilities were situated in close proximity with more than 90 duplicative administrative functions. This integration effort clearly aligns Navy Medicine with Navy's vision of a more efficient and cost effective force.

Over 1,700 non-readiness related military positions are being converted into civilian or contract positions in 2005. We want to ensure that operational requirements are fulfilled by uniformed personnel-while determining those functions that can be performed by civilian or contractor personnel. The primary consideration when determining potential conversions is that military manpower must contribute to our ability to deliver credible combat power. Our intent is not to eliminate positions, but rather to reduce the utilization of active duty personnel performing non-readiness functions.

The Right Training, At The Right Time

A key measure of success in shaping Navy Medicine for the future is the quality and innovative delivery of education and training provided to medical personnel-the right training, at the right time. Streamlining our education and training assets have served us well as we have embraced new technologies and methods of learning.

Learning Continuums-roadmaps of knowledge delivered to Sailors throughout their careers-have blended learning concepts for Navy Medicine personnel. By creating courses in stages and delivering them remotely via Navy Knowledge Online, with classic on-site instruction, our Sailors receive instruction where they are in a timely fashion. This is efficient, not only in the sense that personnel can receive just in time training with computer/Internet access, but it also significantly reduces the cost of shepherding service members to various training locations.

The impact of these new technologies will have a profound impact upon the delivery of training and in saving money and time in training. A great number of recruits are entering the Navy with advanced skill sets and certifications, including emergency medical technician and nursing degrees. Our educators determined that these personnel possess the qualifications to join the fleet sooner and were, in essence, being held back by the length of the curriculum. By incorporating web-based technology, these students, on average, are able to complete their entire basic curriculum in 45 days.

We continue to study the value of advanced simulation training for our health care providers. By introducing simulated patients into the training curriculum, medical personnel are able to practice learned skills in an environment that will prepare them for real world situations.

Finally, our Graduate Medical Education consists of 45 residency training programs and 14 fellowship training programs to support our operational requirements. These programs range from the operationally based Residency in Aerospace Medicine to Radiographic Imaging. Additionally, 140 physicians participate in full-time out-service

training in specialties not offered through Navy programs. At any given time, approximately 25 per cent of the Navy's Medical Corps is in training.

Priority 4: One Navy Medicine-Active, Reserve and Civilian

Navy Medicine is comprised of tremendously talented individuals-active, Reserve and civilian.

Navy Medicine is one team. We will continue to integrate the talents and strengths of our entire workforce to accomplish our mission of Force Health Protection.

One of our goals is to better utilize the expertise of our Reserve force by increasing integration with the active duty. We no longer have separate active and Reserve fleet hospitals but rather one fleet hospital system where Reservists work side-by-side with active duty personnel. When 1,100 active duty medical personnel left the National Naval Medical Center in Bethesda to deploy aboard the hospital ship USNS COMFORT, they were replaced by Reservists who kept the hospital functioning at the same high level of performance.

Reservists comprise 20 per cent of Navy Medicine's manpower resources and their seamless integration with our active duty force is a major priority in achieving our "One Navy Medicine" concept. Through an innovative Medical Reserve Utilization Program (MEDRUP), the Navy's Medical headquarters-the Bureau of Medicine and Surgery (BUMED)-assumes operational control of medical Reservists recalled to active duty. BUMED also provides medical readiness support to the Navy's 75,000 Reservists through medical exams, dental exams and a health lifestyle promotions program which increases Reserve force readiness.

The Medical Reserve Utilization Management Information System (MEDRUPMIS) searches a variety of Reserve and active duty databases, matching personnel to requirements, based on qualifications, availability and other criteria. Over 6,000 Navy medical Reservists are managed by the MEDRUPMIS system, maximizing them as a force multiplier. This utilization system has proven to be indispensable in employing Reservists in support of the global war on terrorism. During OIF, over 2,400 Reservists have mobilized in support of Navy Medicine.

Priority 5: Delivery Of Joint Defense Health Services

Our final priority concerns how we jointly operate with the Army and Air Force. Ideally, all American medical personnel on the battlefield-regardless of service affiliation-should have the same training, use the same communications system and operate the same equipment because we are all there for the same reason-to protect our fighting forces. It does not matter whether the casualty is a Soldier, an Airman or a Marine. The individual should receive the same care, and service medical personnel should be trained similarly to provide this same level of care.

Together with our service counterparts, Navy Medicine is looking to standardize operating procedures to ensure consistency of care and interoperability of our medical forces.

An area in which we are working to improve upon with the Army and the Air Force is the link between initial treatment on the battlefield and medical evacuation out of theater. Our goal is to move patients as expeditiously as possible and provide the highest level of care enroute. Rapid resuscitation capability is always available on the battlefield, but one of our emerging challenges is consistently providing

standardized, high acuity care at each stage of evacuation. The National Naval Medical Command in Bethesda has received over 1,000 casualties from Operation Iraqi Freedom. Many of these casualties came to Bethesda from Iraq and Kuwait-via the Army's Hospital in Landstuhl, Germany-in as little as two days. This is tremendous performance and we are working to refine processes, equipment and training, and standardize our joint operating procedures to ensure this level of performance from our medical evacuation system becomes the norm.

Finally, together with our Service counterparts, we are working to fully integrate in local, state, and federal agencies to be trained and ready to respond to homeland security threats.

Conclusion

Our Nation is at war against threats that demand our best efforts and innovative leadership. Navy Medicine has been extraordinarily successful, and we have opportunities for continued excellence, both in the business of preserving health, and in the mission of supporting deployed forces and protecting our citizens throughout the United States. Our Sailors and Marines, as well as the beneficiary population we serve, deserve no less than the absolute best health care we can provide.

Heroes On The Battlefield

The war in Iraq had just begun, and 29-year-old Hospital Corpsman Brian Alaniz, assigned to the 3rd Battalion, 7th Marines, was doing what the Navy had trained him to do-taking care of "his Marines." So when one of them stepped on a landmine March 21, 2003, Alaniz rushed to his side and began to administer medical care.

His efforts, however, had brought him into harm's way.

He felt a blast beneath him and knew immediately what had happened. Alaniz had stepped on a landmine which shattered the bones in his right leg, making it impossible to repair. He had only been in Iraq for four hours, and his right leg was gone forever.

Alaniz, who has gone on to continue serving in the Navy with the aid of a prosthetic leg, is one of many heroes whose stories were born of bravery in battle and dedication to duty, despite the personal costs.

Unfortunately, not all of Navy Medicine's heroes have survived their injuries. During the Global War on Terrorism, five Navy corpsmen have made the ultimate sacrifice, giving their lives in service to our Nation: Chief Matthew J. Bourgeois of Tallahassee, Fla.; Petty Officer 3rd Class Michael Vann Johnson of Little Rock, Ark.; Petty Officer 3rd Class Fernando A. Mendez Aceves of Ponce, Puerto Rico; Petty Officer 3rd Class David J. Moreno of Gering, Neb.; and Petty Officer 3rd Class Julian Woods of Jacksonville, Fla.

More than a dozen corpsmen have committed acts of selfless bravery, resulting in the award of the Bronze Star Medal. Many more corpsmen have Purple Hearts. At least two have Silver Stars and one Sailor has earned the Navy Cross, our nation's second highest award for valor, and an award which no other corpsman has earned in the past 30 years. In fact, throughout our history, more Navy corpsmen have been awarded Medals of Honor, than any other specialty in the Navy.

The following are brief summaries of extraordinary heroism by Navy corpsmen in the GWOT.

Hospitalman Luis E. Fonseca, Jr., a 23-year-old corpsman, was awarded the Navy Cross for saving the lives of several wounded Marines March 23, 2003. Despite intense rocket-propelled grenades and being under machine gun fire, Fonseca organized litter teams and directed the movement of four of the Marines, while personally carrying one wounded Marine over open ground to safety.

Hospital Corpsman 3rd Class Thomas Smith received the Bronze Star Medal (with Combat Distinguishing Device) May 2004 for putting his life on the line several times to save the lives of eight Marines while under enemy fire April 4-5, 2003.

Hospital Corpsman 3rd Class (FMF) Chad Peabody was awarded the Bronze Star Medal with Combat Distinguishing Device in a ceremony late August for heroism during a convoy attack in Iraq April 9, 2004.

Navy Medicine's list of heroes continues to grow with the names of men and women who serve alongside the Marine Corps, in the field and throughout the fleet. These brave Sailors have exemplified the well-known saying that "a Marine never takes a hill out of the sight of a Navy Corpsman."

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