ARMY MEDICAL DEPARTMENT SUPPORT TO STABILITY OPERATIONS

by

Colonel Kimberly K. Armstrong
United States Army

Colonel Robert Driscoll
Project Adviser

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We live in an uncertain world and military force is frequently used to shape the international environment in support of our National Security Strategy. With weak and failing states serving as havens for our adversaries, the United States has embraced a policy to support democratic movements with the ultimate goal of ending tyranny. To achieve this goal, all elements of national power are drawn upon to stem instability and thwart enemies who wage asymmetric warfare across a transnational landscape.

The Army Medical Department (AMEDD), with a proud tradition of peacekeeping and humanitarian missions, is an important war-fighting weapon in its own right. As combat turns to peacemaking and nation building, the AMEDD comes into its own for solving health problems in the area of operations and for winning the hearts and minds of the local population. With the world in an increasingly precarious state, the AMEDD plays a significant role in achieving US national interests.

This paper looks at the AMEDD’s role in stability operations. This includes an overview of the current environment and doctrine, the AMEDD’s involvement in past missions, current and future challenges, and what AMEDD initiatives may be needed to prepare for the uncertainties that lie ahead.
ARMY MEDICAL DEPARTMENT SUPPORT TO STABILITY OPERATIONS

We live in an uncertain and volatile world and military force is frequently used to shape the international security environment in support of the objectives of the National Security and National Military Strategies. With weak, failing, and failed states serving as havens for our adversaries, the United States (U.S.) has embraced a policy “to seek and support democratic movements and institutions in every nation and culture, with the ultimate goal of ending tyranny in our world.”¹ To achieve this goal, all elements of national power are drawn upon to stem instability and thwart enemies who employ irregular tactics, terror, and asymmetric warfare across a transnational landscape.

Military force, one element of national power, “Can expect to remain fully engaged globally for the foreseeable future not only in winning wars but also in assisting to stabilize, secure, transition and reconstruct weak, failing, and failed states.”² The Department of Defense (DOD), undergoing Transformation to meet these challenges, has recently deemed stability operations as a “core mission” and elevated it to the same priority of importance as combat operations.³ Stability operations, more commonly known as low-intensity conflict, counterinsurgency, or humanitarian missions, are not new, as the military has conducted these missions for years. “What is new is the realization that they play an essential role in shaping the strategic environment, winning wars and securing peace.”⁴

Landpower, specifically the U.S. Army, is crucial for this new grand strategy since it is the main tool by which aggressive or conflict-ridden states can be transformed into stable ones.⁵ The Army Medical Department (AMEDD), with a proud tradition of international peacekeeping and humanitarian missions, is an important war-fighting weapon in its own right. “As combat turns to peacemaking and nation building, the AMEDD comes into its own as a commander’s tool for solving health problems in the area of operations and for winning the hearts and minds of the local population.”⁶ With the world in an increasingly precarious state, the AMEDD plays an increasingly significant and vital role in achieving US national interests. However, the AMEDD cannot do this without tremendous and extensive coordination with all elements of national power to include members of the international community. How the AMEDD fits into the stability operations matrix is the purpose of this treatise.

This paper will look at the AMEDD’s ability to successfully conduct medical support to stability operations. This includes an overview of current security realities facing the U.S. and international community, stability operations and military doctrine, a review of the AMEDD’s involvement in past operations, a discussion of current operations and challenges, and the
issues that lay in wait as the DOD continues to refine its concept of stability operations. Finally, practical recommendations for strategy makers will be offered as we continue to plan for the uncertainties and opportunities that lie ahead.

The Current Security Environment

Today’s international security environment is fraught with danger from every conceivable angle. Since the end of the Cold War, terrorism, weapons of mass destruction, drug trafficking, radical fundamentalism, economic collapse from failing states, environmental degradation, ethnic cleansing, and armed conflict over increasingly scarce resources have emerged to occupy a void previously filled by the stalemate between the U.S. and Soviet Union. “Of the 55 peacekeeping operations that the United Nations (UN) has mounted since 1945, 41 (or nearly 80%) began after the end of the Cold War.”7 Seventeen of these missions, with 66,000 troops committed, were still under way as of July 2005.8 Unfortunately, these new threats have already shaped the dynamics of the 21st century as State and more non-State actors continue to pursue agendas designed to disrupt global stability in order to achieve their objectives.

Humanitarian crises contribute to growing global instability by decimating whole populations and serving as breeding grounds for the disenchanted. Acquired Immunodeficiency Syndrome (AIDS), with 25 million dead and another 40 million infected, continues to spread at an alarming rate and nervous eyes are turned toward an anticipated influenza pandemic that could take up to 300 million lives.9 Over 1 billion people live in poverty (defined as making less than one dollar a day) and 798 million men, women, and children suffer from chronic malnutrition that often comes in the aftermath of natural and man-made disasters.10 According to the World Hunger Organization, an estimated 4.5 million refugees continue to search for a safe haven in an increasingly hazardous world.11

Humanitarian and civic assistance, frequently spearheaded by the UN’s Office for the Coordination for Humanitarian Affairs (UNOCHA), has emerged as a fulltime calling and the volume of need has turned some volunteer non-governmental organizations (NGOs) into international industries wholly dedicated to relieving human suffering. However, more and more humanitarian missions are being thwarted by dangers inherent in unstable regions. In twenty current conflict zones, humanitarian access is restricted by actors willing to condemn civilian populations to protracted and unmitigated suffering.12

All of these perils are transnational in nature, not easily contained within established geopolitical borders, and represent significant and very real threats to the U.S. To meet these threats, the President, in his National Security Strategy, emphasizes many tasks that the U.S.
must accomplish. One such task is “transforming America’s national security institutions to meet the challenges and opportunities of the 21st century.” Stability operations, a new focal point in the U.S. Army’s repertoire to bring about peace, are part of that transformation.

**Stability Operations and Current Military Doctrine**

“Over the past decade and a half, there has been an evolution in the vocabulary used to refer to activities that are undertaken to maintain, enforce, promote, and enhance the possibilities for peace in unstable environments.” Peacekeeping, humanitarian, disaster, refugee, and security assistance missions, post conflict operations, nation building, low intensity conflicts, stabilization and reconstruction are all just examples of terms that have seen use in the media but now fall under the broader category of stability operations in Army doctrinal terms.

DOD Directive 3000.05 defines stability operations as “military and civilian activities conducted across the spectrum from peace to conflict to establish or maintain order in States and regions.” It then defines military support as those DOD “activities that support U.S. Government plans for stabilization, security, reconstruction and transition operations (SSRTO), which lead to sustainable peace while advancing U.S. interests.”

Joint Publication 4-02, Health Service Support, specifies that:

Stability operations encompass various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief.

It further describes the medical aspects of stability operations as those activities that establish, enhance, maintain, or influence relations between military forces and host nation, multinational governmental and civilian populace in order to facilitate military operations, achieve U.S. objectives, and positively impact the health sector.

The main point is that stability operations, previously designated as Phase IV (post-conflict) on contingency and operational plans, have assumed a new posture that encompasses activities that run the entire spectrum of operations in both peace and war. This change, and its elevation to a core mission on the same level of importance as combat operations, is a very significant paradigm shift for U.S. forces. However, for the Army medical community, this emphasis on stability operations in all of its different flavors represents a continuation of business as we have always done it.
History of AMEDD Participation in a Range of Stability Operations

Historically, the mission of the AMEDD has been “to conserve the fighting strength” of our fighting forces. But the AMEDD also has a long and proud history of providing medical care and assistance to indigenous populations caught in the crosshairs of conflict or disaster. A selection of various operations since the dawn of the 20th century show the extent and breadth of the AMEDD’s role in a wide variety of humanitarian, peacekeeping, security assistance, and nation building activities – now known as stability operations.

During the 1898 Spanish American War, Army medical personnel were employed in widespread efforts to control contagious diseases in Cuba, Puerto Rico, and the Philippines. Direct care was provided to the civilian population and an extensive public health campaign was initiated to eliminate bubonic plague, vaccinate against smallpox, and institute measures for a safe water supply. Lieutenant General Arthur MacArthur, military governor of the Philippines, “Felt that medical care was significant in winning over the urban population, depriving the guerillas of their support base and supplies necessary to continue the fight and securing victory.” Like his father did in the Philippines, General Douglas MacArthur oversaw similar projects throughout post-World War II Japan. Through the herculean efforts of Brigadier General Crawford Sams and his medical staff, nationwide programs were created to control disease, deliver relief assistance, and reform the infrastructure of the medical education system. Their labors raised the standards of knowledge and practice for all Japanese medical professionals and provided a new framework for public health and welfare across the entire nation. These initiatives greatly contributed to the recovery of the country and to the good will that continues today between the citizens of Japan and the U.S.

After World War I, Army medical missions became part of larger and more comprehensive relief efforts to reduce disease and starvation among the citizens of Europe. These activities reflected President Woodrow Wilson’s philosophy to employ humanitarian and civic assistance to “prevent civil disintegration, preserve world order, and thereby check the spread of bolshevism.” The Army continued to conduct small foreign assistance missions during the years preceding World War II, but disasters across the U.S. kept most forces occupied with relief efforts at home.

Following World War II, international medical relief efforts resumed across Europe and Japan with the addition of new initiatives to support the rebuilding of nations impacted by the war. Prior to the outbreak of hostilities on the Korean peninsula, the U.S. Army established a Korean Army Medical Field Service School staffed by Army medical instructors. Done to counteract the shortage of doctors and nurses when expatriate Japanese healthcare
professionals returned home after the war, the Department of the Army also allocated a number of spaces for Republic of Korea personnel to attend medical and nursing schools in the U.S.\textsuperscript{28} Thus with a strengthened Korean infrastructure, Army medical forces only needed to serve in an advisory capacity when the war broke out. Following the end of hostilities, programs were expanded and “it was Medical Corps Colonel Wallis Craddock’s belief that while the military had halted Communist aggression on the peninsula, lasting friendship of the Korean people stemmed from the medical aid program, not military achievement.”\textsuperscript{29}

In the fight against Communism, “American medicine offered a means of demonstrating the superiority of the American system and building the strength of the free world.”\textsuperscript{30} In 1961, Major General Leonard Heaton, Surgeon General of the Army, advocated a policy “of employing American medicine “to improve our relations with the free nations of the world, in particular the underdeveloped countries.”\textsuperscript{31} General Heaton argued that adopting this endeavor “would help remove the sources of totalitarianism and thereby make America more secure in its freedom.”\textsuperscript{32} Throughout the 1950s and 1960s, Army medical personnel responded to floods, earthquakes, and other disasters throughout Central and South America, Northern and Southern Europe, the Middle East, North Africa, Eurasia, and Southeast Asia.\textsuperscript{33} Unfortunately, most of these humanitarian efforts were overshadowed by the events unfolding in a small country called Viet Nam.

The war in Viet Nam was one of the most galvanizing events of the 1960s and again Army medicine played a key role as an instrument of national policy. Between 1963 to 1971, there were almost forty million encounters between American medical forces and Vietnamese civilians via a variety of Medical Civic Action Programs (MEDCAP).\textsuperscript{34} This did not include the extensive number of medical activities conducted by Special Forces (SF) teams from the earliest days of U.S. involvement that were outside the purview of the MEDCAP program.\textsuperscript{35} MEDCAP programs emphasized sanitation, disease prevention, direct patient care, and the establishment of education and training programs for health care providers. The overarching goals of the many different MEDCAP programs were the following: (1) to help make the Vietnamese capable of maintaining a satisfactory level of preventive and therapeutic medicine; (2) to enhance the prestige of the government of Vietnam; and (3) to win the hearts and minds of the Vietnamese people to help halt the spread of Communism and bring about a successful resolution to the war.\textsuperscript{36} Though the many medical assistance programs were plagued with unending challenges, and the overall outcome of the war has yet to be reconciled by the consciousness of the American public, an unprecedented volume of humanitarian services were successfully delivered to a population of people in desperate need.
In 1983, the AMEDD established a presence in Honduras with many of its programs still in effect today. Though care for U.S. troops remains the first priority, the medical element at Joint Task Force Bravo (JTF-B) has enjoyed over 20 years of service to the people of Honduras as well as neighboring El Salvador. These services, similar to the MEDCAP programs in Vietnam, include Medical Readiness Training Exercises (MEDRETE), Immunization Readiness Exercises (IMRETE), and other specialty programs focused on educating local Honduran healthcare providers. The name change to readiness exercises emphasizes the value of the medical training to the U.S. medic. This is important as in peacetime, training is a key factor and ‘readiness’ the byword necessary for funding. “However, this wording obscures the great value these exercises have as part of counterinsurgency and civil affairs efforts.”

During the 1990’s, multiple military operations were launched to provide security and stability to volatile regions in northern Iraq (Operation Provide Comfort in 1991), the Balkans (Operation Provide Promise in 1992), Somalia (Operation Restore Hope in 1992), Haiti (Operation Uphold Democracy in 1994), and Kosovo (Operation Allied Force in 1999). Medical assets were deployed in support of U.S. troops but the missions eventually evolved to where personnel were providing medical humanitarian and civic assistance. It was also during this decade that the AMEDD began a medical reengineering initiative (MRI) to incorporate new Defense Planning Guidance that required the DOD to prepare for two simultaneous major regional conflicts as well as small-scale contingencies and operations other than war (OOTW). The Surgeon General’s goal was to 1) reconfigure the Army’s combat health support programs based on lessons learned from 1991’s Operation Desert Storm while 2) anticipating force structure changes necessary for OOTW that were anticipated in the future based on changes in the post-Cold War environment. The MRI initiative, along with the humanitarian aid rendered during these operations, served as a portent for the challenges that the AMEDD would face in the early years of the 21st century.

Now in the United State’s fifth year of fighting the Global War on Terror, and with major hostilities still continuing in both Afghanistan (Operation Enduring Freedom - OEF) and Iraq (Operation Iraqi Freedom - OIF), AMEDD personnel and her coalition partners continue to provide major assistance in support of stabilization operations. Though hampered by challenges from growing insurgencies, massive efforts continue that range from the provision of direct health care to the rebuilding of hospitals and clinics and the training of medical personnel to staff them. Medical humanitarian and civic assistance, considered a low-density, high demand capability, is a major component of stability, security, transition, and reconstruction operations (SSTRO) in both countries and a vital component in helping the U.S. achieve its
strategic aims. Challenges faced in these current operations, and in the assistance missions discussed below, will be discussed in a later section of this paper.

Despite being engaged in two simultaneous wars in Afghanistan and Iraq, the DOD continues to support a wide range of health related activities in support of global U.S. interests. Conducted under the auspices of the DOD’s Overseas Humanitarian Disaster and Civic Aid (OHDACA) program, these activities include short term direct patient care, civic action plans, excess medical property sales, medical readiness training, host nation joint training exercises, bilateral training agreements and exchange programs, mobile training teams, humanitarian and civic assistance, disaster relief, and preventive medicine efforts such as the ongoing AIDS program in Africa. The OHDACA program, carried out in support of each combatant commander’s Theater Security Cooperation plan, helps the U.S. maintain a robust overseas presence aimed at shaping the international security environment in a manner that deters would-be aggressors, strengthen friends and allies, and promotes peace and stability in regions of tension. Although operational deployments (such as OEF and OIF) are well described in extensive international media coverage, deliberately planned humanitarian and civic assistance under OHDACA projects is less well known, even to many U.S. military forces.

Finally, the AMEDD and her sister services have played an increasingly prominent role in health sector mitigation in large-scale international natural disasters. Public health services were a significant part of the military’s response to the Asian Tsunami in December 2004 and the Pakistan Earthquake in October 2005. These were in addition to the ongoing health sector stabilization and reconstruction efforts in Afghanistan and Iraq. Despite the DOD and AMEDD’s long history of involvement in various disaster operations, the magnitude of these recent events, and their ability to destabilize already “at risk” regions of the world, has led to an increased emphasis on civil-military medicine as emphasized by DOD Directive 3000.05, Stability Operations.

Challenges from Current Medical Stability Operations

The AMEDD has emerged from recent operations with a substantial record of success in caring for deployed military forces. In OEF and OIF alone, over 90 percent of military personnel wounded on the battlefield survive as a direct result of Army, Air Force, and Navy medical personnel working together in unprecedented ways. Despite this success, the Army and her sister services continue to face new responsibilities and challenges that extend beyond the immediate mission of caring for military personnel. The following section details some of these
challenges within the realm of stability operations and what, if anything is being done to address them.

Medical Force Structure and Doctrine

In recent contingency operations, U.S. Army medical personnel have increasing absorbed expanded responsibilities beyond those in their current doctrinal combat mission. This is producing new challenges for force structure and doctrine, especially as it pertains to the provision of direct patient care and services.

Combat Support Hospitals (CSH), designed to support U.S. military forces in major combat operations, are configured based on calculations from historical casualty data. This information is then used to design, structure, and predict requirements for current and future operations. However, casualty patterns and patient populations have changed forcing medical units in the field to adapt from their doctrinal guidelines. Equipped to manage young healthy adults with combat related injuries, CSHs in Afghanistan and Iraq found themselves lacking pediatric, geriatric, obstetric, and gynecologic equipment and the expertise needed to conduct stability operations. They also faced patients with chronic illnesses, many of who required long-term medical management and pharmaceutical support, services the CSHs were not doctrinally prepared to carry out. The 212th Mobile Army Surgical Hospital (MASH), sent on a disaster response mission to Pakistan following a devastating earthquake in October 2005, also reported the same limitations and eventually replaced some of their trauma specialists with primary care providers to better manage the requirements of their humanitarian mission.

In anticipation of post-conflict support to local Afghani and Iraq populations, many CSHs temporarily split their organizations into smaller slices to better serve the surges of the military and local populations within their area of responsibility. But most CSHs never regrouped during their entire deployment as they found themselves with an unanticipated mission - caring for an additional volume of Department of the Army civilians, contractors, and members of non-governmental organizations (NGOs). Though a myriad of rules exist regulating healthcare eligibility for these civilian groups, more often then not, services were provided when the sick and or injured presented themselves for care. The volume of detainees and enemy prisoner of war (EPW) patients also exceeded workload projections and severely stressed the clinical and logistical ability of the CSHs to deliver care. To date, civilian, local national, and detainee/EPW patients occupy approximately 75 percent of all CSH beds in both theaters.

To tackle these inconsistencies between new doctrine and force structure, the Department of Combat Development and Doctrine (DCCD) at the AMEDD’s Center and School, is working
closely with the Army’s Training and Doctrine Command (TRADOC) and the U.S. Joint Forces Command, to adjust the structure of all CSHs. Using the Force Design Update Process, DCCD is attempting to document the requirement for CSHs providing hospitalization and outpatient services not only to military personnel, but also to civilians, contractors, local nationals, NGOs, detainees, and EPWs in support of SSTRO.\textsuperscript{57} This includes a restructured design that allows CSHs to function as split entities (versus the current ad hoc model that limits capabilities) and the addition of specialized personnel, bed space, and equipment to support expanded SSTROs. However, this force structure redesign increases personnel and equipment costs that have yet to be approved by the Department of the Army. In the interim period, CSHs in theater are still forced to piecemeal medical providers and submit requests for specific equipment and supplies based on their emerging SSTRO mission.\textsuperscript{58}

Despite the uncertainty of the new CSH design, DCCD has worked closely with the U.S. Army Medical Material Agency to develop humanitarian and civic assistance equipment sets in support of other types of Stability Operations. These sets include separate pediatric, surgical, and adult modes with enough humanitarian equipment and supplies to sustain a patient population of 10,000 for a period of 10 days without re-supply.\textsuperscript{59} These sets are effective immediately and will be added to the existing CSH structure, and incorporated into the future CSH design, once the type of humanitarian or SSRTO mission is identified.\textsuperscript{60} However, additional personnel requirements (specific clinical specialties) are still being documented and the Army will continue to use lessons learned to modify unit structure as needed to support particular humanitarian missions.\textsuperscript{61}

Education and Training for Medical Stability Operations

Within the past five years, the AMEDD has invested tremendous energy and resources into preparing its medical personnel for their combat trauma mission.\textsuperscript{62} Current clinical programs offered by the AMEDD and the Defense Medical Readiness Training Institute include the Combat Lifesavers Course, the Joint Forces Combat Trauma Management Course, the Advanced Burn Life Support Course, the Trauma Nursing Core Course, the Combat Casualty Care Course, the Emergency War Surgery Course, and the Tactical Combat Medical Course. These formalized programs of instruction do not include the profusion of additional workshops and seminars offered at military installations across the globe. It is because of this training, and the healthiness of our young military forces, that 90 percent of them now survive their battlefield injuries.\textsuperscript{63}
Despite this success, AMEDD personnel found that they were not so well prepared to conduct medical operations in support of indigenous populations. Some problems were due to a lack of available clinical expertise (i.e., no obstetric or gynecology providers in a CSH) while at other times it was uncertainty in how to provide care to those patients who required long-term management for chronic diseases (such as kidney failure) in a country that lacked a functioning medical system. In some cases it was confusion over the scope of care that should be provided. Should it be to U.S. or local standards (which might be significantly less than U.S. standards) and who should make and implement that decision across the spectrum of operations? This is a question that still needs to be resolved. Finally, there was lack of expertise in caring for diseases rarely seen within the United States or in the military healthcare system. Some of these diseases included cholera, diphtheria, leishmaniasis, malaria, measles, pertussis, poliomyelitis, schistosomiasis, typhoid fever, and the chronic malnutrition that often accompanies populations under stress. A recent study on the perceived level of preparedness of deployed internal medicine physicians confirmed this when all respondents (n=89) stated that additional training was needed, especially in the areas of tropical disease management, sanitation procedures, and the practices and standard of care of civilian humanitarian workers (international NGOs).

Humanitarian and civic assistance and health sector support has not typically been the AMEDD’s “day job” despite a long history of participation and enthusiasm on the part of medical community. When conducted, these missions have typically been contingency-based and time limited for short-term relief or crisis response. Because combat medicine remains the primary focus for health care providers preparing for deployment, the AMEDD is limited by insufficient education and training opportunities in the health aspects of natural disasters and ongoing post-conflict settings requiring extensive SSTRO. Though the Army has experienced preventive medicine teams, their efforts are focused on keeping U.S. forces safe and reducing disease, non-battle illnesses (DNBI). To support local populations in crisis, more trained primary care and preventive medicine specialists will be needed, especially if the military is expected to engage in more major humanitarian efforts such as refugee movements, displaced persons (DC) camps, and natural disasters.

A review of various military medical educational facilities reveals a paucity of programs available to prepare AMEDD personnel for the demands of stability operations. The AMEDD Center and School does not have any programs in development to address SSTRO nor has it received any funding to do so despite the DOD’s directive to ensure that DOD medical personnel and capabilities are prepared to meet military and civilian health requirements in
stability operations.” To fill this gap, and as a result of personal experiences assisting in disaster relief, several military pediatricians at the Uniformed Services University of Health Services (USUHS) designed the Military Medical Humanitarian Assistance Course. The two-day course is designed to train U.S. military healthcare providers how to deliver optimal medical care under austere conditions to civilian populations, primarily women and children, in the aftermath of humanitarian emergencies. While a phenomenal course, the program is not highly visible and is only offered six times per year. Also at USUHS is the Center for Disaster and Humanitarian Assistance Medicine (CDHAM), which was established “to become the Department of Defense’s focal point for medicine in nontraditional military operations and missions.” Though mainly a research organization, CDHAM does conduct some classes for USUHS medical and graduate nursing students but to date no other formalized courses are available to military personnel. Finally there is the DOD’s Center of Excellence in Disaster Management and Humanitarian Assistance (COE-DMHA) located at Tripler Army Medical Center in Hawaii. Created in 1996, the COE-DMHA’s goal is to improve civil-military coordination internationally, particularly for humanitarian and civic assistance, disaster management, and peacekeeping through training and education programs, consultations, and information sharing. The COE-DMHA offers a variety of valuable courses for medical personnel but they are expensive (around $5,000 to $10,000 per individual) and some have not been offered within the past two to three years.

The international medical community hosts an expansive variety of courses and references regarding disaster and humanitarian support but the costs are usually prohibitive for large-scale training. Many Army professionals seek this information on their own but it is clear that the AMEDD needs to take a more formalized approach to this training process in order to prepare medical personnel for all of the complexities associated with stability missions.

Financing Medical Care during Stability Operations

Various funding sources exist to support foreign humanitarian and civic assistance activities and AMEDD personnel face new challenges in understanding the appropriate source and application of each stream. Funds available for stability operations include Title 10 United States Code (USC) dollars (only under stringent conditions as these funds are appropriated to train, equip, and sustain U.S. forces), Title 22 USC dollars (foreign nation support such as those used to conduct medical readiness training exercises and disaster relief), and the current combat zone Commander’s Emergency Response Program (CERP). Laws exist regarding usage of funds (Title 10 versus Title 22) and much confusion surrounds the appropriate
application of these laws. Recent examples from Bosnia and Afghanistan highlight these challenges.

During a typhoid outbreak in Bosnia, a combatant commander prohibited medical personnel from vaccinating the indigenous population for fear of violating Title 10 USC. He was unaware that medical supplies and equipment could be used in a humanitarian emergency and without Secretary of Defense approval. This caused a diplomatic as well as humanitarian crisis that could have been avoided with a better understanding of the code. Professor Flavin, of the U.S. Army Peacekeeping and Stability Operations Institute, states that hesitancy to act for fear of violating the law is a common problem among operational commanders and AMEDD personnel must be well versed in Title 10 USC in order to appropriately advise them. On the other hand, he also stated that it was not uncommon for inexperienced AMEDD personnel, with their altruistic nature, to unknowingly violate Title 10 USC by distributing large amounts of medical materials (i.e., to stock a small clinic) that could have been obtained through other sources. De Minimus activities under Title 10 USC allow personnel from medical units (one or two providers) to examine local persons for a few hours or provide limited immunizations. Many units provide care under this provision.

In Afghanistan, the U.S. Agency for International Development (USAID) built a dispensary but did not have any funds to stock the facility with medical equipment and books. Title 10 USC funds could not be used (not a humanitarian emergency) so the local medical unit was instructed to apply for an exception to policy to use Title 10 USC funds or Title 22 USC funds through the Overseas Humanitarian Disaster and Civic Aid program (OHDACA) and Foreign Excess Property program. The medical unit, frustrated by the long delays and labyrinth procedures, wrote home to their local communities to collect books and equipment for the dispensary – all of which was eventually delivered to Afghanistan by the U.S. Post Office. Collection drives of this nature are not uncommon and requests and stories of U.S. good will fill the Internet and newspapers. One recent medical book drive, spearheaded by a retired Army physician, successfully collected over 100,000 medical textbooks and journals to rebuild the library at Iraq’s largest medical school library.

Some Commanders in the combat zone use CERP funds to support medical missions and projects. However, this is usually dependent upon the commander’s priorities and the brigade surgeon’s skill in promoting the advantages of using medical assets. If CERP funds are used, the Brigade surgeon must ensure that there is no duplication of effort between the activities of Provincial Reconstruction Teams (PRTs) and NGOs and that all projects work to compliment one another.
In the end, funding is usually not an issue for AMEDD personnel when the Army responds to an emergency (i.e., earthquake) or to programs conducted under the auspices of a combatant commander’s theater security cooperation plan. Where it is less clear is when the AMEDD is tasked with infrastructure repair and assistance following the cessation of hostilities. It is obvious that AMEDD personnel must become well versed in the legal requirements and the process for obtaining these funding sources in order to accomplish the mission in a timely and effective manner.

Non-governmental Organizations and Medical Support Operations

The U.S. and DOD recognize that many stability operations, especially long-term humanitarian and civic assistance operations, are best performed by indigenous, foreign, or U.S. civilian professionals. International non-governmental organizations (NGO’s) are an essential part of this relief, bringing years of experience in public health and preventive medicine to a crisis zone. “In humanitarian emergencies, ninety percent of deaths occur from disease rather than armed conflict, making NGO’s a crucial part of any relief agencies.” However, the relationship between the military and NGO’s has long been tense, with distrust on both sides due to disagreements on how to conduct business and who is best qualified to administer humanitarian and civic assistance.

Most NGO’s spend years supporting unstable regions and are there long before and long after military assistance is provided. In some operations, such as the security assistance conducted through JTF-Bravo in Honduras, relationships have developed and the military and NGO’s work along side one another in complementary operations. This was also evident in the U.S. response to the 2004 Asian Tsunami. Former Army Surgeon General LTG (Ret) James Peake coordinated the humanitarian activities of the hospital ships the USN Mercy and the USN Comfort and he directly credits the success of that mission to the relationships he built with NGOs over the years. Relationships have also improved in Iraq where a civil-military operations center (CMOC) was successfully established in Kuwait in 2003. Although coordination was initially met with resistance from the NGO’s, ultimately over eighty organizations, the UN, and the U.S. military worked together to plan humanitarian activities. However, this process took time, and the banishment of the media, to produce a safe environment where the military and NGO’s could work in private to resolve most issues.

Despite the success of these recent examples, more work is needed to improve military and NGO cooperation. With more stability operations looming in the future, additional medical professionals and medical planners will need to understand the options provided by NGO’s and
the philosophies under which they work. Currently, Civil Affairs (CA) officers conduct most of that interface but the majority of CA units are located in the Reserves and the Army is experiencing a shortage of this specialty group. Medical professionals must be able to fill this void in order to plan for efficient and non-competing operations. To this day, much of the existing civil-military cooperation and coordination in Afghanistan and Iraq is based on personal trust, face-to-face interactions in neutral locations, and is occurring at the ground level.

Interagency Cooperation and Medical Support Operations

Few of the challenges facing America’s military forces match that posed by the U.S. Government’s interagency process for developing and conducting stability operations. This was painfully exposed by a number of civilian and military critics in the plans for the invasion of Iraq. One of the unquestionably positive outcomes from these recent events is the nearly universal recognition that stability operations are necessarily interagency. The DOD has conceded that war is not just military business and the Department of State has realized that it needs to better prepare to be an equal partner at an earlier stage in the planning process. While the AMEDD usually does not play a large role in interagency cooperation at the strategic and doctrinal level, it does feel the impact of these policies (or the lack thereof) at the point of the operator. With the President’s strengthened emphasis on interagency cooperation, and with additional stability operations looming on the horizon, the AMEDD will need to take a more active role in this process.

The U.S. Government (USG) has a wide variety of non-military resources available for responding to humanitarian emergencies and in support of SSTRO. The vast majority of these resources are not directly related to the provision of medical care or public health but through the direct funding of these programs. For example, the USG contributed, through USAID, more than sixty million dollars for humanitarian and civic assistance following the October 2005 earthquake in Pakistan. The Pakistani government then used the money to provide medical care, shelters, water, and logistical support. USAID conducts similar financial support operations in Iraq, Afghanistan, and an additional sixty other nations across the globe.

The USG also has three non-military assets that can directly respond to a crisis and who occasionally work alongside military medical personnel. The first is USAID’s Disaster Assistance Response Team (DART) designed to assess current public health and medical status of an international disaster. The Centers for Disease Control (CDC), with all of its expertise in public health and laboratory research support, is the second part of the triad of USG direct assistance. International Medical and Surgical Response Teams (IMSuRTs) are the
third component and are maintained in affiliation with the National Disaster Medical System.99 These teams can deploy immediately and staff two operating room suites that provide emergency surgery, treatment, and stabilization. However, the last time they deployed internationally was to the 2003 earthquake in Iran. IMSuRTs are funded for both domestic and international actions but finding resources for international emergencies continues to be a challenge so the USG usually turns to the DOD to conduct the mission.100

Traditionally, most AMEDD personnel have limited interagency involvement during combat operations except for those humanitarian activities conducted on the ground at the medical unit level. This coordination usually involves working with Provincial Reconstruction Team (PRTs), Civil Affairs units, sister services, or NGOs. In Afghanistan and Iraq, much confusion occurred when various medical units started providing care that overlapped or duplicated the efforts of other units and agencies. This usually happened when Commanders directed their medical assets, or the medical personnel initiated the actions, to provide local services without first coordinating with CA units or PRTs. 101 Both theaters have since matured and SSTRO are more consistently coordinated through PRT or CA teams.102

In international disaster response efforts, AMEDD personnel have interacted directly with large agencies such as USAID, the World Health Organization, or the UN. The 212th MASH, in its deployment to Pakistan after the October 2005 earthquake, sought out and participated in the World Health Organization and Pakistan’s Ministry of Health medical cluster meetings, which served as the overall coordinator for the international medical relief efforts in the area.103 This proved to be extremely valuable in leveraging collective capabilities and establishing a network of services and logistical support in an extremely austere, isolated, and devastated environment.

Obviously, cooperation has taken on a new level of importance for all involved in making the world a safer place and recent experiences have run the gamut from successful to the catastrophic. With the DOD’s expanded role in providing stability operations, more and more military personnel will need to acquire the ability to “interact collegially and effectively in peace support operations with representatives of U.S. civilian agencies, non-U.S. civilian governmental agencies, international organizations, nongovernmental organizations, civilian populations, and local and global media.”104 The DOD is beginning to take steps in this direction and is looking at options that include including adding stability operations into school curricula; tours of duty with other U.S. agencies, international organizations, and NGO’s; incorporating military and civilian students into training courses that include personnel from other U.S. agencies, foreign governments, international agencies, NGO’s, and members of the private sector with expertise
in stability operations planning, training and exercises; and participation in a variety of multinational planning exercises. The U.S. military has two institutions currently devoted exclusively to stability operations that it can draw from: the U.S. Army Peacekeeping and Stability Operations Institute (PKSOI) and the Naval Post-Graduate School’s Center for Stabilization and Reconstruction Study (CSRS). PKSOI assists with the development of Army doctrine at the strategic level and works with the UN, USG interagency groups, NGOs, and foreign militaries. CSRS’s mission is to educate personnel involved in stability operations through education, research, and outreach activities.

Other interagency initiatives include the recent creation of the Office of the Coordinator for Reconstruction and Stabilization (S/CRS). Under the direction of the Secretary of State, the C/CRS is responsible for leading, coordinating, and institutionalizing USG agency efforts in post-conflict and reconstruction situations. Key members of C/CRS include the Department of State, USAID, DOD, Joint Chiefs of Staff, Joint Forces Command, Special Operations and Low-Intensity Conflict, Army War College Peacekeeping and Stability Operations Institute, Department of Justice, Office of the Director General, Diplomatic Readiness Initiative, Central Intelligence Agency, Army Corps of Engineers, Office of Population, Refugees, and Migration, Office of Foreign Disaster Assistance, and the Department of the Treasury.

Another idea being considered around Washington D.C. is the creation of a Center for Complex Operations (CCO) funded by the DOD, State Department, and USAID. The CCO, responsible for implementing recommendations from DOD Directive 3000.05 (Stability Operations) and the classified 2006 Quadrennial Defense Review, would serve as a hub for integrating existing training, education, research and lessons-learned gained from stability operations and irregular warfare. Specifically, the center would prepare civilian and military officials for integrated interagency operations in both Washington, D.C. and in the field.

Obviously a tremendous amount of energy and resources are being expended and it is unclear how military medicine will participate, if at all, within these new and emerging organizations. Despite these uncertainties and growing pains, it is imperative that the expertise and knowledge be leveraged to the lowest levels of the institution – with an additional focus on the specific needs of AMEDD.

Additional Missions and Challenges Ahead?

In addition to the issues discussed above, new developments are appearing on the horizon with strategic implications for the AMEDD. The future remains uncertain but the only
irrefutable fact is that military forces, and the medical professionals who support them, will remain gainfully employed as a critical tool for serving U.S. national interests abroad.

In light of the events of September 11, 2001 and Hurricane Katrina, the DOD may be facing additional missions as the nation refines its strategies for responding to national emergencies. Currently, governors mobilize their state National Guard assets when needed to augment local civilian efforts. It is only when local and state authorities are overwhelmed, and that assistance is requested, that resources under the Department of Homeland Security (DHS) are activated and federal military forces are mobilized to support local officials and their efforts on the ground. However, some defense experts state that the DOD is best qualified to lead these responses, especially those that involve an attack upon U.S. soil, a pandemic flu outbreak, or a massive earthquake. Colonel Richard Chavez, director of civil support in the Office of the Assistant Secretary of Defense for Homeland Defense (the military component of the Department of Homeland Security), argues that local and state authorities must be allowed to lead and that the DOD should continue to serve in a support role. Yet David McIntyre, director of the Integrative Center for Homeland Security at Texas A&M University and a 30-year Army veteran, argues that the DOD and not DHS, is best qualified for response and recovery efforts and DHS is best suited for prevention and mitigation activities. If this comes to pass, and the DOD is expected to lead the response to an incident of national significance, then the DOD will need to ensure that its forces are trained and equipped for this domestic mission. For the AMEDD, this will require significant planning and coordination with resources available within the civilian medical community. Military medical treatment facilities currently conduct joint training exercises with their civilian counterparts but never in a command and control position. This is an interesting but not insurmountable obstacle to overcome.

The Army continues its efforts to transform itself into a lighter, more agile and knowledge-based force to conduct combined and joint operations and gain success against all foes. Yet the post war challenges encountered in Iraq and Afghanistan have lead some analysts from a variety of government “think tank” organizations, to include Dr Thomas Barnett in his books The Pentagon’s New Map and Blueprint for Action, to call for the creation of an entirely new force – one entirely dedicated to SSTRO. Since the early 1990s, concerns were raised that the use of military forces for SSTRO would degrade their ability to fight and win the nation’s wars. However, advocates for this new force structure argue that instead of assigning stability operations ad hoc to units designed, equipped, and trained for combat, employ a separate force “explicitly designed for achievement of the national strategic objectives of peace and stability (and defense of the homeland) through these means.” Basically a force trained in all of the
interagency and civil-military subtleties necessary for success in a venue associated with “winning the hearts and minds.” Since health and welfare are critical components of any SSRTO, AMEDD assets could conceivably be assigned to this new force structure. A medical element large enough to support this new force structure could be a considerable hurdle to overcome as medical assets not deployed in support of major combat operations are fully engaged in caring for soldiers and families on the home front. Supporters for this idea advocate that it would take adding an additional 30,000 soldiers to the current U.S. military force structure to bring this about.\textsuperscript{116} What is not known is if medical personnel were considered in those projections.

Recommendations for the Future

Francis Harvey, Secretary of the Army, stated, “We must bring together the experiences, resources and ideas across our nation to develop solutions to the challenges of stability operations.”\textsuperscript{117} To answer Secretary Harvey’s call for action, the AMEDD should consider implementing the following suggestions:

1. Using a variety of platforms, implement an initiative to educate AMEDD personnel on the unique requirements for supporting stability operations. This includes incorporating content in professional military education programs from entry to the senior service school level that explains the significance and impact of these missions, improves cultural awareness, and emphasizes the importance of foreign language skills. Stability operations are now a core mission and the AMEDD community must understand the important role it plays in influencing policy makers and supporting national security goals.

2. Ensure that key personnel attend a wide variety of courses with a national and international perspective to prepare them for the medical and ethical challenges of stability operations. Current courses include, but are not limited to, the Military Medicine Humanitarian Assistance Course from the Uniformed Services University of the Health Sciences, the Civilian-Military Pre-Deployment Training Workshop offered by the U.S. Army Peacekeeping and Stability Operations Institute, and the World Vision Security Workshop conducted by the Center for Excellence in Disaster Management and Humanitarian Assistance. AMEDD personnel must be prepared to deal with unusual diseases and provide treatment that is realistic and in synchronization with the long-term needs of the host nation. Goals and end states must be clearly defined. This can be a major paradigm shift for AMEDD personnel who grew up and were educated in a highly technological society that demands life saving measures at all costs.
3. Encourage interagency cooperation by initiating internships, fellowships, or even assignment opportunities with U.S. government agencies such as the Office of the Coordinator for Reconstruction and Stabilization, U.S. Agency for International Development, or the Center for Complex Operations (if established). “Perhaps the most difficult challenge in conducting stability operations is in strengthening interagency efforts.” Integrating an AMEDD officer into these organizations may be the first step in promoting long lasting success, eliminating duplication of effort, and producing synergy.

4. Promote cooperation and understanding between the military and international and non-governmental organizations by pursuing internship and fellowship opportunities for AMEDD officers. Stability operations can and will take years of involvement and building relationships with the leading experts in international development can enhance understanding and capability for all involved.

5. Invite U.S. government agencies, NGOs, and Air Force and Naval medical units to participate in all military planning and training exercises such as those recently conducted by Center for Stabilization and Reconstruction Studies at the Naval Post Graduate School (tabletop exercise) and the new stability operations training (field training) at the Joint Readiness Training Center, Fort Polk. Interagency and international planning and cooperation continues at the strategic level but true relationships are built on the ground at the personal and operational level.

6. Ensure that the Joint Force Surgeon and other senior medical leaders within each combatant command develop aggressive strategies to promote and take advantage of every opportunity to support theater security cooperation activities. Relationships based on a common goal - to relieve pain and suffering - can often open doors when more formal methods of diplomacy fail. Senior leaders must also design measures of effectiveness to evaluate the true impact of these programs.

7. Obtain clear guidance on the “rules of engagement” for conducting medical operations in foreign nations. Will care to indigenous populations be provided to local or U.S. standards of care? Will efforts be coordinated so that they are sustainable by the local population once the military leaves? Are the ends, ways, and means feasible, acceptable, and suitable to achieve U.S. interests while supporting the long-term development of the host nation? Have efforts been made to coordinate with existing agencies on the ground to ensure synchronization of effort? All AMEDD senior leaders must ensure that these questions are clearly answered and parameters defined prior to deployment with adjustments made as the mission evolves.
8. Ensure that medical personnel on the ground understand the application of Title 10, Title 22, and CERP funds as well as the process for obtaining them. Provide resources at the medical brigade level and higher that can help individual units navigate the process – instead of allowing bureaucracy to delay much needed initiatives. The AMEDD must also ensure that medical personnel understand the important role they play in advising commanders on the proper use of medical capabilities and supplies in all operations.

9. Ensure that operational commanders understand the advantages of using medical assets as part of their overall information operations campaign. Medical units often serve as a “force protection” asset – especially in a counterinsurgency campaign where “winning the hearts and minds” of the local populace is critical for success.\(^{120}\)

10. Consider developing a cadre of health specialists like the Air Force (AF) International Health Specialist program. These AF specialists, with expertise in language, humanitarian and civic assistance, and diplomatic and political skills provide expert guidance to combatant commanders as well as on the spot guidance to deployed AF personnel.\(^{121}\) An AMEDD team could produce the same effect and provide interested providers with a career track that optimizes their skills and fulfills professional goals. This “in-house” expertise could help combatant commanders refine theater security cooperation plans, train and prepare units for stability operations, act as ambassadors by leading mobile training teams, and serve as a rapid response force for humanitarian assistance projects across the globe. An even better approach could be the creation of a joint force of international health specialists. This would capitalize on service specific capabilities, provide forces with a cadre of experts, and promote the concept of “jointness” and its relevance to future operations.

Conclusion

This century is still young but it promises to be one filled with a variety challenges that will continue to test the very mettle of this nation. With weak and failing states serving as havens for our often-faceless enemies, stability operations have taken on a new level of significance in shaping the strategic environment. Defeating our enemies and laying the groundwork for global stability is now the work of generations - and it will take the skillful and effective application of all elements of national power to prevent conflict, win wars, and secure peace.

General Peter Pace, Chairman of the Joint Chiefs of Staff, asked his Service Chiefs to “look for ways the military instrument – and the way it is applied – can complement and strengthen the actions of other elements of national power.”\(^{122}\) Army medicine, with a long tradition of international peacekeeping and humanitarian missions, is the perfect strategic tool to
augment other diplomatic, informational, and economic initiatives. The AMEDD possesses the capacity, the expertise, and most important of all – the desire of its members to go forth and relieve pain and suffering regardless of military or political affiliation. AMEDD personnel are natural ambassadors whose talents can be employed during conflict prevention and resolution, conflict intervention, and post conflict stabilization and reconstruction – pillars of the Administration’s strategy for addressing regional conflicts and the new definition of stability operations.123

Creative and resourceful, AMEDD personnel have overcome tremendous obstacles to deliver the finest care anywhere in the world and under the most hostile and austere of conditions. Despite their overwhelming success, AMEDD personnel should not have to rely upon ingenuity and trial by error when lives and regional stability are at stake. Issues identified in this paper, outdated force structure, educational shortfalls, funding streams, and confusion surrounding interagency and NGO relationships, highlight the need for a more consolidated and structured approach to the concept of supporting stability operations. It is through a deliberate and thoughtful examination of our current and future responsibilities that the AMEDD can step forward to serve as a powerful force multiplier in support of our national security strategy.


11 Ibid.


13 NSS, 1.


15 DOD Directive 3000.05, 2.

16 Ibid.


18 Ibid.

19 AUSA Torchbearer, 5.

20 AMEDD website.

22 Ibid., 19.


24 Ibid., 21.


26 Ibid., 104.

27 Wilensky, 21.

28 Ibid.

29 Ibid., 22.

30 Foster., 147.

31 Ibid.

32 Ibid.

33 Ibid., 147-176.

34 Wilensky, 4.

35 Ibid., 32.

36 Ibid., 49.

37 Author’s personal experience while assigned to Joint Task Force - Bravo, November 1987 to May 1988.


39 Ibid.


41 Ibid., 14.

42 AUSA Torchbearer, 12.


45 Drifmeyer, 975.


47 Ibid.

48 COL (Ret) James Kirkpatrick, “Combat Support Hospital Redesign,” briefing slides with comments presented to MG Czerw, new Commander, Army Medical Department Center & School, Fort Sam Houston, 27 July 2006. COL (Ret) Kirkpatrick is the clinical consultant for the Department of Doctrine and Development, AMEDD Center and School.

49 Andrew Doyle, “Caring for Contractors in Our Midst: Lessons Learned from Operation Iraqi Freedom,” Army Medical Department Journal (July-September 2006); 17.


51 Ibid.


53 U.S. Army Medical Department Center and School, “Force Design Update,” briefing slides, Fort Sam Houston, 1 December 2006. Hereafter referred to as Force Design Update.

54 Doyle, 17.

55 Nye, briefing.

56 Force Design Update, briefing.

57 COL (Ret) Charles Cahill, email message to author, 14 December 2006. COL (ret) Cahill is the Chief, Organization and Personnel Systems Division, Directorate of Combat Development, at the U.S. Army Medical Department Center and School.

58 COL Joseph Lofgren, Army Logician, of the U.S. Army War College Class of 2007, interview by author, 1 December 2006. Comment is based on COL Lofgren’s experiences in Iraq as a logictician and forward operating base commander from 2003 to 2004.
59 Cahill, email.

60 Ibid.

61 COL (Ret) John Bonin, Professor of Concepts and Doctrine at the U.S. Army War College, interview by author, 14 December 2006.

62 Personal experience as a faculty member of the Army Medical Department Center and School, January 2004 to June 2006.

63 Kirkpatrick, briefing

64 Nye, briefing.

65 Ibid.


68 Clunan, 47.

69 Clunan, 48.

70 LTC Jose Betancourt, email message to the author, 3 January 2007. LTC Betancourt is the Associate Dean of the U.S. Army Medical Department Center and School.

71 Personal conversation with faculty of the Military Medical Humanitarian Assistance Course when the author attended in August 2004.


73 Ibid.


75 Ibid.


77 COL (Ret) William Flavin of the U.S. Army Peacekeeping and Stability Operations Institute, interview by author, 2 February 2007. All information in this paragraph regarding the vaccine incident in Bosnia was provided in its entirety by COL (Ret) Flavin.

79 Flavin, interview. All information in this paragraph regarding the facility in Afghanistan built by USAID was provided in its entirety by COL (Ret) Flavin.


81 Flavin, interview.

82 DOD Directive 3000.05, pg 2.

83 Clunan, 7.

84 Ibid.

85 Ibid., 15.

86 Author’s personal experience while assigned to Joint Task Force - Bravo, Honduras, November 1987 to May 1988.


88 Clunan, 15.

89 Ibid.

90 Peake, interview.

91 Clunan, 13.


94 Ibid.

95 Clunan, 64.

96 Ibid.
97 Ibid., 65.
98 Ibid., 68.
99 Ibid., 66.
100 Ibid., 67.


102 COL Kelly Wolgast, Chief Nurse of the 14th Combat Support Hospital in Afghanistan, e-mail message to author, 2 December 2006.


105 Serafino, 9.
106 Ibid.
107 Ibid.


111 Ibid.
112 Ibid.

Ellsworth, 2.

Ibid., 6.

Barnicle.


AUSA Torchbearer, 24.

Peake, interview.


NSS, 15.