

ORIGINAL PAPERS

Stability operations and the implications for military health services support

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Abstract

This paper examines the implications of the new military campaign type – Stability Operations – on military health service support. The paper uses the format of the medical estimate process and shows how the health service support planning factors of Mission Analysis; Ground; Enemy forces; Friendly forces; Time and Space; Security; Casualty Estimate; Medical Command, Control, Communication, Computers and Information (C4I); Medical Capabilities; Medical Force Protection; Medical Logistics; and Medical CBRN are affected by this change. The paper also identifies two new roles for military medical services, assistance to security sector reform and assistance to reconstruction and development. These two new roles will be discussed more fully in later papers.

Introduction

In 2002/3 a series of papers that reviewed the history of casualty evacuation in the twentieth century (1-5). These papers concentrated on intervention and warfighting operations and did not cover medical planning and casualty evacuation for counter-insurgency operations during the so called 'Savage Wars for Peace' fought in countries such as Malaya, Aden, Borneo, Cyprus, Oman and Northern Ireland (6). These wars were fought against 'non-state' forces that were fighting to achieve political change inside their country and to force the withdrawal of external national forces (i.e. Great Britain). The UK aim was to achieve transition to a local national government within a stable political and security environment.

The terrorist events of September 11 2001, transformed the international military environment and have led to intervention operations in Iraq and Afghanistan. After the completion of the 'war-fighting' phase international military forces have been conducting operations intended to create a stable security environment in which political transition, economic stability, and development can occur. Whilst similar to past counter-insurgency operations and NATO operations in the Balkans, a new label has evolved for this type of military operation: 'Stability Operations'.

In November 28, 2005, the US Department of Defense (DOD) issued a directive that designates stability operations as "core missions" of the U.S. military. This marks a major shift in military doctrine and emphasizes the future necessity of performing peacekeeping and related stability operations (also known as stabilization and reconstruction operations) as well as combat operations. The Directive states: "*Stability operations are not easy, they require continuous and sophisticated planning against uncertainty, a strong focus on intelligence and prevention, and truly multinational staffs, with a very broad-based appreciation of the interagency process and requirements*" (7).

This new form of conflict has been described as a 'war

amongst the people' which requires new concepts for the use of military force at the operational and tactical level (8). This paper will examine these changes and discuss how they impact on military medical services.

The recent evolution of conflict and the nature of future military operations

The term "peacekeeping" gained currency in the late 1950s, when U.N. peacekeeping operations mostly met a narrow definition: providing an "interpositional" force to supervise the keeping of a cease-fire or peace accord that parties in conflict had signed, but it continued to be used as the range of activities grew. In 1992, the U.N. began to use a broader terminology to describe the different types of activities in securing and keeping peace. It created the term "peace enforcement" to describe operations in unstable situations where peacekeepers are allowed to use force to maintain peace because of a greater possibility of conflict or a threat to their safety. "Peacebuilding" was adopted as a term for activities that were designed to prevent the resumption or spread of conflict, including disarmament and demobilization of warring parties, repatriation of refugees, reform and strengthening of government institutions (including re-creating police or civil defense forces), election-monitoring, and promotion of political participation and human rights. Organizing and providing security for humanitarian relief efforts was also considered to be a potential part of peacekeeping and peace enforcement operations. During the 1990s and early 2000s, Western international military forces were engaged in several such operations either as part of a U.N. or NATO force or within a multilateral coalition force: Bosnia (from 1992 - present day), Kosovo (from 1999 - present day) Haiti (1994-1996 and again in 2004), and Somalia (1992-1994). These were generally referred to by the generic term of "peacekeeping" by the US Congress, even though U.S. executive branch agencies replaced "peacekeeping" with "peace operations" as the generic term. Recently, such operations have been labeled by the US Army doctrinal term as "stability operations" which also encompasses the diverse missions of operations in Afghanistan and Iraq. This may be a more useful term for such operations, as many include not only peace operations (i.e., peacekeeping

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and peace enforcement), but also related missions such as humanitarian and civic assistance, counterterrorism, counter-drug, and counter-insurgency (i.e., foreign internal defense) efforts, all of which also are included under the term “stability operations.” Stability operations have also been referred to as “Phase IV” or “post-conflict” operations, although reoccurrences of conflict are often possible (9).

The medical support plans and experiences described previously (1-5) were based on the ‘old assumptions’ of industrialised, inter-state conflict. This implied a warfighting phase of high intensity and short duration. There was essentially a linear battlefield with a moderately secure rear area in which there was consent of the local population and so the support elements of the force only needed to defend themselves against defined military threats. The medical support plan was focussed on clearing the battlefield by efficient evacuation. The medical treatment capability was austere and mobile designed to care for trauma casualties in a young male population.

The ‘new realities’ of asymmetric warfare present a different picture. Conflicts are less likely to be between states but against a ‘nebulous’ opposition in which combatants are not clearly identifiable as enemy and the ‘consenting population’ are from a cultural environment that is very different from our own forces (10). The military campaign will be just one component of a multi-dimensional political process involving a number of lines of operation: diplomatic, informational, military, economic (DIME). The duration of the military campaign will be ill-defined without clear end-states and will be utterly dependant on engagement with, and the consent of, the local population. The overall package of people involved in the campaign will include reserves, diplomatic and other government employees, civilians (both directly employed by the military and employed on military contracts), international agencies and non-Government organisations. This will be multi-national and may, or may not, be conducted within the framework of pre-existing multi-national organisations. At its most intense, stability operations may require any commander, even quite a junior one, to coordinate air, aviation, indirect-fire, and organic direct-fire weapons in a battlespace in which humanitarian operations, coordination with nongovernmental organizations and other government departments, and security-sector reform tasks continue at the same time (11).

Implications for health services support

This discussion on the implications of stability on health services support will be based upon the factors to be considered in the medical contribution to the Estimate process (12). These factors are shown in Table 1.

Mission Analysis. The core function of military medical services, to provide health services support to military forces, will remain unchanged. However national support for the mission is likely to

Mission Analysis
Ground
Enemy forces
Friendly forces
Time and space
Security
Casualty Estimate
Medical Command, Control, Communication, Computers and Information (C4I)
Medical Capabilities
Medical Force Protection
Medical Logistics
Medical CBRN

Table 1: Health Service Support Planning Factors

be more vulnerable to casualties and so the effectiveness of the medical support plan will have a far higher political prominence than previously (13). As described earlier, the population at risk involved in the operational campaign may also be considerably wider than solely military forces and this will require careful consideration of the eligibility criteria for the use of each element of the military medical support system from ‘in extremis’ medical care through to strategic evacuation to country of origin. As demonstrated in Iraq and Afghanistan, the mission might include wider tasks to support military forces involved in security sector reform and also to provide military medical capability as part of a response to a humanitarian crisis or in support of health sector development. The implications of these latter two tasks will be covered in further papers.

Ground. The new geopolitical environment has changed the locations of international security threats from the edge of the Soviet Union to those countries with unstable political structures. This means that Western military forces are most likely to deploy to the Middle East, Asia and Africa rather than Europe. Experience from Sierra Leone, Afghanistan and Iraq has proven that this requires considerably greater expeditionary capability and the ability to support forces with extended lines of communications. This also means that medical units have to be robust with good environmental infrastructure to cope with extreme cold and heat, and that the strategic medical evacuation routes may be long. At a tactical level, the centre of gravity for the international campaign will be in urban areas (12), though the opposition may use rural areas and other countries to provide their secure base. This means that the medical support must be able to support both urban operations and also rural operations in extreme environmental conditions.

Enemy forces. Opposing forces may not be easily distinguishable from the indigenous population and may not conform to the ‘rules’ of warfare. The opposition is likely to be loose affiliations of individuals and the force ratios for contact engagements are likely to be considerably smaller (even when massed) than those upon which ‘warfighting’ operational analysis has been based. This will lead to a lower frequency of attacks with fewer casualties but which are more difficult to predict in time and space. The battlespace will be contiguous with few military locations that are absolutely safe. This will dictate a matrix of military locations across the area of operations. Experience from Iraq and Afghanistan has proven that there will be limited or no protection for medical units from the use of the Red Cross and all personnel who leave security bases will need to be proficient in basic military skills. Ground ambulances will require armoured protection and mobility that matches that of other ground vehicles and will often require force protection during medical evacuation tasks. This will mean that the response to incidents involving casualties will be a ‘G3’ operation involving a multi-functional grouping including combat forces, information operations, explosive ordnance disposal, forensic investigation as well as medical services; it is not a ‘999’ response only requiring an ambulance.

Friendly forces. It is extremely unlikely that any future military operation will not be multi-national or coalition operations. NATO provides the leading international framework for such operations although not all operations will be conducted under the auspices of NATO. This means that the medical plan will require co-ordination between the medical staffs of troop contributing nations (TCNs) at all stages of the operational planning process. It is also vital that key personnel within the medical chain of command understand NATO doctrine and also have sufficient proficiency in English to work in or with headquarters in which English is the working language. The operational environment is

likely to lead to lower troop densities than are described for war-fighting operations and these forces are likely to be operating on an area or matrix basis rather than in a linear operational laydown. This means that the medical laydown and medical evacuation plan will be based around a 'hub and spoke' concept rather than a linear evacuation chain (3).

Time and space. The laydown of medical forces will be determined by the overlay of the 1-2-4 hour clinical timelines upon the 'hub and spoke' laydown of forces described above. This may lead to the requirement to 'mission-tailor' medical units to balance the minimum clinical capability required in isolated locations with the need to be economical in the use of medical manpower. From a wider perspective, the military contribution to a stability campaign may run for several years leading to the need to manage the sustainment of medical support over the same period. This will necessitate the rotation of personnel and discussion about ideal tour lengths and tour intervals to balance the requirement to maintain the medical support plan with the demands on individuals. Innovative solutions to personnel shortages may be required such as the flexible use of reserve forces, using personnel from other troop contributing nations (creating multi-national medical units), and using civilian contractors. In addition it may be valuable to target individuals with specific personal characteristics such as females (to enable care of the local female population of gender segregated societies), personnel from ethnic minorities or personnel from other troop contributing nations (to enable better engagement with the local population for development projects).

Security. It is highly likely that opposing forces in stability operations will not respect the protection afforded by the Red Cross under the Geneva Convention. Military medical units and evacuation assets will need to be within the overall military force protection envelope and thus will need to be sited close to military assets that support the campaign. Whilst this conflicts with the requirement for military medical units to be separated from combat forces under the Geneva Convention, compliance is not a practical option. The medical plan will need to be closely aligned to the operational plan. This will require medical staff and facilities to be able to communicate within the same secure information environment as the rest of the general staff. Medical communication requirements will be discussed more fully under Medical C4I.

Casualty Estimate. Casualty estimation used to be based upon the SHAPE planning figures that were derived from a statistical analysis of military engagements in World War 2 and Korea (14). These figures are not suitable for current stability operations in which casualties will occur from less intense and less frequent incidents, though there may be occasions when deliberate military operations are undertaken that approach the intensity of conventional war fighting. The widespread use of improvised explosive devices has the potential to cause multiple casualties from a single incident and medical planning should take the risk of such events into account.

Medical C4I. The arrangements for command and control are central to the effective organisation of medical services. These may vary for medical units from being under the command of the multi-national commander to being solely under the command of the contributing nation. Whatever the states of command, the multi-national medical staff will need effective communication to all medical facilities within the military secure network. The increasing use of electronic patient records will also necessitate a system for import and export of these records between national medical systems. Medical staff will need to be familiar with multi-national medical reporting formats and to be able to exploit the

increasing use of web-based technology to share information within electronic networks.

Medical Capabilities. Effective first aid is the most important component of a military medical system, all the more so if medical evacuation chains are tenuous. Recent advances to improve the first aid management of bleeding include the introduction of topical haemostatic agents such as QuikClot™ or HemCon™ and the issue of easily applicable tourniquets to all personnel. Deployed medical capability was dominated by the requirement to provide surgical care for multiple trauma casualties. Long-term, expeditionary operations require a careful balance between full clinical capability in-theatre for surgical and medical cases and the opportunity costs of keeping clinical personnel relatively under-employed in an operational theatre rather than the home base. Clinical services also need to include the capability for diagnoses of exclusion (e.g. investigation of unexplained chest pain) in order to maximise return to duty in-theatre and avoiding unnecessary medical evacuation. Furthermore medical services in the home base should also remain focussed on the importance of returning military personnel to operational employment (15). Thus military medical systems will evolve to focus on individual clinical care rather than high-volume 'population care'.

Almost all Western nations are finding the frequency of operational deployments is having an adverse impact on retention of specialist medical personnel, not only surgeons and anaesthetists but also specialist nursing and paramedical staff such as intensive care nurses, operating department practitioners, radiographers and laboratory technicians. Increasingly nations are entering into partnerships to manage and run medical units as multi-national facilities. Examples include the Multi-national Integrated Medical Unit (MIMU) in Sipovo in Bosnia and the Greek-led multi-national medical unit in Kabul, Afghanistan. These multi-national medical units require careful development to ensure commonality of professional and clinical processes, mechanisms for credentialing of staff, external quality assurance and processes for resolution of disputes. Whilst I have focussed on hospital facilities, it is important not to forget primary care, psychological care and dental care in the medical support plan.

Medical Force Protection. The public tolerance to military casualties from expeditionary stability operations has proven to be substantially less than casualties arising from wars of national survival (14). Whilst medical force protection measures have always been important in maintaining the fighting strength of a military force, these measures are now equally important in demonstrating duty of care towards military personnel. This requires continued research and investment in force protection measures such as body armour and armoured vehicles as well as the medically specific force protection measures such as immunisations, anti-malarials etc. Public concern about exposures to long-term health threats in military operational environments, such as the allegations of a 'Gulf War Syndrome' will persist and environmental and public health assessments will become an essential element of medical force protection plans (16).

Medical Logistics. Logistic support for expeditionary operations is much more challenging than that for a central European war operating on contracting logistic lines. Whilst medical commodities are a very small component of the overall logistic demand, failure of the system such as breakdown of the temperature regulation chain for drugs or blood can have catastrophic consequences for medical support. As medical support receives greater investment, equipment support to high technology, low population equipment such as CT scanners

becomes mission critical and very difficult to deliver when spares and technical knowledge are only held in the home-base. The increasing use of multi-national medical facilities requires integration of specific components of the medical logistic system such as drug formularies and blood products.

Medical CBRN. The Chemical Biological Radiological and Nuclear (CBRN) threat has also changed from that of a conventional chemical cloud released by military delivery systems to a more likely point source incident, released using unconventional means. There have been a number of examples such as the Tokyo subway attack with sarin in 1995 and the Anthrax contamination of the US postal system in 2001. CBRN attacks against military forces could also include radiological attacks using explosive devices to dissemination of radioactive material or contamination of the military food and water procurement chains. Protection and response to these changed threats requires close integration between medical and CBRN staffs with a high degree of technical knowledge amongst all parties.

Conclusions

Recent military operations in Iraq and Afghanistan have led to the introduction of a new type of military campaign - Stability Operations. This article has examined the consequences of this change to medical planning and medical support. I have focussed on the implications of stability operations for medical support to military forces. Two further papers will discuss the roles of military medical services in security sector reform and in reconstruction and development. The military medical community needs to capture experiences from these type of operations in Iraq and Afghanistan and to share them for organisational learning, not only within national forces but also across the international military medical community.

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