Abstract

Medical insurance is a complex process that includes disease prevention, limitation of body injuries, evacuation of wounded and sick, hospitalization and patient treatment in order to maintain the readiness of the engaged forces. Ensuring an optimal level of medical support is an important indicator in the successful the international military missions. A multilevel concept of medical support, which ranges from basic first aid to definitive tertiary level medical care, was adopted. International military missions are characterized by unique features that have a fundamental impact on the provision of medical support, such as the political complexity and the dynamic nature of operations, geographic, demographic, cultural and linguistic variations within the mission areas, the specific epidemiological patterns of the prevailing disease and multi-national participation in international military missions with various national training standards, operational procedures, equipment and supplies. This paper outlines the planning considerations in determining the medical assets required to support an international military mission and gives detailed operational guide lines for each level of medical support. It must promote the understanding of the concept of medical support and its importance in carrying out the missions.
The NATO requirement to deal with all types of threats and the constitutional responsibilities call for the Romanian Armed Forces to develop capabilities which would enable them to conduct operations on the national territory, within the NATO area of responsibility, as well as in a wider strategic environment which is constantly influenced by several factors requiring change.

As the Alliance has adopted a "more comprehensive approach", covering the entire range of missions from crisis prevention to humanitarian operations and high intensity war, the Romanian Armed Forces must be able to respond promptly and effectively.

In this context, an important indicator in the completion of international army missions is the insurance of an optimal level of medical support. The maximalist approach mobilizes considerable resources in the form of personnel, equipment, and evacuation assets, whereas the minimalist approach relies on basic and existing medical resources.

Medical facilities of Romanian armed forces are generally deployed to support U.N. peacekeepers and international staff. Occasionally, the mandate for a mission may extend to include humanitarian assistance to the local population. If this mission has not been specified in the mandate, official U.N. policy is that there is no obligation to provide or take responsibility for medical services to the local population\(^1\), although this is sometimes rendered according to the dictates of international humanitarian law and the ethical code of the medical profession\(^2\).

It has adopted a multilevel concept of medical support that ranges from basic first aid to definitive tertiary level medical care. Before establishing the international army mission, a technical survey is conducted in the potential mission area with the purpose of determining the main medical threats, as well as the medical facilities and resources required to support such an operation.

International army missions are characterised by unique features that impact fundamentally on the provision of medical support. These include:
• Political complexity and dynamic nature of operations;
• Geographic, demographic, cultural and linguistic variations within mission areas;
• Specific prevailing epidemiological and disease patterns;
• Multi-national participation in international army missions, with varying national standards of training, operational procedures, equipment and supplies.

**Political complexity and dynamic nature of operations**

The level of care and the number of medical units depend on the overall troop strength and the type of activity, with high-risk operations such as peace enforcement and demining making greater demands on the medical system.

**Geographic, demographic, cultural and linguistic variations within mission areas**

In considering geographical factors such as terrain and road conditions, the primary concern is the accessibility of patients to timely medical care. In particular, distances to secondary and tertiary medical facilities have to be considered and play an important part in determining the deployment of medical units and the requirement for ambulances and aircraft for evacuation. Climate can also influence medical planning, particularly if bad weather, flooding, or snow can disrupt normal evacuation channels.

**Specific prevailing epidemiological and disease patterns**

The primary role of deployed medical units is to meet the daily health care needs of personnel in the field. As such, they have to manage and treat minor ailments generally encountered in a primary health care practice as well
as endemic infectious diseases in the mission area. It is important to note that accidents are the major cause of fatalities and serious injuries in most missions, although injuries from direct acts of hostility and land mines can be encountered. Therefore, it is necessary for any medical unit to be able to manage severe trauma and mass casualty situations. This may require deployment of a field surgical unit, radiology facility, laboratory, and blood bank. Surgeons would be required to handle a wide range of surgical procedures, including burns, orthopedic. It is also important to have dental facilities and an operational field hygiene and vector control unit.

**Multi-national participation in international army missions, with varying national standards of training, operational procedures, equipment and supplies**

There is a need for standardized guidelines for the different levels of medical support in operations. This is particularly important in the present situation, in which forces comprise personnel, units, and facilities from different nations. Medical units from different countries vary in their composition, treatment capability, and terminology. Adopting a common classification is important for the following reasons:
- it ensures that deployed medical units are able to meet the operational standards and treatment capabilities required of them, particularly in areas such as personnel, medical equipment and logistics, evacuation assets, and other resources;
- it allows interoperability and cooperation between medical units of different countries, providing integrated medical support for the entire mission;
- it facilitates planning and administration of medical support for different missions;
- it allows direct comparison of epidemiological data from different missions, and if the classification is adopted on a wider scale, it can be used to study data from war and conflicts in general.

Medical support plans

Medical support plans must be designed for each mission to meet specific operational demands. These must remain flexible to adapt to changing demands and circumstances. These plans must be acceptable to the respective Mission Headquarters and the participating Troop Contributing Countries.

Basic Level

This refers to immediate first aid provided to the patient by the nearest person at the site of injury ("buddy aid") or by a trained paramedic or nurse. It is expected that all military have basic knowledge of first aid, including core skills such as cardiopulmonary resuscitation, wound dressing, control of hemorrhage, immobilization of fractures, and casualty evacuation. Equipment required includes first aid kits and personal field dressings.

Level 1 Medical Support

This is the first level of structured medical support in which primary health care and emergency treatment are provided by a medical team. This is the first level where a doctor is available. These services are generally provided by the medical section of a military unit and include daily patient consultations and triage, resuscitation, and stabilization of patients before evacuation. In addition, level I teams would be expected to oversee hygiene and preventive medicine practices for the deployed forces.

The facility should maintain the capacity to treat at least 20 ambulatory patients per day and have short-term ward facilities for about 5 patients. Level 1
unit generally deploys in tents or containers, but they can make use of existing buildings if these are available. They are located close to the mission or regional headquarters but must also be readily portable to support combat units.

Level 1 unit must have the operational ability to split into two independent medical teams or to deploy a forward medical team. Forward medical teams comprise between two and four medical personnel and provide basic health care for outposts and secondary deployment sites. These can be further equipped to provide medical care during air evacuation or search-and-rescue missions.

**Level 2 Medical Support**

This is the next level of medical care and the first level where surgical expertise and facilities are available.

Level 2 units provide advanced life support, basic surgery, intensive care, and limited patient holding capacity, in addition to primary health care, to military within a mission area. It is supported by ancillary laboratory and radiology facilities, a dental unit, and hospital support elements.

Medical staff should include general and orthopedic surgeons, an anesthetist, an internist, a dentist, and intensive care and operating room personnel. The hospital should have the capacity to perform at least 4 surgical operations, 5 to 10 dental procedures, and 40 patient consultations per day, with ward facilities for up to 20 patients. It should also maintain the ability to deploy at least two forward medical teams at any time.

**Level 3 Medical Support**

This is the highest level of medical care provided by a deployed medical unit. It combines the capabilities of Level One and Two units, with the additional capability of providing specialized in-patient treatment and surgery, as well as extensive diagnostic services. It is important to note that a Level
Three unit is rarely deployed, and that this level of support is generally obtained from existing civilian or military hospitals within the mission area or in a neighboring country.

This level comprises a multidisciplinary general hospital, which provides emergency and definitive medical and surgical treatment, intensive care, specialist medical and dental services, and inpatient ward facilities. Level 3 facilities should have high standards of laboratory, radiology, and pharmaceutical services.

**Level 4 Medical Support**

A Level Four medical facility provides definitive medical care and specialist medical treatment unavailable or impractical to provide for within a Mission area. This includes specialist surgical and medical procedures, reconstruction, rehabilitation and convalescence. Such treatment is highly specialized and costly, and may be required for a long duration. It is neither practical nor cost-effective to deploy such a unit within the mission area. Such services are generally sought in the host country, a neighboring country, or in the troop contributing country itself.

**Forward Medical Team**

A Forward Medical Team (FMT) is a small, highly mobile medical unit of about 3 men that is configured and equipped to provide short-term medical support in the field. This is generally constituted as and when required from existing medical units within the mission area (including personnel, equipment and supplies), but may be a separate entity requested from troop contributing countries and deployed with an independent mission.

Tasks of Forward Medical Team are:

1. To provide primary healthcare and emergency medical services at a medical post supporting an isolated military contingent of about 100-150 personnel.
2. To provide first line medical support for short-term field operations in areas without immediate access to medical facilities.
3. To provide continuous medical care during land and/or air evacuation of casualties particularly for seriously ill or unstable casualties and where evacuation distances are long or where delays are anticipated. This includes medical evacuation out of the Mission area into a nearby country or medical repatriation, if indicated.
4. To provide a medical team for search and rescue missions. All equipment and supplies need to be portable and configured for use in confined spaces like ambulances and helicopters.

**Conclusion**

This paper outlines the planning considerations in determining medical assets required to support an international army mission and provides detailed operational guidelines for each level of medical support. This should promote understanding of the medical support concept and its importance in the completion of international military missions.

**REFERENCES**


