Medical Lessons Learned Newsletter

Medical Lessons Learned: A Key to improve operational Health and Medical support.

The LL process is responsive to current operations and this requires active data collection, a strong analysis network and, the distribution of regular, effective and pragmatic solutions. These solutions must be freely available if lessons are to be learned and that is the purpose of this newsletter. The following pages contain a number of current NATO lessons along with an update on progress to action them.

Sharing Medical Information is in the Interest of All
Sharing information is important to everyone involved in medical support, be they from a member or partner nation or associated organization. NATO’s medical lessons learned team wants to hear about your observations as these may be relevant to others. Information sharing helps us perform better and builds trust and confidence between organizations. Most important of all it improves the quality of care we provide. All inputs received will be presented at the NATO Medical Lessons Learned (LL) Core Team quarterly meeting, chaired by Allied Command Transformation (ACT). You will receive feedback on the inputs you provide. Please send your lessons or questions to:

**NATO LL Core Team Secretary:**
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Your observations could save time, money, or a life.

German/US/British Medical Training: An Example of Coalition Building and Information Sharing
A joint medical training exercise held in Germany during May 2011 successfully practiced the integration of a German field hospital and a 10-bed Early Entry Package from the USA Army’s 212th Combat Support Hospital. The exercise also involved participation from the United Kingdom’s 1st Medical Regiment and medical interoperability in material and personnel was achieved. Everyone learned a great deal from the experience and grew together into a cohesive team, proving that within the Alliance we depend on other nations as other nations depend on us. Training together is essential for trust building and standardizing of processes.
Why are LL Observations Useful to NATO?
For JALLC they add to NATO’s database of knowledge and have already informed JALLC’s reports on ‘Multinational Medical Support’ and ‘Medical Civil-Military Interaction’. For the Military Medical Centre of Excellence (MILMED COE) they inform and update education and training content. For NATO HQs, they help optimize the provision of medical support to operations and provide recommendations to NATO bodies and nations. The LL process enables NATO to make best use of its collective knowledge & experience.

Priority Medical Lessons
NATO has selected a List of Priority Lessons on which to focus its staff effort. It also provides an excellent guide to nations and partners as to the main lessons of interest to NATO Medical. The current Priority List contains the following lessons:

- MEDEVAC timelines (Aero and Ground medical evacuations)
- Interoperability issues regarding multinational medical treatment facilities
- Difficulties in sharing information across national boundaries and with NATO Commands
- Best practices for multinational medical personnel, procedures and clinical improvement
- Comprehensive Approach, Reconstruction, Development and Stabilization experiences, with particular emphasis on civil-military interaction
- Medical personnel training

Progress made on each Priority Lesson is included within this Newsletter.

Observation Criteria
To be included in the Priority List, a lesson should meet the majority of the following criteria:

- Relevant to current operations
- Feasible to implement
- Realistic resource requirement
- Improves interoperability
- Extends outreach and engagement
- Promotes multinationality

Medical Evacuation (MEDEVAC)

Lesson Learned: NATO agreement on MEDEVAC timelines

Following extensive national engagement, the June meeting of the NATO Committee of the Chiefs of the Military Medical Services (COMEDS) endorsed a NATO Life & Limb Saving Timeline to replace the 1-2-4 Hour Principle. The new Timeline will be included in the next revisions of NATO medical policy and doctrine. The new timeline is:

- **Enhanced first aid.** Immediate life saving measures applied by personnel trained in tactical combat casualty care. Bleeding and airway control for the most severely injured casualties to be achieved within **10 minutes** of wounding.
- **Damage Control resuscitation.** Measures commenced by emergency medical personnel within **1 hour** of wounding.
- **Damage Control surgery.** Depending on the specific and individual requirement the aim is to be able to provide damage control surgery within 1 hour, but no later than **2 hours** of wounding.

This completes the action on this Priority Lesson. MEDEVAC is now a *Lesson Learned.*
Interoperability/Multinationality

Lesson Identified: Lack of medical treatment facility (MTF) interoperability

NATO Medical Evaluation Manual (MEM)  On 19 April 2011 NATO held a workshop in support of its development of the MEM, which provides for standardized categorization of medical treatment facilities. The workshop was attended by the MEM custodian, Allied Command Operations (ACO), MILMED COE and Thales, the contractor developing a bench-test computer database of the NATO MEM. The workshop enabled the contractor to refine its understanding of the user requirement and what was needed from the e-version of MEM.

Exercise VIGOROUS WARRIOR 2011

Hungary hosted Exercise VIGOROUS WARRIOR 2011 involving the deployment of medical assets from Czech Republic, France, Germany, Hungary and The Netherlands. The MILMED COE provided the point of contact for the participating nations. It also served as the lead in facilitating the planning, conduct of multilateral talks and provision of communication with the foreign force providers. The Exercise scenario was elaborated and managed by MILMED COE.

The Exercise coincided with the hosting by Hungary of the 35th Plenary of the COMEDS in Budapest on 6-10 June 2011. This enabled the nations participating in Exercise VIGOROUS WARRIOR to provide a demonstration of in-theatre multinational medical cooperation.

The 36 NATO member and partner nations attending COMEDS were impressed by the well driven, real-time and live-camera supported demonstration and a great many positive outcomes came from the Exercise. Observations were captured and the after action review and will take in September 2011.

The process of identifying lessons for further analysis began on the Exercise and will be provided to the NATO LL cycle.

“Interoperability will not work in a joint and multinational environment if forces do not practice, train and exercise together.” (“The Lessons Learned Process and Lesson Sharing in NATO and Nations”, a report by JALLC, page 39)
**Information Sharing**

*Lesson Identified: Need for improved information sharing*

**Medical Information and Coordination System (MEDICS)** NATO is conducting research and experimentation to support the procurement of MEDICS, to provide NATO with medical information support. MEDICS represents part of a wider NATO Logistic Functional Services information systems project. A decision on procurement is currently under consideration. The research has already led to MEDWATCH, a test bench model that includes functions for MEDEVAC, Patient Tracking and Medical Reporting. This work has proven the value of such a tool to NATO and confirmed the importance of ensuring its development.

**Deployment Health Surveillance Capability (DHSC)** DHSC is located at the Bundeswehr Medical Office in Munich and has been functionally integrated into the MILMED COE structure, with DHSC forming the COE’s 4th medical branch. DHSC’s function is to serve as a central analysis centre to analyze data received directly from medical providers on all NATO deployments. The provision of this data will enable centralized near-real-time epidemiological monitoring of NATO expeditionary forces and early detection of outbreaks based on clinical symptoms. The surveillance tool utilized by DHSC is the French ASTER (Alerte et Surveillance en Temps Réel – Real Time Surveillance and Alert) system.

The MILMED COE point of contact for LL is Lieutenant Colonel Robert Balazs (lessons.learned@coemed.org).

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**Best Practice**

*Lesson Identified Need to share observed good national and multinational practices to improve multinational medical procedures and attain clinical improvement*

**NATO Trauma Registry (NTR)** NTR is a project to provide continuous monitoring and analysis of the incidence of trauma and its mechanisms to enable the medical response to trauma to be improved and medical and non-medical counter-measures developed. Traumas result from both battle injuries (such as detonation of improvised explosive devices) and non-battle injuries (such as road traffic incidents) and include both physical and psychological effects. Trauma Registry is similar to Disease Surveillance, but is less time critical, with a greater emphasis on learning from the results of recent experience to make improvements. NTR is one of the key functions within MEDICS. The NTR Team is working with member nations on integration of NATO and national systems and is assisted by the work of NATO’s Military Health Care Working Group and the MILMED COE.

MILMED COE has also begun data entry into a trial **Tactical Clinical LL Database**.

*Please contact MILMED COE, Lieutenant Colonel Robert Balazs, (lessons.learned@coemed.org) for more information.*
Comprehensive Approach, Reconstruction, Development and Stabilization

Lesson Identified: Need for a medical concepts, doctrine and guidance on these issues

MEDACTool:
MEDACTool is a web-based Medical Assistance and Collaboration Tool being worked on by ACT for the practical coordination and exchange of information amongst the international civilian and military medical community. It will improve the response in crisis management between those responsible for delivery of medical support. The MEDACTool architecture design has been completed by the contractor. The next step will be production of a bench-test model and design of guidelines for potential implementation.

Collaborative Study:
A Collaborative Study is being conducted at the request of ACT between Harvard University and JALLC to examine the impact of military medical involvement in humanitarian healthcare provision and its implications for human security. This study will look at 5 case studies from Afghanistan, Kosovo, Republic Democratic of Congo, Honduras, and Haiti. The study aims to:
- Define the military’s role in civilian health sector stabilization & reconstruction
- Develop policy tools needed for a Comprehensive Approach
- Guide civil-military involvement in health & human security

Medical Training
Lesson Identified: A lack of integration of medical training during NATO exercises

Individual Training: ACT and ACO conducted a Review of NATO Medical Individual Training in relation to the competencies NATO requires from personnel in operational medical planning appointments. The recommendations of the Review have been very well received following presentations to a number of NATO bodies including COMEDS. Development work to put the Review’s recommendations into practice are currently on hold due to current gapping of key posts, but will be taken forward in 2012.

Collective Training: Collective training should be seen in different ways, not only as preparation for specific operational activities. Joint Force Command Brunsum Medical Branch offers ISAF Medical Key Leader Training, twice a year, aimed at all medical stakeholders soon to be deployed to ISAF. This facilitates future medical network actions and collaboration.

Other Lessons (outside the Priority List)
Command & Control: ACO is undertaking a review of the CJMed (Combined Joint Medical) and JLSG (Joint Logistic Support Group) concepts.
ACT Document Update: Comments have been received from nations on the Study Draft of AJP-4.10(B) Allied Joint Medical Doctrine. This has helped develop the document in preparation for further circulation in 2012.

Medical Task Force (TF): The Medical TF represents medical interest and coordinates defence planning related multidisciplinary actions through the NATO Defence Planning Process (NDPP). The Medical TF has drafted an Action Plan, formal endorsement of which is being considered by the chain of command.

Collective Medical Contracts: ACT is investigating commercial interest and capability in this area and whether this could provide an acceptable cost-effective option to fill specific medical capability gaps. ACT has issued an RFI (Request for Information) on this subject and a workshop will be held during ACT Industry Day in London on 12-13 September 2011.
New Concepts in Development

Human Security and Operations

Rear Admiral Bruce Doll USA Navy, NATO ACT Medical Advisor, briefed the NATO Military Committee on 19 July 2011 on the key role Medical plays in human security. This is particularly relevant given the outcome of the NATO Lisbon Summit and the NATO Strategic Concept, with its principles and tasks relating to the diversity of the security environment and the range of actors within it. A wide range of relationships need to be developed as part of a Comprehensive Approach involving the military, international organisations and civilian actors. Developing this new approach will promote human security, which is a factor in a range of operations, from conflict prevention to post conflict reconstruction and development. How secure someone feels is not solely related to the absence of violence or the threat of its use. Health and human factors are important for the force and are also important indicators of the stability of a host nation. Furthermore, the capability of the health sector and its development contributes to the overall strength of state-building efforts and long-term state stability. Creating such structures depends, in part, upon an enduring commitment to the provision of a health sector that addresses essential population needs. Its early consideration during the planning process ensures an effective contribution to human security.

Collective Medical Contracts

As nations look for financial savings across national budgets including defence, NATO is similarly seeking greater coherence and improved efficiency in its requirement for, and use of, operational assets. There is a need for each and every capability area to be considered and medical support is no exception. Medical capability shortfalls can hamper national and NATO operations and can impinged upon the scope of the military mission, limiting the freedom of action for the Alliance as a whole. Moreover, member nations’ increasing operational involvement in disaster relief, stabilization and post-conflict reconstruction has created new demands on the scope and the scale of deployable medical capabilities, with resulting implications for medical planning and capability development. Therefore, there is a need for each and every option for delivery of capability to be considered. NATO is already delivering a range of multinational medical solutions but also recognizes that other initiatives will need to be explored and examined in collaboration with partners and industry to investigate how best use can be made of the medical assets available.
Modular Approach (ModA) ModA will be key to achieve improvements in the multinational dimension to NATO medical support. The aim of ModA is to demonstrate the collective advantages from modular medical capabilities based on standardized component modules that can be rearranged, replaced, combined and interchanged easily. This marks a shift from considering medical support in traditional “Role-based” capability terms to defining capabilities in terms of the main component elements they contain. This will help mitigate medical shortfalls and improve multinational medical support, not only to military forces but also to other actors involved in crisis response.

Research & Technology Organisation (RTO)

The RTO Human Factors and Medicine (HFM) Panel initiates and manages time-limited multinational activities proposed by its three Area committees in Health, Medicine, and Protection (HMP), Human Systems Integration (HSI) and Human Effectiveness (HE). RTO HFM provides a science and technology base for optimizing health, human protection, well-being and performance. This is accomplished through the exchange of information, collaborative experiments, and shared field trials through such activities as Task Groups, Symposia, Specialist Workshops, and Lecture Series. It also addresses the interests of alliance nations and of NATO groups representing collective research interest, such as COMEDS and the ACT Medical Branch. HFM is striving to enhance the communication and collaboration with these two groups to maximize the utility of HFM products and to coordinate or to avoid duplicate efforts. HFM actively participates in NATO’s work on medical lessons. Active HFM Task Groups are examining, among many others, such issues as:

- Suicide in military populations
- Ionizing radiation bio effects and countermeasures
- NATO special operations medical personnel training
- Aircrew performance and sustainment
- Medical fitness for expeditionary operations
- Application of emerging nano/biotechnology to deployable laboratories

HFM’s next symposium, “A Survey of Blast Injury across the Full Landscape of Military Science,” will be held in Halifax, Canada 3-5 October 2011.

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