

NATO STANDARD

AJP- 4.2

ALLIED JOINT DOCTRINE FOR MEDICAL SUPPORT

Edition A, Version 1

JULY 2026



NORTH ATLANTIC TREATY ORGANIZATION

ALLIED JOINT PUBLICATION

**Published by the
NATO STANDARDIZATION OFFICE (NSO)
© NATO/OTAN**

Intentionally blank

NORTH ATLANTIC TREATY ORGANIZATION (NATO)

NATO STANDARDIZATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

14 July 2026

1. The enclosed Allied Joint Publication AJP-4.2, Edition A, Version 1, ALLIED JOINT DOCTRINE FOR MEDICAL SUPPORT, which has been approved by the nations in the MILITARY COMMITTEE JOINT STANDARDIZATION BOARD (MCJSB), is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 2228.
2. AJP-4.2, Edition A, Version 1, is effective upon receipt and supersedes AJP-4.10, Edition C, Version 1, which shall be destroyed in accordance with the local procedure for the destruction of documents.
3. This NATO standardization document is issued by NATO. In case of reproduction, NATO is to be acknowledged. NATO does not charge any fee for its standardization documents at any stage, which are not intended to be sold. They can be retrieved from the NATO Standardization Documents Database (<https://nso.nato.int/nso/>) or through your national standardization authorities.
4. This publication shall be handled in accordance with C-M(2002)60.

Thierry Poulette
Major General, FRA (A)
Director, NATO Standardization Office

Intentionally blank

Allied Joint Publication-4.2

Allied Joint Doctrine for Medical Support

Allied Joint Publication-4.2 (AJP-4.2), Edition A, Version 1,
dated July 2026,
is promulgated as directed by the Chiefs of Staff



Head Doctrine and Analysis

Conditions of release

This publication is UK Ministry of Defence Crown copyright. Material and information contained in this publication may be reproduced, stored in a retrieval system and transmitted for UK government and MOD use only, except where authority for use by other organisations or individuals has been authorised by a Patent Officer of the Defence Intellectual Property Rights.

Intentionally blank

RECORD OF NATIONAL RESERVATIONS

[illegible]

Intentionally blank

RECORD OF SPECIFIC RESERVATIONS

[nation]	[detail of reservation]
HUN	Although the military medical community of the Hungarian Defence Forces accepts and tries to follow the AJP-4.2, it is necessary to mention that two key statements of this doctrine, frequently cited in other subordinated doctrines as well, i.e: (1) 2.12 Treatment timelines and (2) 7.7 [MEDEVAC] Planning considerations are realistically NOT achievable in a possible future large-scale and high-intensity, symmetrical conflict against a technically advanced peer enemy, so their prescription as quasi-mandatory planning factors is very risky in that kind of situation.
NOR	Norwegian legislation limits the extent of patient information that can be openly available on a medical CIS. For the integration and sharing of medical records Norwegian medical CIS must adhere to Norwegian legislation.
TUR	Within the Turkish military medical support system, medical roles are implemented through an integrated civil–military framework. Role-1 military health services are provided by the respective Force Commands (Land, Navy and Air Force) through their organic medical personnel and facilities. The Turkish Navy possesses the capability to provide Role-2 medical support afloat on selected naval platforms. This capability is activated on a mission basis and is available on platforms including the Landing Helicopter Dock (LHD), Auxiliary Oiler Ammunition and Supply Ship (AOE), Bayraktar- class Landing Ship Tanks (LST) and the Submarine Rescue Ship (ASR). Role-2 medical support afloat is delivered through Deployable Fleet Surgical Teams (DFST). These specialist teams are established with the support of specialist personnel from the Ministry of Health and operate under the coordination of the Ministry of National Defence Military Health Services General Directorate. On land, advanced surgical care may also be provided through Forward Surgical Teams and deployable surgical hospitals, including mobile field hospitals and deployable forward surgical facilities. These capabilities are established and operated under the coordination of the Ministry of National Defense Military Health Services General Directorate, with the support of specialist personnel assigned from the Ministry of Health. Role-3 medical services are provided by hospitals belonging to the Ministry of Health in coordination with the Ministry of National Defence Military Health Services General Directorate.

	Role-4 medical services are provided by Ministry of Health Training and Research Hospitals and University Hospitals within the national health system. Medical logistics and sustainment are conducted under the coordination of the Ministry of National Defense Military Health Services General Directorate, with the support of relevant civilian health authorities when required. Considering that the referenced STANAG provides guidance for planning and supporting Allied joint operations, cooperation between the Turkish Armed Forces / Ministry of National Defense and national civilian health authorities constitutes an essential element of the Turkish military medical support system.
USA	Reservation 1. The United States categorizes medical support as both sustainment and force health protection. Understand NATO categorizes medical support as sustainment. Reservation 2. The United categorizes Roles of care slightly differently than NATO, however the capabilities required by NATO Roles I-IV are still met by US military support assets. Reservation 3. The United States will take NATO patient return policy into consideration when establishing its patient return policy. The USA will retain national control over execution of this policy for its Service Members. Reservation 4. The United States policy and the Law of Armed Conflict provide a detailed framework for who must be treated (e.g., detainees, EPWs). Granting a NATO commander the final authority on eligibility could potentially conflict with these national policies and legal obligations. The USA will follow NATO guidance. Reservation 5. The ultimate duty of care and legal responsibility for US personnel remains a national obligation. The USA continuously evaluates "Blood System Regulations and Standards Deemed Comparable to the United States" based on guidance of the Food and Drug Administration. DoD Instruction (DoDI) 6480.04, "Armed Services Blood Program," prescribes policy for receipt of blood products manufactured in foreign countries deemed comparable by the Assistant Secretary of War for Health Affairs (ASW(HA)). As of January 2026, there are 10 nations that meet this criteria. The US must abide by this regulatory standard. Reservation 6. The United States government recognizes the term 'sex' in place of 'gender'.
Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Documents Database for the complete list of existing reservations.	

Summary of Changes

- Based on the entire revision of the AJP-4, *Allied Joint Doctrine for Sustainment of Operations series*, AJP-4.2, *Allied Joint Doctrine for Medical Support* has undergone a fundamental restructuring to ensure synchronization and coherence between NATO's high-level doctrine, especially with AJP-01, AJP-3, AJP-4, AJP-5 and AJP-10, and includes content related to cross-cutting topics.
- Given the dynamic security environment, NATO must continuously evolve in an agile manner to effectively address emerging needs and operational challenges. Medical support as a key force enabler must be capable to cope with the whole spectrum of NATO operations.
- Ensuring a clear structure and coherence across all levels of command, the doctrine is now divided in eight chapters. The first two chapters address essential knowledge for the commander and staff by emphasizing comprehensively the fundamental principles of medical support and medical planning. AJP-4.2 highlights the integration of the joint medical staff into commanders' joint operations planning group and reflects the critical cohesion necessary to deliver medical support in the most effective manner.
- The remaining six chapters are structured according to the six components of medical support, including Command and Control, Communication and Information Management, Force Health Protection, Military Health Care, Medical Evacuation and Medical Logistics. Additionally, the realization that medical capabilities will be contested, civil-military interaction, understood as a collaborative network, might create the most effective medical services with given resources.
- To maintain consistency and clarity, the terminology has been synchronized with related documents by consistently using and referring to *NATO Term* database. Where applicable and necessary and based on the urgent need to modernize and adapt this doctrine and driven by capability development, newly introduced terms with appropriate indications.

Intentionally blank

Related Documents

The Geneva Conventions of 1949, their Additional Protocols, and other bodies of international law (as applicable)

AAP-03	Directive for the Production, Maintenance and Management of NATO Standardization Documents
AAP-47	Allied Joint Doctrine Development
AAP-77	NATO Terminology Manual
AAMedP-1.1	Aeromedical Evacuation
AJP-01	Allied Joint Doctrine
AJP-2	Allied Joint Doctrine for Intelligence, Counter-Intelligence, and Security
AJP-3	Allied Joint Doctrine for the Conduct of Operations
AJP-3.5	Allied Joint Doctrine for Special Operations
AJP-3.7	Allied Joint Doctrine for Recovery of Personnel in a hostile environment
AJP-3.8	Allied Joint Doctrine for Comprehensive Chemical, Biological, Radiological, and Nuclear Defence
AJP-3.13	Allied Joint Doctrine for the Deployment and Redeployment of Forces
AJP-3.14	Allied Joint Doctrine for Force Protection
AJP-3.19	Allied Joint Doctrine for Civil-Military Cooperation
AJP-3.20	Allied Joint Doctrine for Cyberspace Operations
AJP-4	Allied Joint Doctrine for Sustainment of Operations
AJP-4.1	Allied Joint Doctrine for Logistics
AJP-4.3	Allied Joint Doctrine for Host Nation Support
AJP-4.4	Allied Joint Doctrine for Movement

AJP-5	Allied Joint Doctrine for the Planning of Operations
AJP-6	Allied Joint Doctrine for Communication and Information Systems
AJP-10	Allied Joint Doctrine for Strategic Communications
AJMedP-1	Allied Joint Medical Planning Doctrine
SRD-1 to AJMedP-1	Military Medical Reports and Returns Guideline
AJMedP-2	Allied Joint Medical Doctrine for Medical Evacuation
AJMedP-3	Allied Joint Medical Doctrine for Medical Intelligence
AJMedP-4	Allied Joint Medical Force Health Protection Doctrine
SRD-4 to AJMedP-4	Field Hygiene and Sanitation
SRD-7 to AJMedP-4	Vaccination Catalogue Within NATO and PfP Forces
AJMedP-5	Medical Communications and Information Systems (MedCIS)
AJMedP-6	Allied Joint Civil-Military Medical Interface Doctrine
AJMedP-7	Allied Joint Chemical, Biological, Radiological and Nuclear (CBRN) Medical Support Doctrine ¹
AJMedP-8	Allied Joint Medical Doctrine for Military Health Care (MHC)
AJMedP-9	Multinational Medical Support
AMedP-1.1	Minimum Requirements for Blood, Blood Donors, and Associated Equipment
AMedP-1.5	Identification of Medical Material for Field Medical Installations
AMedP-1.6	Medical Evaluation Manual
AMedP-1.7	Capability Matrix
AMedP-1.8	Skills Matrix

¹ Will be re-named to Allied Joint CBRN Medical Support

AMedP-1.10	Medical Aspects in the Management of a Major Incident/Mass Casualty Situation
AMedP-1.11	Requirements of the Individual Operational Rations for Military Use
AMedP-1.12	Medical and Dental Supply Procedures
AMedP-1.14	Minimum Medical Design Requirements for Military Motor Ambulances
AMedP-1.19	Cross-servicing of medical gas cylinders
AMedP-1.20	Military Good Distribution Practices for Medical Material
AMedP-2.1	Stretchers, Bearing Brackets and Attachments Supports
AMedP-2.3	Patient Evacuation Coordination Cell (PECC) Tasks and Responsibilities (In Ratification)
AMedP-2.4	Guidelines on Ground Medical Evacuations (In Study)
AMedP-3.2	Medical Information Collection and Reporting
AMedP-4.1	Deployment Health Surveillance
AMedP-4.4	Dental Fitness Standards for Military Personnel and the NATO Dental Fitness Classification System
AMedP-4.8	Pre- and Post- Deployment Health Assessments
AMedP-4.9	Requirements for Water Quality During Operations
AMedP-4.11	Measures to Reduce Risk of Transfer of Biological Hazards During Troop and Materiel Movement
AMedP-4.13	NATO Special Operations Forces (SOF) Medical Support
AMedP-5.3	Telemedicine for Mission Support
AMedP-7.3	Training of Medical Personnel for Chemical, Biological, Radiological, and Nuclear (CBRN) Defence
AMedP-8.3	Training Requirements for Health Care Personnel in Interational Missions
AMedP-8.6	Mental Healthcare during Deployment

AMedP-8.10	A Psychological Guide for Leaders Across the Deployment Cycle
AMedP-8.12	Military Acute Trauma Care Training
AMedP-8.15	Requirement for Training in Casualty Care for All Military Personnel
AMedP-8.18	Medical Response to Sexual Based Violence in an Operational Setting
AMedP-8.19	Military Healthcare Ethics
AMedP-9.1	Modular Approach for Multinational Medical Treatment Facilities (MTF)
AMedP-9.2	Guidelines for a Multinational Medical Unit
AMedP-9.3	Credentialing for NATO Healthcare Professionals Assigned to a Role2/3 Multinational Medical Units
AMedP-24	Emergency Medical Care in the Operational Environment
ATP-3.13	Reception, Staging and Onward Movement (RSOM) Procedures
ATP-79	Orders for the Camouflage of Protective Medical Emblems on Land in Tactical Operations
AC/320-D(2022)0003	Guidance for Civil-Military Cooperation for the Evacuation of Patients in Large Scale Emergencies
ACO DIR 80-90	Civil Preparedness Management
ACO DIR 83-1 ED 2	Medical Support to Operations
ACO DIR 83-2	Allied Command Operations (ACO) Guidance for Military Medical Services Involvement with Humanitarian Assistance and Support to Governance, Reconstruction and Development
ACO DIR 083-004	Chemical, Biological, Radiological and Nuclear Medical Support Directive
SH/SUPPORT/J4/LSP/LRQ/EM/24-015780	Final Host Nation Support Concept for Collective Defence
SH/PLANS/J5/PLS/ST/23-014911	Comprehensive Operations Planning Directive

ACT/CAPDEV/CAP/MED/TT-6265/SerNU2203 NATO Medical Consultation, Command and Control (MedC3) Functional Concept

ACT/CAPDEV/CAP/MED/TT-6266/Ser:NU:2714 NATO Patient Flow Functional Concept

ACT DIR 75-2/T Medical Joint Functional Area Training Guide

Bi-SCD 040-001 Integrating Gender Perspective into NATO Command Structure (2021) ACT/CG/GENAD//TT-3634/Ser:NU

COMEDS-L-0003-2025 Action Plan to Enhance Medical Support for Collective Defence

C-M (2002)49 Security Within the North Atlantic Treaty Organization

EAPC(C)D(2018)0019 NATO/EAPC Policy and Action Plan on Women, Peace and Security

IMSM-0174-2021 NATO Medical Support Capstone Concept

MC 133/4 NATO's Operations Planning

MC 0319/4 NATO Principles and Policies for Logistics

MC 0326/5 NATO Principles and Policies of Medical Support

MC 0327/2 NATO Military Policy for Non-Article V Crisis Response Operations

MC 0335 Establishment of the Committee of the Chiefs of Military Medical Services in NATO (COMEDS)

MC 20/11 Military Committee Policy for Military Operational Standardization

MC 0343/1 NATO Military Assistance to International Disaster Relief Operations (IDRO)

MC 0411/2 NATO Military Policy on Civil-Military Cooperation (CIMIC) and Civil-Military Interaction

MC 0472 NATO Military Concept for Defence against Terrorism

MC 0458/4 NATO Education, Training, Exercises and Evaluation Policy

MC 0551	Medical Support Concept for NATO Response Force (NRF)
MC 0055/5	NATO Logistic Readiness and Sustainability Policy
MC 0572	NATO Military Medical Vision and Objectives 2007-2016
MC 0693-1	NATO Bio-Preparedness and Response Concept
MCM-0004-2023 (INV)	Alliance Concept for Multi-Domain Operations
MCM-0082-2022 (INV)	Military Guidelines on the Prevention of, And Response to, Conflict-Related Sexual Violence
NSHQ DIR 75-001	Medical Standards and Training Directive
NSHQ DIR 300-001	SOF Medical Leaders Handbook
NATO Lessons Learned database; Joint Analysis & Lessons Learned Centre (JALLC)	
PO (2022) 0200	NATO Strategic Concept
PO (2020)0156	NATO Gender-Inclusive Language Manual
PO (2010) 0169	The Alliance's Strategic Concept
PO (2016) 0407 (INV)	NATO Policy for the Protection of Civilians
PO (2018) 0227-AS1	Military Committee Concept for the Protection of Civilians
PO (2022) 0280	Human Security Approach and Guiding Principles
PO (2022) 0520	NATO Medical Support Capstone Concept
Protection of Civilians ACO Handbook (3)	
Patient Flow Management Guideline Version 1.1	
Security Council resolution 1325 (S/RES/1325 (2000)), 31. October 2000 and follow up documents (such as 1820, 1888, 1889)	
Tägerwilen 2 Report	
UN World Health Organization <i>One Health Initiative</i> (2017)	

[NATOTerm Database](#)

Table of Contents

Reserved for national promulgation letter	i
RECORD OF NATIONAL RESERVATIONS	iii
RECORD OF SPECIFIC RESERVATIONS	v
Summary of Changes	vii
Related Documents	ix
Table of Contents	xv
Preface	xvii
Chapter 1 – Fundamentals of medical support.....	1
Section 1 – Description	1
Section 2 – Strategic and operational context	2
Section 3 – Organization of medical support	3
Section 4 – Considerations for medical support	6
Section 5 – Approaches to medical support	9
Section 6 – Information and knowledge management.....	11
Section 7 – Education, training, exercises and evaluation.....	12
Chapter 2 – Planning and conducting medical support in operations	17
Section 1 – Fundamentals of planning.....	17
Section 2 – Planning considerations.....	18
Section 3 – Stages of an operation.....	23
Chapter 3 – Command and control.....	29
Section 1 – Description	29
Section 2 – The headquarters' medical staff architecture	29
Section 3 – Roles and responsibilities	31
Section 4 – Consultation and civil-military interaction in operations.....	33
Chapter 4 – Communications and medical information management	35
Section 1 – Description.....	35
Section 2 – Considerations for medical communications and information systems	35
Section 3 – Medical records	37
Section 4 – Medical intelligence and medical information.....	37
Section 5 – Health surveillance.....	38
Section 6 – Command and control and decision support.....	39

Chapter 5 – Force health protection.....	41
Section 1 – Description.....	41
Section 2 – Considerations.....	41
Section 3 – Force health protection approaches	42
Section 4 – Force health protection program areas.....	42
Chapter 6 – Military health care	45
Section 1 – Description.....	45
Section 2 – Military health care areas	45
Section 3 – Military health services	45
Section 4– Roles of medical support and capabilities	47
Section 5 – Continuum of care	49
Chapter 7 – Medical evacuation.....	51
Section 1 – Description.....	51
Section 2 - Medical evacuation assets	52
Section 3 – Planning considerations	53
Section 4 – MEDEVAC responsibilities	53
Section 5 – Patient flow management	54
Chapter 8 – Medical logistics.....	57
Section 1 – Description.....	57
Section 2 – Considerations for medical logistics	57
Section 3 – Planning considerations and conduct of medical logistics	58
Annex A – Medical doctrine architecture.....	A-1
Annex B – Considerations for special populations at risk.....	B-1
Lexicon	Lex-1

List of Figures

Figure 2.1 – All Hazards Approach

Figure 3.1 – Joint Medical Staff Architecture

Figure A.1 – Medical Doctrine Architecture

Preface

Context

Medical support is a key enabler for Alliance force preparedness, readiness, resilience and sustainability. Allied Joint Publication (AJP)-4.2(A), *Allied Joint Doctrine for Medical Support*, Edition A addresses the increased complexity of managing the development, integration, employment and sustainment of medical support to Alliance operations. Medical support must be agile and flexible to provide the capabilities required for the full spectrum of NATO operations.

Scope

AJP-4.2(A) provides NATO level 2 doctrine for planning, preparing and conducting medical support to operations and builds on the principles described in AJP-4(C), *Allied Joint Doctrine for Sustainment of Operations*. This publication covers the essential terms, relationships and processes necessary to enable headquarters to plan and prepare the conduct of medical support activities. It does not contain detailed procedures, which are covered in lower-level documents including Allied Joint Medical Publications, Allied Medical Publications, Allied Dive Publications, and Allied Aeromedical Publications.

Purpose

Although every operation is unique, their preparation and execution can be approached in a consistent manner. AJP-4.2(A) is intended to provide guidance to commanders and their staffs to facilitate clear and common understanding and flexible decision-making. It clarifies NATO's approach to medical support, organization, procedures, and responsibilities, and provides a common framework for the medical contribution to NATO operations.

Application

AJP-4.2(A) is primarily intended for the operational level, although it also has utility at both the strategic and tactical levels. The doctrine provides guidance and a framework for medical support activities conducted by a coalition of mission participants. It also provides a reference for civilian mission participants.

Linkages

AJP-4.2(A is consistent with MC 0326/5 *NATO Principles and Policies of Medical Support*² and is directly subordinate to AJP-4 *Allied Joint Doctrine for Sustainment of Operations*. AJP-4.2(A) follows the framework provided by AJP-01, *Allied Joint Doctrine*, the principles and processes outlined in AJP-3, *Allied Joint Doctrine for the Conduct of Operations* and AJP-5, *Allied Joint Doctrine for the Planning of Operations*.

² AJP-4.2 is based on the content of MC 0326/5, which is currently under revision.

Chapter 1 – Fundamentals of medical support

Section 1 – Description

1.1 Medical support is one of the functions of sustainment.³ It encompasses the full range of medical planning and provision of medical and health services to maintain force strength through disease prevention, evacuation, rapid treatment of the diseased, injured and wounded, and their recovery and return to duty.

1.2 Medical support contributes to fighting power through the preparation and sustainment of personnel that are physically and mentally able to fulfil their role. It contributes to the moral component, or the will to fight, by providing the force with reassurance that they will be well cared for in the event of becoming wounded, injured or ill, wherever they are operating.

1.3 All military activities require medical support, regardless of location throughout peacetime, crisis and conflict. It must be included in all phases of the operation from planning, preparation, deployment, execution and recovery. Medical support must be capable of addressing security challenges or threats in all environmental and operational conditions.

1.4 Medical support involves the identification, analysis and assessment of hazards and threats to health, advice to commanders on risks and the provision of services, capabilities, and resources to mitigate these risks. Provision of medical support incorporates a capable range of medical and health services provided by medical professionals⁴ including, but not limited to, prevention, diagnosis, treatment, rehabilitation, and palliation.⁵

1.5 Medical support is enabled through a wide range of capabilities, activities and subject matter expertise which may include, but is not limited to, administration, logistics and supply, intelligence, training and education, food and water safety, veterinarians and counter-chemical, biological, radiological, and nuclear (CBRN) medical support.

1.6 Medical support is part of the wider provision of military health care to military personnel from enlistment to retirement through the full spectrum of their military duties in the home base and on operations. To sustain and restore a healthy military workforce, medical support to operations is highly dependent on integration of the home base military medical services (and/or national health services). The medical support function might also include activities beyond the medical support of military forces.

1.7 Throughout this doctrine, where the word medical is used it refers to all aspects of health care, not just the practice of medicine. Nations may use the term health service support

³ Refer to AJP-4 Allied Joint Doctrine for Sustainment of Operations.

⁴ NATO *Term*.

⁵ Some aspects of medical support can be delivered by adequately trained and equipped non-medical personnel.

interchangeably with medical support to encompass all services provided directly or indirectly to contribute to the health and well-being of patients or a population.

1.8 Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.⁶ It enables the force to carry out duties unimpeded by physical or mental problems. Therefore, the maintenance of good health and wellbeing of military personnel, alongside medical support, is a key force enabler. Health and medical support⁷ comprise a set of actions which contribute to the preparation and preservation of human potential by full and coherent care. This wider concept recognizes that there are important actions that are the responsibility of commanders, other staff functions (such as logistics and personnel branches) and individuals themselves to sustain health and prevent injury and illness.

Section 2 – Strategic and operational context

Strategic context

1.9 The strategic environment of the coming decades will be characterized by complexity, strategic competition, pervasive instability and recurring shocks driven by differing perspectives, priorities, motivations and interests of parties. It will continue to be shaped by economic and environmental pressures, climate change, urbanization, population shift, resource scarcity and increasing energy demands.⁸

1.10 NATO's core focus remains on deterrence and collective defence, crisis prevention, crisis management, and cooperative security. The Euro-Atlantic area needs further military and civilian resilience to fulfil these core tasks.

1.11 The development of advanced and disruptive technologies, in conjunction with the constant acceleration in the speed and volume of data, has led to the emergence of complex and interconnected challenges and increased vulnerability to cyber threats. The proliferation of emerging biotechnologies, human performance enhancements and developments in the use of artificial intelligence in health care are current, future-oriented topics that need to be considered in the individual and collective development of capabilities.

1.12 The changing patterns of disease, accelerated by climate change, will increase the frequency of regional outbreaks and risk of pandemics. The global shortage of healthcare workers and competition for medical supplies, including pharmaceuticals, will have an impact on both military and civilian healthcare systems.

⁶ World Health Organization (WHO) definition.

⁷ NATO Term.

⁸ NATO Strategic Concept (2022). *“The Euro-Atlantic area is not at peace. The Russian Federation has violated the norms and principles that contributed to a stable and predictable European security order. We cannot discount the possibility of an attack against Allies’ sovereignty and territorial integrity.”*

Operational context.

1.13 The previous focus on peace support and expeditionary operations has shifted towards the ability to support the full spectrum of operations up to maximum level of effort warfighting to accomplish NATO's core tasks. Another pivotal shift is NATO's approach to multi-domain operations (MDO)⁹, which will endeavour to empower the Alliance to strategically influence events, synchronize efforts with external stakeholders and present formidable challenges to adversaries. In a peer/near-peer conflict, where the fighting will be more lethal and intense, this MDO approach is an advantage. Medical capabilities in support of NATO operations will be deployed into challenging operational conditions with a need to scale, adapt and adjust to cover the entire spectrum. These conditions include but are not limited to:

- high intensity combat which may lead to a high number of casualties;
- high prevalence of health threats and risks which may lead to a high number of disease and non-battle injuries (DNBIs);
- deliberate violations of humanitarian and international law;
- remote and austere locations;
- dense urban areas;
- prolonged timelines, operating along extended and/or limited lines of communication;
- hybrid/unconventional/asymmetric warfare;
- variable availability of host nation (HN) support and civilian-military interaction; and
- high demand and competition for medical resources;
- Mass and frequent return of isolated personnel (e.g., prisoners of war, hostages, or detainees) through rescue, self-recovery, or diplomatic means.

1.14 These varying conditions require a high level of readiness, agility and flexibility, but also interoperability, resilience and sustainability. Medical support must adapt to constraints, such as the protection of medical capabilities being targeted and managing patient flow despite restricted freedom of movement.

Section 3 – Organization of medical support

1.15 Medical support on operations is provided by medical capabilities.¹⁰ Medical capabilities might be delivered by an individual, a team, one or several medical units or multinational medical units. The capabilities required will be determined by the medical planning process and will be tailored to the mission.¹¹ All of the medical capabilities supporting an area of operations (AOO) or activity from the medical support system.

⁹ NATO Term, refer to MCM-0004-2023 *Allied Concept for Multi Domain Operations*

¹⁰ NATO Term

¹¹ Refer to Chapter 2 Planning and Conducting Medical Support in Operations.

1.16 The medical support system must be integrated across all operational domains. The medical support system could also include arrangements to use HN, other nation, multinational or contracted healthcare services. The medical support system is inherently connected and mutually supported by national military and/or civilian health systems. Operating as a collaborative network can create the most effective health care with given resources.

Components of medical support

1.17 To function effectively, a medical support system must consist of all the following components.¹²

- a. **Command and control.** Command and control (C2) is the authority, responsibilities and activities of military commanders in the direction and coordination of military forces as well as the implementation of orders related to the execution of operations. Medical C2 and supporting architecture must be clearly established in operation plans.¹³
- b. **Communications and information management.** Effective communication and information sharing are essential for improving medical decision-making, coordinating medical support, ensuring accessibility and interoperability and enhancing the commander's situational awareness and decision-making process. This will provide the basis of the recognized medical picture (RMedP), processed as the medical layer of the common operational picture (COP).
- c. **Force health protection.** Force health protection comprises all medical efforts to promote or conserve physical and mental well-being, reduce or eliminate the incidence and impact of disease, injury and death and enhance operational readiness and combat effectiveness of the forces.
- d. **Military health care.** Military health care provides clinical care, including diagnosis and treatment, as well as clinical services and interventions.
- e. **Medical evacuation.** Medical evacuation (MEDEVAC)¹⁴ is the movement of a patient who is wounded, injured, or ill to and/or between medical treatment facilities under the supervision of personnel trained and equipped to provide appropriate medical care.

¹² The description of the components of medical support follows MC 0326/5. These essential factors are considered *Six Components of Medical Support*.

¹³ Refer to Chapter 3 Command and Control.

¹⁴ NATOTerm; Terminology Proposal Form for Modification of the NATOTerm 22089 by MMSOP WG.

- f. **Medical Logistics.** Medical logistics embraces planning, procurement, storage, movement, distribution, maintenance, and disposal of medical materiel¹⁵ and pharmaceuticals, including blood products and medical gases.

Roles of medical support

1.18 Roles of medical support are categories used to identify the functions and capabilities of medical elements. Medical support of a defined role might be delivered by a single medical treatment facility or can be distributed across multiple providers and facilities.

1.19 There are four roles of medical support¹⁶.

- a. **Role 1 medical support** provides routine primary health care, specialized first aid, triage, resuscitation and stabilization. Role 1 medical support capabilities are often organic to and must work closely with the supported troops and are therefore a national responsibility. In a multinational context there is a need to aim towards collective effort, agreeing as a minimum common standard and approach.
- b. **Role 2 medical support** provides a capability for the reception and triage of patients, as well as the structure to perform treatment of the wounded, injured and diseased at a higher technical level than Role 1, including resuscitation and surgery. Role 2 capabilities are tailored to mission needs in order to operate in remote, austere and unsecure tactical environments.
- c. **Role 3 medical support** provides the structure for deployed hospitalization with the elements required to support it, including a mission-tailored variety of clinical specialties and support functions.
- d. **Role 4 medical support** provides the full spectrum of definitive medical care that cannot be deployed in theatre or is too time-consuming to be conducted there. This is a national responsibility and is typically conducted within the patient's home nation, but other arrangements might be made.

Continuum of care

1.20 Medical support is organized to provide an end-to-end care pathway from the point of injury (POI) or onset of illness through to the completion of their treatment, rehabilitation, and if possible, return to duty. This organizational pattern is termed the continuum of care.¹⁷ Each patient will follow a seamless, continuous pathway through increasingly capable medical

¹⁵ Refer to AMedP-1.20 *Military good distribution practice for medical materiel*; examples include medical consumables, diagnostic agents, surgical and medical instruments; devices and appliances, imaging and other diagnostic tools, laboratory requirements, rehabilitation equipment, clinical training equipment.

¹⁶ Chapter 6 *Military Health Care* provides more detail on the patient care delivered at each role of medical support and other key medical capabilities. Refer to AJMedP-1 *Allied Joint Medical Planning Doctrine* (under revision) for details.

¹⁷ Refer to Chapter 6, Section 8 *Military Health Care, Continuum of Care*

treatment facilities (MTFs), transported by capable MEDEVAC assets. The totality is, in fact, a complex network of MTFs, staging/holding locations (e.g. staging units, hubs) and services across the AOO and beyond, through which the flow of patients is carefully managed.¹⁸

Entry to the medical support system

1.21 Medical personnel will not always be available at the POI. To improve survival, all military personnel must have first aid training and have appropriate basic first aid equipment. Non-medical military personnel with advanced first aid training should arrive as soon as possible to provide first aid and/or evacuate casualties. First aid and casualty evacuation are not strictly part of medical support but a key interdependency.¹⁹

1.22 **Casualties and patients.** A casualty is, regarding to the personnel system, a person who is lost to an organization by reason of having been declared dead, wounded, injured, diseased, detained, captured or missing. When a casualty enters the medical support system for diagnosis and/or treatment they are referred to as a patient.

Section 4 – Considerations for medical support

Principles and policies

1.23 NATO principles and policies of medical support are laid down in MC 0326/5²⁰. The key principles and policies for the planning and execution of medical support are reflected throughout this doctrine. For patient care, the following should always be considered.

- a. **Primacy of clinical need.** Clinical need is the primary factor in a patient's medical care and evacuation. All sick, injured, shipwrecked or wounded should be treated without discrimination and solely based on their clinical needs and the availability of medical resources.
- b. **Universal provision of acute emergency care.** The operational commander has the authority to permit but also to limit medical support to non-combatants based on factors like the force's medical capacities, the workload of its medical assets and facilities and the availability of medical supplies.²¹ However, in the case of acute life-threatening conditions, emergency care should generally not be denied within the capability/capacity of the medical resources deployed.
- c. **Standards of care.** Every effort should be made to ensure that medical support is based on internationally accepted best medical practice. Medical support should aim to provide the best possible care given the circumstances of the operation and

¹⁸ Refer to Chapter 7, Section 5 Medical Evacuation, Patient Flow Management.

¹⁹ Refer to Chapter 6, Section 1 Military Health Care, Description for details.

²⁰ Refer to MC 0326/5 *NATO Principles and Policies of Medical Support*.

²¹ Refer to Chapter 2, Section 2 Planning and Conducting Medical Support in Operations, Medical Rules of Eligibility (MRoE).

resources available. It is recognized that the nature of operations may prevent the ability to always meet all medical requirements. Each activity must have medical support that is safe and sufficient, and the commander must understand and decide on any risk taken. Medical support must be subject to a system of assurance to review performance and ensure compliance with this policy.

Legal framework²²

1.24 NATO nations must operate within a legal framework, defined by their applicable national laws and by international humanitarian law to maintain the lawfulness, and therefore, the legitimacy of their actions. Observing the rule of law is fundamental to NATO's professional military culture and is inherently linked to lawful behaviours. Medical personnel should understand the legal underpinning of a NATO activity and the laws that govern medical personnel behaviour.²³

Geneva Conventions and additional protocols

1.25 In armed conflicts, the Geneva Conventions and their additional protocols protect medical personnel and facilities, (including maritime vessels and aircraft), and assigns clearly identifiable and distinctive emblems. NATO nations are the signatories to the Geneva Conventions and are responsible for the compliance, training, and investigating the application of international humanitarian law in relation to their military personnel.

1.26 The following provisions always apply:

- a. Medical personnel retain their protected status whilst they are exclusively acting in their humanitarian function.
- b. Medical personnel retain their rights and obligations under the Geneva Conventions, irrespective of whether the protective emblem is displayed.
- c. Medical personnel are permitted to carry and use arms for their own defence, or to defend the wounded and sick in their charge, but not to support the collective protection of non-medical facilities and assets.
- d. The use of the protective emblem (red cross, crescent, and crystal), designed to facilitate identification of medical personnel, infrastructure, and equipment is reserved for personnel and objects used exclusively for medical support.

²² The legal framework applicable to medical personal, equipment and facilities changes depending on the context (peace time to international armed conflict) and the nationality of the personnel. The following principles are applicable during international armed conflict, and partially in non-international armed conflict.

²³ The legal framework for medical personnel and units are clearly defined within MC 0326/5 *Policies and Principles of Medical Support* and a number of NATO Standardization Agreements (STANAGs).

1.27 It is the responsibility of NATO commanders at all levels to ensure the protection of medical assets and to respect the distinctive emblems.²⁴ Failure to respect the protected status of medical capabilities may constitute a violation of international humanitarian law and equally compromise military operations. After consulting the Medical and Legal Advisor, NATO commanders at the appropriate level can authorize, but not mandate, the masking of protective emblems and the protection of medical capabilities and those in their care by combatant personnel with appropriate weapon systems. However, before making any decisions, it is important to consider the benefits and risks of masking the emblems and from combatants operating in the vicinity of medical personnel and objects.²⁵

National law and professional regulation

1.28 Medical personnel have a duty to comply with their respective national laws and national professional regulations. National bodies have the ultimate authority regarding the regulation, authorization and licensing of healthcare practitioners including those working in military contexts. Whilst national laws/professional regulations and international codes/laws have primacy, NATO nations should report to the NATO commander and other troop contributing nations (TCNs) of any variance. In all cases where medical personnel provide health care outside of their national jurisdiction, it is imperative that their regulatory authorities and permission to practice are confirmed before the operation commences.

Ethical approach

1.29 Ethical and moral considerations are fundamental to medical support and operational decision-making. NATO commanders at all levels are responsible for enabling their subordinates to act accordingly and should hold them accountable for their behavior.²⁶

1.30 In the event of a significant number of patients requiring medical care, it may be advisable to avoid initiating complex or comprehensive clinical procedures. In circumstances when resource demand exceeds capacity and/or in a contested/deteriorated environment, alternative guidelines or procedures may be temporarily imposed to improve the chance of survival for the maximum number of patients.

Human security

1.31 Conflict will affect human security. Therefore, NATO acknowledges the importance of reducing the impact of its actions on civilian populations.²⁷ Human security encompasses five areas:

- combatting trafficking in human beings;
- protection of children in armed conflict;

²⁴ Refer to AMedP-1.5 *Identification of Medical Materiel for Field Medical Installations* (STANAG 2060) *Annex A Geneva Convention Signs*.

²⁵ Refer to ATP-79 *Orders for the Camouflage of Protective Medical Emblems on Land Tactical Operations*.

²⁶ Refer to AMedP-8.19 *Military Healthcare Ethics* (STANAG 6562).

²⁷ Refer to PO (2022) 0280 *Human Security Approach and Guiding Principles*.

- preventing and responding to conflict-related sexual violence^{28,29};
- protection of civilians; and
- cultural property protection.

1.32 These categories are also related to determinants of health. In the given mandate and where possible, NATO forces might need to provide emergency first response to victims/survivors. There are medical response obligations to conflict-related sexual and gender-based violence as well as sexual abuse and exploitation.³⁰

Gender perspective

1.33 The integration of gender perspective has a force multiplying effect across all components of the Alliance's fighting power and should be considered during all stages of NATO operations and missions.³¹ This acknowledges that conflict affects men, women, boys and girls differently, which can have tactical, operational and strategic implications. Gender analysis³² can help to identify local national, cultural, and religious sensitivities to clinical treatment and access to health care for men and women, boys and girls in developing and developed countries.³³

Section 5 – Approaches to medical support

Flexible

1.34 Military medical services need to support every type of operation, under all environmental conditions, in order to meet the Alliance's commitments³⁴. This requires a flexible medical support system, able to adapt and adjust in response to military necessity and patient care needs.

Scalable

1.35 Scalability is the increase or decrease of medical support capabilities to respond to mission requirements. Military medical services must have the adaptability and agility to support operations of varying scales.

²⁸ Refer to MCM-0082-2022 (INV) *Military Guidelines on the Prevention of, and Response to, Conflict-Related Sexual Violence*.

²⁹ Refer to AMedP-8.18 *Medical Response to Sexual Based Violence in an Operational Setting (STANAG 2546)*.

³⁰ Refer to Bi-Strategic Command Directive 040-001 – *Integrating Gender Perspective into the NATO Command Structure (2021)*, ACT/CG/GENAD/TT-3634/Ser:NU

³¹ Refer to AJP-01 *Allied Joint Doctrine, Annex B – Gender and Women, Peace and Security*

³² NATOTerm

³³ WHO Gender and Health. Gender equality and the empowerment of women and girls are central to the 2030 Agenda for Sustainable Development and all 17 Sustainable Development Goals (SDGs).

³⁴ Refer to AJP-01 *Allied Joint Doctrine*.

Resilient

1.36 Resilience³⁵ is the ability of an entity to continue to perform specified functions during and after an attack or an incident. Imperatively, medical support systems, both civilian and military, must remain operational regardless of circumstances. This requires a dependable crisis response system and sustainment mechanisms.

Multinational

1.37 The principle of 'collective responsibility'³⁶ encourages NATO members to share the operational burden collectively. Standardization, cooperation, and mutual assistance enable nations to share in the provision and use of operational capabilities and resources. This promotes effectiveness and helps minimize duplication of effort. Pooling and sharing increases interoperability and may facilitate a more efficient utilization of scarce and finite resources.³⁷

1.38 In order to be able to deliver multinational medical support, it is necessary to strike a balance between national and NATO approaches. In this context, it is important to consider a number of factors such as force structures, legislation, educational requirements, cultural awareness, political perspectives, operational procedures, and technical compatibility.

1.39 National contributions to multinational medical support can range from purely national to fully integrated multinational medical units. In each case, responsibilities and authorities are to be addressed by a memorandum of understanding, technical agreement or other arrangement agreed by all parties.³⁸

Modular

1.40 A module is a self-contained entity comprising personnel, equipment, materiel and procedures whose final output is a specific functional capability. Modules can be arranged, rearranged, replaced, combined, and interchanged according to mission requirements. This approach ensures that the collective capability is flexible, enabling it to adapt to any evolving operational medical support requirement. This approach enables nations to contribute single or multiple capability components.³⁹

³⁵ NATOTerm.

³⁶ Refer to AJP-4 *Allied Joint Doctrine for Sustainment of Operations*.

³⁷ The framework is described in AJMedP-9 *Allied Joint Medical Doctrine for Multinational Medical Support*.

³⁸ Refer to AMedP-9.2 *Guidelines for a Multinational Medical Unit* provides an example of a MoU.

³⁹ Refer to AMedP-9.1 *Modular Approach for Multinational Medical Treatment Facilities (MTF)*

Civil-military medical interaction

1.41 NATO recognizes the need to integrate, orchestrate and synchronize with non-military actors. Strong civil-military interaction (CMI)⁴⁰ can address critical shortfalls in several areas, including medical support.⁴¹ It is important to foster mutual understanding and collaboration between military and non-military actors in order to support and sustain operations.

1.42 The establishment of a successful civil-military medical relationship requires effective consultation between the two sides. When successful, the military and civil healthcare systems will complement one another, resulting in enhanced patient care. It will assist non-military personnel in understanding how NATO operations may affect their provision of health care and how to mitigate such impact. CMI must be continuously strengthened during peace time. Planning and preparing for conflict and crisis must be a joint effort.⁴²

Section 6 – Information and knowledge management

1.43 Sharing and managing information between nations, NATO, and non-military entities are crucial for mission success and for effective patient care as well as health protection. Information management systems need to be in place to collect, store, process and exploit data.⁴³

1.44 Information and data from various sources are assessed to form the basis for the RMedP that contributes to the medical layer of the COP. This data provides tactical, operational and clinical insights and themes that supports both decision-making and medical planning.

1.45 The extraction, conservation and provision of knowledge⁴⁴ is of the utmost importance. Knowledge management supports continuous improvement and organizational learning⁴⁵ and, therefore, strengthens the collective standard and resilience of medical support. The main organizational approaches that contribute to continuous improvement include:

- risk management;
- sharing best practices;
- lessons identified and lessons learned;
- research, science, technology, and innovation; and
- digital transformation.

⁴⁰ NATOTerm

⁴¹ NATO *Warfighting Capstone Concept* (NWCC).

⁴² Refer to AJMedP-6 *Allied Joint Medical Publication Civil-Military Medical Interface Doctrine* (SD).

⁴³ Refer to Chapter 4 Communications and Medical Information Management.

⁴⁴ NATOTerm

⁴⁵ Refer to Chapter 2, Section 3 Continuous Improvement of Healthcare Support to Operations (CIHSO).

Section 7 – Education, training, exercises and evaluation

1.46 Education and training provide the necessary skills, knowledge, and experience to deliver medical support. Although education and training are foremost a national responsibility, common approaches and agreed minimum requirements support interoperability. Collective training and exercise can increase preparedness. Exercises and evaluations contribute to the overall aim of interoperability in support of NATO's core tasks.

Education and training for military personnel

1.47 **Self and buddy care.** Self and buddy care is able to be delivered by all service personnel. It is an essential component of military training that focuses on the physical and mental well-being of military personnel. This includes first aid, individual hygiene and health promotion, the handling of their own minor injuries or illnesses, assist or relieve individuals suffering from injuries, diseases, and/or contamination.

1.48 Successfully performed first aid, like stopping accessible serious bleeding and providing the ability to breathe can significantly improve survivability and the outcome of the injured, wounded or sick.⁴⁶ Both aspects are crucial for fostering resilience, teamwork, and readiness within military units. It emphasizes the importance of individual accountability and mutual support in challenging and high-stress environments. To ensure the best possible self and buddy care, all military personnel should be equipped with appropriate individual first aid kits.

1.49 All Nations should adopt and train military personnel and civilian counterparts according to a standardized first aid training program in order to enable them to deliver immediate care within the first ten minutes from time of injury. The training should cover combat related life-saving interventions in accordance with established evidence-based practices derived from a robust trauma registry.

1.50 **Hygiene training**⁴⁷ is essential for an individual's well being by reducing the impact of DNBI. All personnel on NATO operations should be proficient in performing the essential basics of individual hygiene and health discipline determined by the commander.

1.51 **Advanced first aid training for non-medical personnel.** Assigned personnel will be trained to perform advanced first aid procedures. This is particularly important where forces are operating in a setting where access to medical treatment might be hampered. This could cover independently performing wound management, airway management, sickcalls, administration of certain medications, mental health first aid, prolonged casualty care and care of the dying, which may be adjusted to limited freedom of movement and extended lines of communication. This may require specific waivers or endorsement by national authorities.⁴⁸

⁴⁶ Refer to AMedP-8.15 *Requirement for Training in Casualty Care for All Military Personnel* (STANAG 2122).

⁴⁷ Refer to SRD-4 to AJMedP-4, *Field Hygiene and Sanitation*

⁴⁸ For example, as reflected in AJP-3.5 *Allied Joint Doctrine for Special Operations* (STANAG 2523) and AMedP-4.13 *NATO Special Operations Forces (SOF) Medical Support* (STANAG 6541)

Education and training for medical personnel

1.52 Individual education and training for healthcare professionals and other medical staff is a national responsibility; however, all TCN should follow current NATO medical standards. Education and training should encompass clinical skills as well as research, communication, management, and continuous professional experience.

1.53 Leaders of medical units and those serving in a medical staff function should be trained, exercised, and experienced accordingly. This includes but is not limited to critical incident management, leadership, organization, coordination, language, and planning skills in the context of the fundamental principles of medical support.⁴⁹

1.54 Training standards for medical personnel in military operations should ensure interoperability and a standardized output of medical capabilities.⁵⁰ Credentialing procedures must be undertaken before assignment to a multinational medical unit.⁵¹

1.55 Medical teams, particularly those providing emergency medical and surgical care, should be trained and exercised as realistically as possible, for the environment in which they will operate and with the troops they support. This training should include life and limb and function⁵² saving techniques, with expectation that execution of the trained skills will occur outside a hospital environment under tactical conditions with the respective limited equipment. Education and training of military medical personnel must prepare them for effective CMI.

Responsibilities for NATO Command Structure and NATO Force Structure

1.56 Allied Command Operations Joint Medical Staff defines NATO's requirements for medical education and training to prepare the NATO Command Structure (NCS) and NATO Force Structure for current or/and future operations and missions. The Centre of Excellence for Military Medicine (MILMED COE) monitors and matches the requirements with effective and affordable education and training solutions. All training requirements need to be continuously validated. National/multi-national training facilities may request an evaluation by the MILMED COE to assure the training provided meets NATO requirements. Nations are responsible for ensuring personnel assigned to the NCS are trained according to the requirements.⁵³

⁴⁹ MC0326/5 *Policies and Principles of Medical Support*

⁵⁰ Refer to AMedP-8.3 *Training Requirements for Health Care Personnel in International Missions* and AMedP-8.12 *Military Acute Trauma Care Training* and AMedP-1.7 *Capability Matrix (under revision)* and AMedP-1.8 *Skills Matrix (under revision)*.

⁵¹ Refer to AMedP-9.3 *Credentialing for NATO Healthcare Professional assigned to Role 2/3 Multinational Medical Units*.

⁵² including eyesight

⁵³ Refer to MC 0458/4 *NATO Education, Training, Exercises and Evaluation Policy* and *NATO Medical Support Strategic Training Plan* (revised version 2025).

Exercises

1.57 Exercises are essential to evaluate and to improve the medical support provided to deployed forces and to facilitate cooperation and interoperability among the different services and nations involved.

1.58 Training of medical support is an integral part of all exercises of allied forces and should be given appropriate priority. The deploying forces must be trained according to the tactics, techniques and procedures that will be used in the area of operations. Medical personnel must be involved in the exercise design and scenario development process to ensure appropriate medical training objectives based on the six components of medical support are included. Exercising medical capabilities should not be tasked to provide real-life medical support. Training should be conducted in similar environmental conditions, such as cold weather, with deploying forces.

1.59 Cross functional exercises such as command post exercises strengthen low- and high-intensity warfighting skillsets of the Headquarters. They enable different levels to train together and test a wide range of medical capabilities and procedures. Cross-disciplinary CBRN and medical training exercises increase NATO interoperability, verify common procedures of patient management in a CBRN environment and improve its seamless handling between the areas of responsibility.⁵⁴

Evaluation

1.60 Evaluation should provide assurance that medical capabilities are ready and prepared to meet operational requirements. The evaluation of medical units and treatment facilities ensures that each capability provided meets NATO standards. Nations are responsible for the evaluation and certification of the units they contribute to a multinational force. The NATO commander is responsible for the certification of the entire force.⁵⁵

⁵⁴ Refer to AJMedP-7 *Allied Joint Chemical, Biological, Radiological and Nuclear (CBRN) Medical Support Doctrine* and AMedP-7.3 *Training of Medical Personnel for Chemical, Biological, Radiological, and Nuclear (CBRN) Defence*.

⁵⁵ Refer to AMedP-1.6, *Medical Evaluation Manual* (under revision) and AMedP-1.7 *Capability Matrix* (under revision) and AMedP-1.8 *Skills Matrix* (under revision). The MILMED COE can provide expertise and training in medical evaluation upon request.

Education and training requirements on gender perspective

1.61 Education and training on gender perspective is a national responsibility and is mandatory for any personnel assigned to NCS or to NATO missions, operations and activities.⁵⁶ All medical personnel should have the required knowledge on gender perspective in military operations, the prevention and response to conflict-related sexual violence and sexual exploitation and abuse. Any specific gender related medical training will be in addition to this baseline knowledge.⁵⁷ Training requirements authorities for medical support and for gender on military operations should coordinate to align training.

⁵⁶ This meets NATO's intent to support United Nations. Security Council resolution 1325 (S/RES/1325 (2000)), 31 October 2000 and follow up documents (such as 1820, 1888, 1889).

⁵⁷ Refer to Bi-Strategic Command Directive 040-001 – *Integrating Gender Perspective into the NATO Command Structure (2021)*, ACT/CG/GENAD//TT-3634/Ser:NU

Intentionally blank

Chapter 2 – Planning and conducting medical support in operations

Section 1 – Fundamentals of planning

2.1 Medical planning contributes to NATO's overall planning process. It encompasses identifying and analysing threats, environments and health hazards, then defining, designing, and implementing a medical support solution.⁵⁸

2.2 The medical contribution, including the medical assessment, includes both input of medical expertise to the joint operations planning process (OPP) and the development of a medical support plan for the operation.⁵⁹ Medical planning must be conducted within all phases of the planning process.⁶⁰ Medical staff must be involved in the OPP to assess how the planned courses of action can be best supported medically. There must also be early and continuous engagement with and between Nations to ensure coherent provision of health care to the force. Commanders are responsible for ensuring there is thorough consideration of medical support within their operations plan.

2.3 Medical support is a very broad function covering various health care specializations as well as related services and enablers. It is vital that the joint medical (JMED) staff are integral to all operations planning and decision-making. However, JMED will require additional specialist advice from a variety of medical and non-medical subject matter experts (SMEs). The use of appropriate SMEs early in the planning process saves time, effort and misunderstanding later. The planning, conduct, and sustainment of medical support requires collaboration between medical staff and other HQ staff functions at each level of command.⁶¹ Medical staff contribute to the analysis of the overall operating environment by identifying health risks and other medical factors which may impact the planning and execution of the operation.

2.4 Input of information, intelligence (including medical intelligence⁶²) at each stage, and at all levels, of medical planning is essential to ensure a comprehensive analysis of the mission. It is important to the medical staff to support the OPP by providing input to the joint intelligence preparation of the operating environment (JIPOE).⁶³

⁵⁸ This chapter does not go into depth on medical support planning as this is covered in detail in AJMedP-1 *Allied Joint Medical Planning Doctrine* (under revision). It does provide high-level information for NATO commanders and staffs.

⁵⁹ Medical staff contribute to other products, such as Combined Joint Statement of Requirements (CJSOR), Theatre Capabilities Statement of Requirements (TCSOR), Crisis Response Measures (CRM) request and Crisis Establishment (CE).

⁶⁰ As described in AJP-5 *Allied Joint Doctrine for the Planning of Operations*.

⁶¹ Refer to AJP-3 *Allied Joint Doctrine for the Conduct of Operations*.

⁶² NATO Term.

⁶³ Refer to Chapter 4, Section 4 Medical Information and Intelligence.

2.5 **Reconnaissance.** Medical SME's should be included on operational liaison and reconnaissance teams⁶⁴ to provide guidance on the Host Nation (HN) healthcare system and the medical support layout. This information influences the medical support plan.

Section 2 – Planning considerations

General planning considerations

2.6 The all-hazard approach (CBRNE3T), as shown in figure 2.1, is a comprehensive threat agnostic⁶⁵ framework which addresses operational hazards that may affect the health of the force or the population at risk (PAR).

CBRNE3T – All Hazard Approach		
C	Chemical	e.g., conventional chemical agent threats, toxic industrial chemicals, riot control agents, chemical agents derived from pharmaceuticals
B	Biological	e.g., live organisms, toxins, biological hazards deliberately employed to harm the PAR
R	Radiological	e.g., material or events that release ionizing (alpha, beta, gamma radiation and neutrons) and non-ionizing radiation (including directed energy)
N	Nuclear	e.g., weapons or events that result in nuclear fission/fusion reactions
E	Explosive	Explosive (and ballistic) threats which cover consequences of explosive activity on human bodies, including gunshot, indirect fire, improvised explosive devices (IED), shells and bombs.
E	Environmental	Environmental conditions likely to cause harm, e.g. heat, cold, altitude.
E	Endemic	e.g., infectious diseases and biological agents that pose a risk to the health of the PAR, even if they are not deliberately released.
T	Traumatic	e.g. the trauma element of non-battle injuries to complement the explosive and ballistic threats.

Figure 2.1 – All Hazard Approach

In addition, the following need to be considered:

- threats to mental health due to unfavourable social, economic, geopolitical, and environmental circumstances;
- a deteriorating HN healthcare system incapable to cope with high demands; and
- misinformation or disinformation⁶⁶ that poses a risk to health (e.g., misinformation about vaccination safety or other preventive medicine measures).

⁶⁴ Refer to AJP-5 *Allied Joint Doctrine for the Planning of Operations*.

⁶⁵ Refer to AJP-3.8 *Allied Joint Doctrine for Comprehensive Chemical, Biological, Radiological, and Nuclear Defence*.

⁶⁶ Refer to AJP-10 *Allied Joint Doctrine for Strategic Communications*.

2.7 **Population at risk.**⁶⁷ The PAR is considered to identify medical capability and capacity requirements. The PAR may include but is not limited to:

- military personnel from allied, partner, friendly, or neutral nations;
- non-military NATO personnel, contractors in support of operations, members of government departments and agencies, international organizations;
- prisoners of war and other persons deprived of their liberty;⁶⁸ and
- non-combatants, local civilian population, refugees and displaced persons, locally employed civilians.

2.8 Different groups of the PAR may need specialist health care that may not typically be deployed with military medical support.

2.9 **Medical rules of eligibility.** The medical rules of eligibility (MROE) are part of the medical contribution to the operations plan. They should be guided by operational requirements as well as by ethical and legal principles and ensure that medical support capabilities can provide appropriate treatment and care when it is needed. MROE are used to determine who is eligible for treatment by the medical forces and is defined by the operational commander. There will be a requirement to harmonize the troop contributing nations' (TCNs) MROE with those of the operational commander to ensure that the local engagement of NATO health care providers is balanced against operational requirements and the strategic and operational objectives of Alliance operations.⁶⁹

2.10 **Patient return policy.** In close cooperation with the medical advisor and the headquarters medical staff, the operational level commander will establish the patient-return policy, defining the maximum length of time a patient will be allowed to receive treatment in the area of operations (AOO), to recover and return to duty. Personnel unable to return to duty within this limit should be evacuated to their nation's home base as soon as it is considered appropriate. Used in this way, the patient return policy provides a mechanism by which patients' needs are balanced against the need to ensure that sufficient medical treatment and evacuation capacities remain available to support the force. The patient return policy needs to be dynamic and able to respond to operational imperatives.

2.11 **Casualty estimation.**⁷⁰ Casualty estimates are a key factor to determine medical capability and capacity requirements for a given operation and should be produced early in the planning process. As the estimation of casualty rates is based upon assumptions, it may not provide definitive results. Military medical expertise and sound judgement will be required in interpreting casualty estimation data to determine the medical support plan.

⁶⁷ NATOTerm

⁶⁸ Refer to Annex B Principles of Medical Care to Persons Deprived of their Liberty.

⁶⁹ MC 0326/5 *NATO Principles and Policies of Medical Support* set's the legal and ethical baseline to define the PAR eligible for military medical support.

⁷⁰ NATOTerm

Casualty estimates are normally divided into battle casualties⁷¹ (BCs) and diseases and non-battle injuries (DNBIs).⁷²

- a. The BC rate estimation is the responsibility of the planning staff (J5) based on their knowledge and development of the plan. The personnel and administration staff (J1), the intelligence staff (J2) and JMED support J5 in conducting the BC rate estimation.⁷³
- b. DNBI estimation is the responsibility of the JMED. The estimate will be based on historical evidence, an analysis of medical intelligence and medical information, an environmental assessment and knowledge of the occupational risks associated with military duties.

2.12 Treatment timelines. All medical emergencies, whether due to trauma or acute illness, need to be treated as quickly as possible to achieve the best possible outcome. The medical system aims to provide appropriate life, limb, and function (e.g. eyesight) saving treatment, wherever practicable, within specific treatment timelines, balancing clinical evidence with operational reality.⁷⁴ Timelines are an important planning consideration. Planners will therefore decide how the available medical resource such as medical evacuation (MEDEVAC) assets and medical treatment facilities (MTFs) can be sited across the AOO that emergency patients⁷⁵ could reach treatment within these timelines. The **10-1-2 (+2) timeline** consists of:

- a. lifesaving first aid response measures to control severe bleeding and maintain airway, breathing and circulation immediately, as soon as possible but not later than **10 minutes**, after injury or onset of acute symptoms;
- b. pre-hospital emergency care including early resuscitation, such as damage control resuscitation, as soon as possible but not later than **1 hour** after injury, or onset of acute symptoms;
- c. life, limb, and function preserving surgical and resuscitative care such as damage control surgery as soon as possible but not later than **2 hours** after injury or onset of acute symptoms; and
- d. further surgical, resuscitative, diagnostic or specialist care capabilities are necessary to stabilize the patient for medical evacuation should be available as soon as possible but not later than **2 hours** of tactical evacuation time following initial surgery.

⁷¹ NATOTerm; Examples: operational stress casualty (OSC), captured in action (CIA), died of wounds (DOW), killed in action (KIA), missing in action (MIA), nuclear, biological, chemical, and radiological casualties (CBRN), and wounded in action (WIA).

⁷² The process for conducting casualty rate estimation is identified in AJMedP-1 *Allied Joint Medical Planning Doctrine (under revision)*. It may require digital tools used jointly within the Joint Operations Planning Group (JOPG).

⁷³ Refer to AJP-5 *Allied Joint Doctrine for the Planning of Operations* (STANAG 2526).

⁷⁴ Refer to AMedP-24 *Emergency Medical Care in the Operational Environment*; NATO agreed manual about the treatment of casualties on the battlefield.

⁷⁵ Note that not all casualties will be medical emergencies.

2.13 Operational factors, such as dispersed forces, austere conditions, limited resources and enemy action, may make it difficult to achieve the timelines. In this case the medical advisor has to communicate the risks to the commander, along with any proposed mitigation strategies. The commander must consider these risks as part of their overall risk management process. To make informed decisions, the commander must understand the likelihood and impact of injuries/illnesses occurring, informed by operational and medical staff, and set that against the operational necessity.

2.14 **Health facility planning and management.** Nations typically provide deployable medical capabilities with suitable military infrastructure. Managing health facility infrastructure is a complex task requiring interaction between multiple engineering disciplines and trades. Coordinated facility assessments, requirements analysis and construction activities need to ensure that the medical infrastructure meets the requirements of the overall operation.

2.15 The selection and employment of infrastructure options must be appropriate to the operating environment so they can be operated, maintained and sustained accordingly. Medical planners need to consider the use of existing infrastructure as an opportunity to deliver health care. In some situations, constructing purpose-built facilities might be necessary.

2.16 The targeting of medical capabilities, such as MTFs, even in the rear area, is highly probable. Therefore, this will require the hardening of the MTFs, the ability to continue working despite disruption of communication systems, as well as frequent and rapid re-positioning and additional force protection to improve survivability.

Special planning considerations

2.17 **Mass casualty situation.**⁷⁶ In a mass casualty (MASCAL) situation⁷⁷ the number of casualties exceeds the available local capabilities and capacities. A MASCAL situation can happen at any time anywhere in the AOO, and at any level of command. It may be caused by a natural disaster, terrorist attack, vehicle or aircraft accident, or military operations and can lead to a prolonged impact. An effective MASCAL response is a command driven process. It requires cross-functional cooperation, support from superior headquarters and their resources and a single command authority, which in most cases will be executed by the commander of the affected force element. It may require security and force protection, fire services, explosive ordnance disposal, coordination with civilian entities, etc. A MASCAL plan is an integral part of contingency planning at all levels. The medical implications of MASCAL plans should be reflected in the medical support plan and then be briefed and rehearsed.

2.18 A major medical incident (MMI) is a critical incident where the number, severity, or type of medical cases to treat, or its location, requires extraordinary resources and procedures. A MMI is usually declared 'bottom up', from each level of command considering the need to deploy

⁷⁶ Refer to AMedP-1.10 *Medical Aspects in the Management of a Major Incident/Mass Casualty Situation*.

⁷⁷ NATO *Term* Mass Casualties: revision proposal to be not solely focused on medical aspects.

extraordinary resources and procedures. This can include the process of triage.⁷⁸ Not every MMI is a MASCAL situation, but it may result in one.

2.19 Large scale patient flow. In large scale operations scenarios, the number of casualties could generate a continuous flow of high numbers of patients. This has the potential to saturate the medical support system, including HN health systems. This could lead to a change in approach for medical support and reallocation of finite resources.

2.20 Medical support in chemical, biological, radiological, and nuclear environments.⁷⁹ All planning should consider the risk from chemical, biological, radiological, and nuclear (CBRN) threats, whether deliberate, accidental, or due to natural or industrial hazards. The five functions of interest for planning medical support in a CBRN environment are:

- provision of CBRN medical advice (clinical, tactical, operational and strategic);
- medical contribution to CBRN defence (e.g., medical countermeasures, health surveillance, casualty care);
- CBRN protection of MTFs, personnel, patients and MEDEVAC platforms;
- provision of CBRN casualty care including any casualty (including trauma and heat illness) in a CBRN environment, the management of CBRN casualties from point of exposure through rehabilitation, and the management (investigation and treatment) of the unusual patient or unknown disease; and
- provision of an operational bio-response, and ability to surge strategically.⁸⁰

2.21 Special operations forces medical support. Special Operations Forces (SOF) operations differ from conventional operations because they are frequently discreet or covert and executed on short notice for strategic purposes where risk is assumed because of mission importance. SOF operations may be conducted outside of conventional medical coverage due to operational timelines or geographic distance. Despite having advanced training and education their integrated medical capacity and capabilities may be limited. SOF planners mitigate these risks through detailed planning, integration with conventional medical support, and local medical support services where appropriate.⁸¹

2.22 Host nation and other non-NATO medical entities. Medical planning will need to address medical support beyond the Alliance's military capacity. Most operations will require a degree of consultation⁸² and arrangements with HN, other nation medical forces, third nation medical systems, international organizations (IOs), non-governmental organizations (NGOs),

⁷⁸ NATO Term; Refer to AMedP 1.10 *Medical Aspects in the Management of a Major incident/Mass Casualty Situation*.

⁷⁹ Refer to ACO DIR 083-004 *CBRN Medical Support Directive* and AJMedP-7, *Allied Joint Chemical, Biological, Radiological and Nuclear (CBRN) Medical Support Doctrine*. (STANAG 2596) and its subordinate AMedPs.

⁸⁰ Refer to MC0693-1 *NATO Bio-Preparedness and Response Concept*.

⁸¹ Refer to AJP-3.5 *Allied Joint Doctrine for Special Operations* (STANAG 2523) and AMedP 4.13, *NATO Special Operations Forces (SOF) Medical Support* (STANAG 6541) outline SOF specific medical support considerations.

⁸² Refer to *NATO Medical Consultation, Command and Control (Med C3) Functional Concept*.

contractors and industry/suppliers. This civil-military medical system interaction is potentially beneficial to all parties. However, engagement may be variable with each entity. NATO must anticipate that despite all political and diplomatic efforts, HN or other non-NATO entity support not capable to cope with the demand, will present a degree of risk to the operation plan.

2.23 Veterinary care. Military working animals (MWA) are important assets to operations. The veterinary care of MWA has important distinctions to medical support for humans. However, there are also many commonalities and parallels regarding the procurement, storage, movement, distribution, maintenance and disposition of medical materiel and pharmaceuticals. The support to veterinary care for MWA must be considered when planning medical support to operations and veterinary services personnel must be involved in this process.⁸³

Section 3 – Stages of an operation

2.24 NATO operations normally consist of a number of stages, which can exist continuously, or concurrently throughout an operation. Medical support is key to the success of each stage of an operation.

Enablement

2.25 Enablement refers to the integrated whole-of-government activities that underpin NATO's planning in order to set the conditions for reinforcement and sustainment in peacetime through transition to crisis and follow-on phases. The reinforcement and sustainment network (RSN) is a strategic construct that facilitates reinforcement by forces and sustainment flow to enable the whole of Supreme Allied Commander Europe's area of responsibility. It links all physical elements such as zones, facilities and bases and functional elements such as governance, stakeholders, networks, processes and agreements. Medical support is paramount to the RSN, and its integration must be planned and prepared in peacetime.

2.26 Medical capabilities throughout the continuum of care are part of the physical elements of the RSN and must be capable of providing the agreed medical effect within the designated area. Medical functional elements include the memoranda of understanding or technical agreements for HN or third nation support, workforce or contracted services as well as governance processes and arrangements with national home base healthcare systems. Important functional arrangements will be required. For example, for the flow of patients and medical supplies across international borders and for the exchange of medical information. These are areas where regulations will apply and require resolution in advance of the mission.

Preparation

2.27 Development of the medical support plan. Medical staff contribute to the analysis of the operating environment by identifying health risks and other medical factors which may impact the execution of the operation. Early consideration of medical aspects, such as medical

⁸³ Refer to AMedP-8.4 *Animal care and welfare and veterinary support during all phases of military deployments*.

intelligence⁸⁴ and medical information⁸⁵, in particular for force health protection measures at each stage of planning, is essential to ensure a comprehensive analysis of the mission, and considerations for capabilities needed based on the development of an operations plan that can be supported medically.

2.28 Force generation and preparation. Where practical, multinational solutions should be considered (including the provision of resources, personnel and equipment) to optimize scarce medical resources. Medical SMEs should be included on the operational liaison and reconnaissance team⁸⁶ to provide guidance on the HN health care system and the medical support layout.

2.29 Force health protection (FHP) recommendations for the specific operating environment should be identified and communicated to all deploying force elements early in the OPP. This would include recommendations on immunization, prophylaxis, adaptation to environmental conditions, preventive medicine measures, etc. as necessary.⁸⁷

2.30 Bio-preparedness and response addresses the Alliance's ability to prepare and respond to natural outbreaks and the intentional use of biological agents, as well as the investigation and management of an unusual patient and unknown disease.⁸⁸ Surveillance will trigger the transition from preparedness to response as well as monitor the effectiveness of the response. The level of response depends on the scale and impact of an outbreak, the strategic context (deliberate, cross-border, international regulatory requirements) and the requirement for mutual aid.

2.31 Medical intelligence (MedIntel) and medical information serve several essential purposes at the strategic, operational and tactical levels of planning. It is important to the medical planning, preventive medicine, and medical operational staffs. They are also vital to operations planning to form strategic assessments in the non-medical domain.⁸⁹

2.32 Mission training. The medical estimate may identify specific medical and non-medical training requirements, both individual and collective.⁹⁰ These are communicated to TCN. If there is a requirement to conduct multinational collective training, the method of evaluation must be identified.⁹¹

2.33 Planning the arrival of medical capabilities must be synchronized with all other force elements as part of commander's desired order of arrival. This ensures that the appropriate

⁸⁴ NATO agreed term.

⁸⁵ NATO agreed term

⁸⁶ Refer to AJP-5 *Allied Joint Doctrine for the Planning of Operations*.

⁸⁷ Refer to Chapter 5 Force Health Protection and SRD-7 to AJMedP-4 *Vaccination Catalogue within NATO and PfP Forces*.

⁸⁸ Refer to MC0693-1 *NATO Bio-Preparedness and Response Concept*.

⁸⁹ Refer to Chapter 4, Section 4 *Medical Information and Intelligence*.

⁹⁰ The NATO School Oberammergau and NATO Centre of Excellence for Military Medicine (MILMED COE) are providing courses beneficial for medical staff.

⁹¹ Refer to STANAG 2560 AMedP-1.6 *Medical Evaluation Manual*.

medical capabilities are available to meet the demands as the deployed force builds in size and disperses in the AOO.

2.34 Credentialing. Credentialing is the process of ensuring that all personnel joining a healthcare team hold the right qualifications, licenses, training and experience required for the task they are to undertake. This is particularly important for multinational medical treatment facilities.⁹²

Deployment⁹³

2.35 Medical staff support the planning and execution of the reception, staging, and onward movement of all other force elements arriving in the AOO.⁹⁴ During the deployment phase, transiting forces may require HN medical support. These requirements need to be planned and negotiated in advance.

2.36 The initial set up of some medical treatment facilities, headquarters, and supply depots may require substantial military engineering, logistics, force protection and communication & information systems support. This must be coordinated and prioritized prior to deployment.

Execution

2.37 Medical support in operations is based on the effective employment of the six components of medical support. It must function in all geographic and environmental conditions, including a CBRN environment.

2.38 To manage limited resources and to avoid duplication of effort, medical support requires close coordination between multinational medical force elements, and between levels of command as patients may move between formations and components (land, air, maritime), including out of the AOO. It may require significant collaboration with civilian health partners (HN, nations, IOs, NGOs, or contractors).

2.39 To be responsive to changing operational demands and to provide timely advice to commanders and staff, headquarters at all levels require an appropriately sized medical staff.⁹⁵

2.40 On some missions, there may be multiple medical lines of operation, including support to own forces, mentoring or training of HN personnel, and humanitarian assistance. Whenever possible different personnel should be used for each line of operation to avoid conflicting missions.

⁹² Refer to AMedP-9.3 *Credentialing for NATO Healthcare Professionals Assigned to Role 2/3 Multinational Medical Units*.

⁹³ Refer to AJP-3.13 *Allied Joint Doctrine for the Deployment and Redeployment of Forces (currently under revision, Datafusion)*.

⁹⁴ Refer to ATP-3.13 *Reception, Staging and Onward Movement (RSOM) Procedures*.

⁹⁵ Chapter 3, Section 2 provides information on headquarters' medical staff architecture.

2.41 Mortuary affairs. Mortuary affairs are ultimately a logistic responsibility and not a medical responsibility. Medical personnel support the dedicated team that specializes in mortuary affairs under commanders' responsibility. Support might include medical specialist capability for certification for cause of death, forensic pathology investigations, and preparation for burial of deceased military personnel, including human remains of adversaries.⁹⁶

Assessment and review

2.42 Throughout an operation there is a requirement to continuously assess the effectiveness of the medical plan and adjust accordingly, and feed into the review of the operations plan. This must be supported with continuous, systematic collection and analysis of standardized data.⁹⁷ For example, the review of reports and returns detailing the number and type of patients managed through the medical system enables assessment of the effectiveness of the medical plan against operational activity.

2.43 Continuous improvement in healthcare support on operations (CIHSO) refers to processes applied across the whole medical support system in all phases of an operation to optimise patient outcomes and continuously improve clinical performance. CIHSO assures that the health care provided on operations meets the clinical and patient safety standards expected and that challenges are acknowledged and addressed. CIHSO requires systematic collection and analysis of quality, standardized data. An example of CIHSO is the assessment of patient outcomes through a trauma registry, enabling rapid adaptation of clinical approaches to the operational situation, identification of risks and mitigation actions and sharing of lessons and best practices learned to the whole medical system. This requires nations and organizations to be transparent and willing to share information.

2.44 All medical support systems and units should have frameworks in place to assess performance against policies and standards, implement cycles of quality improvement and if necessary, address adverse incidents and poor performance. CIHSO is supported by an organizational learning approach.⁹⁸

Redeployment

2.45 Redeploying forces⁹⁹ will continue to require medical support. Within the AOO, there will be rearward movement, staging and dispatch to include medical support provided by a lead nation, a multinational effort, arrangements with HN, contracted solution, or a combination thereof. The redeployment of forces from the AOO to their respective home base is a national responsibility in close coordination with Joint Force Command and the Joint Support Enabling Command.

⁹⁶ Refer to AJP-4.1 *Allied Joint Doctrine for Logistics* (SD).

⁹⁷ Refer to Chapter 4.

⁹⁸ Refer to Chapter 1.

⁹⁹ Refer to AJP-3.13 *Allied Joint Doctrine for the Deployment and Redeployment of Forces*.

2.46 Medical capabilities play a vital role in preventing disease transmission. Preventive medicine, One Health surveillance,¹⁰⁰ and veterinary experts should be consulted during redeployment planning to ensure that effective measures are in place to prevent the transmission of human, animal and agricultural diseases during troop and materiel movement.

Identify lessons

2.47 Lessons are of paramount importance for the future development of medical structures, capabilities, organization and procedures, as they provide not only the driver but also the detail needed to amend the existing concepts, doctrines and other documents. Through the lessons identified – lessons learned (LI – LL) process,¹⁰¹ armed forces can institutionalize experience gained from operations and exercises. Medical units and medical headquarters' staff have to clearly identify lessons within their routine reports and the chain of command should ensure, that all potential lessons are correctly staffed and contribute to the analysis process.

2.48 **Lessons identified** are processed by research, innovation and experimentation to support medical concepts, doctrine and capability development. Allied Command Operations will use these to develop strategic medical directives and procedures for operations. Every level of the chain of command should be involved with identifying and developing lessons learned.

2.49 **Lessons learned.** Allied Command Transformation leads the NATO lessons learned process, supported by the Joint Analysis and Lessons Learned Centre. The MILMED COE collects observations, coordinates the processing and maintains a medical LL database for observations, experiences and lessons from exercises and missions.

¹⁰⁰ Refer to AMedP-4.11 *Measures to reduce Risk of Transfer of Biological Hazards during Troop and Materiel Movement*.

¹⁰¹ MC Document.

Intentionally blank

Chapter 3 – Command and control

Section 1 – Description

3.1 **Command and control**¹⁰² (C2) is the authority, responsibilities and activities of military commanders in the direction and coordination of military forces as well as the implementation of orders related to the execution of operations. The layers of command should be kept as few as possible and the relationships and responsibilities vertically and horizontally clearly defined, delineated, fully understood and agreed upon.¹⁰³

Section 2 – The headquarters' medical staff architecture

3.2 **The headquarters' medical staff** must be fully integrated into the staff and operations planning process and appropriately represented on reconnaissance teams. The medical staff will work as a dedicated branch but can support other joint staff cells as well.

3.3 **The joint medical staff.**¹⁰⁴ To effectively fulfil their role, the joint medical staff (JMED) should be adequate in size, equipment, expertise and experience and fully integrated into the headquarters staff structure (Fig. 3.1). JMED should oversee all required medical functions and have clear and tailored authority to undertake appropriate and timely actions, including medical planning.

3.4 JMED acts as the executing body of the medical organization supporting joint and multi-domain operations. In order to effectively conduct its tasks, JMED requires the following roles, which affect all medical support tasks:

- leadership (Medical Director, Chief of the JMED and Deputy Medical Director);
- medical planning;
- medical operations¹⁰⁵;
- patient evacuation coordination;
- force health protection;
- medical intelligence;
- health advice/liaison for Host Nation;
- medical logistics;

¹⁰² NATOTerm.

¹⁰³ The roles and responsibilities of organizations involved in the delivery of medical support are contained within AJP-4.1, *Allied Joint Doctrine for Logistics* (Chapter 2, Roles and Responsibilities, Command, Control, and Coordination, STANAG 2182).

¹⁰⁴ While there are various names for this type of office depending on the organization (i.e., Navy Medicine Division (NMED), Combined Joint Medical Division (CJMED), etc.) the term JMED will be used in this publication.

¹⁰⁵ Med plans and ops may be combined to 'Chief Med Ops and Plans (CJMED 3/5) & Deputy MEDDIR.

- medical chemical, biological, radiological, and nuclear (CBRN); and
- administrative assistance and information management.

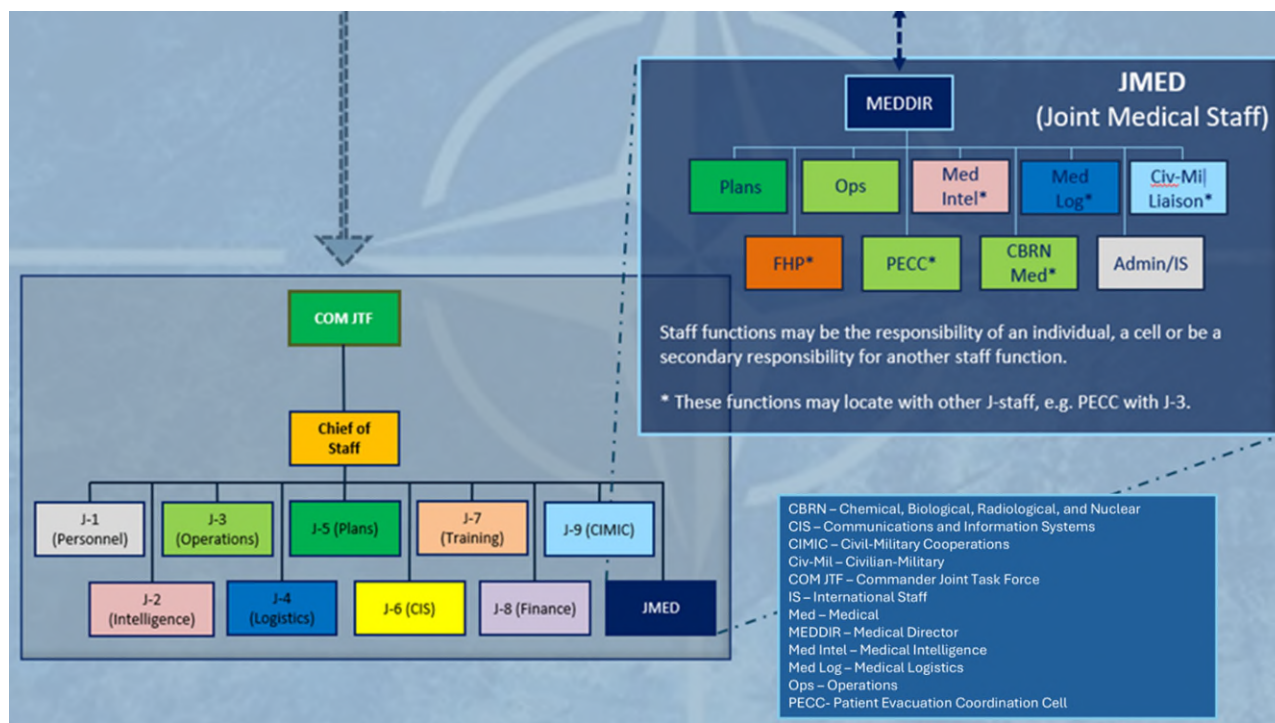


Figure 3.1 – Joint Medical Staff Architecture

3.5 **The Medical Advisor**¹⁰⁶ (MEDAD) is an indispensable part of the command group or special advisory group and is responsible for providing appropriate medical advice to the commander, ensuring that the commander and the commander's staff are properly aware of the health and medical implications of their actions and any related issues affecting the force or the operation. The MEDAD must have direct access to the commander to ensure that all health and medical support related matters requiring the commander's attention, decision or action, can be addressed in time and based on specialized expertise.

3.6 **The Medical Director**¹⁰⁷ (MEDDIR) is the functional head of the medical services in a formation or an area of operations (AOO). The MEDDIR has delegated responsibility for implementing medical policy and plans, as well as coordinating and synchronizing authority for medical support within the AOO. The MEDDIR will report directly to the joint task force commander and assures the appropriate medical requirements for the medical support system to all forces participating in the operation.

¹⁰⁶ NATOTerm.

¹⁰⁷ NATOTerm. Note: The medical director may also be the medical advisor to a senior commander.

3.7 CBRN Medical Advisory Group. If required a medical advisory group (MAG) should be established. The MAG is chaired by the MEDAD and consists of CBRN subject matter experts and may include specialized units and teams.

3.8 Patient evacuation coordination ensures the most effective use of medical treatment and evacuation resources, and that all patients receive appropriate care in a timely manner, enabling control and coordination of movements of patients within the AOO. Depending on the size and complexity of the AOO, a patient evacuation coordination cell (PECC)¹⁰⁸ may be established at different levels of command in the commander's combined joint operations centre. The aim of a PECC is to harmonize medical evacuation (MEDEVAC) activities and to coordinate these activities based on the operations plan. Full integration of a PECC at the appropriate level of command is necessary in order to gain the situational awareness and be fully entitled to make the required decisions and combine medical care and evacuations.¹⁰⁹

3.9 Medical taskforce headquarters (MEDTF-HQ).¹¹⁰ NATO medical support may be organized as a medical taskforce (a battalion-sized unit) including all medical treatment facilities (MTFs), a MEDEVAC company, a medical logistics (MEDLOG) company and a PECC, together with Role 1 and other national embedded capabilities. C2 of the MEDTF as well as the MEDAD function to the joint force commander can be organized within the MEDTF-HQ.

Section 3 – Roles and responsibilities

3.10 Commander's responsibility. NATO commanders at all levels, with support of medical staff, have health and medical support responsibilities to include:

- conducting operations planning including contingency planning;
- identifying and assessing risks and threats to the health of the force;
- implementing and controlling measures to mitigate identified health threats;
- identifying and evaluating the operational requirements for medical support;
- determining the medical capabilities required to accomplish the mission;
- determining the medical footprint and coverage in the AOO considering operational risk and planning guidance such as the medical evacuation and treatment timelines agreed by the troop contributing nations (TCNs); and
- ensuring that medical support is provided in accordance with the principles, policies, standards, guidelines and directives agreed by the TCN.

3.11 As responsibility must be aligned with authority, the commander assigned responsibility for a specific operation will typically be granted coordinating authority over the medical

¹⁰⁸ For PECC responsibilities refer to AMedP-2.3 *Patient Evacuation Coordination Cell (PECC) Tasks and Responsibilities*.

¹⁰⁹ Refer to AJMedP-2 *Allied Joint Medical Doctrine for Medical Evacuation*.

¹¹⁰ New Capability Code (Reporting) in the NDPP 2022-2026.

capabilities, assets, facilities and units deployed to support the force. This coordinating authority includes:

- to require reports on existing bi- and multilateral medical host nation support (HNS) agreements;
- to establish new medical HNS requirements, and initiate, coordinate, and conduct negotiations for them;
- to determine the placement and configuration of medical units, facilities and assets in the area of responsibility (AOR);
- to coordinate the operation of medical assets, capabilities and units in the AOR;
- to coordinate and track medical treatment and movement of patients;
- to determine and implement the minimum standards of individual first aid, health and hygiene to be achieved within the theatre as defined by STANAGs;
- to implement and oversee recommendations of the medical staff on issues like medical education and training, immunization, disease prevention and control;
- to establish epidemiological One Health¹¹¹ surveillance for deployed force;
- to direct environmental monitoring/occupational hygiene measures;
- to make arrangements for safe shelter, food, water and sanitation within the AOO;
- to determine the medical rules of eligibility and the patient return policy;
- to propose the use of CBRN medical countermeasures including the administration of prophylactics; and
- to establish JMED function.

3.12 To make informed decisions, the commander must understand the likelihood and impact of injuries/illnesses occurring (informed by both operational and medical personnel) and set that against the tactical necessity of undertaking the activity in both time and space. MEDADs identify the medical risks and provide potential mitigation strategies.

3.13 **National responsibilities.** Nations are responsible for all necessary arrangements (e.g memorandum of understanding, technical agreements and status of forces agreements) to ensure appropriate health care and medical support to their military personnel. Nations are responsible for facilitating the overall medical support plan, for establishing an interface with the NATO medical organization and for continuously keeping contact with the NATO headquarters' staff, even if they support their forces through a purely national medical support system. Nations providing medical contributions are responsible for:

¹¹¹ One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.

- coherence and compliance of their national clinical standards;
- practices and procedures with relevant agreed common policies and guidelines;
- availability, readiness, resilience and sustainability of their contributions;
- interoperability, connectivity and adaptability of their contributions; and
- exercise, training, education and evaluation of their medical support capabilities prior to deployment.

3.14 Transfer of authority. As the ultimate risk owners accountable for the health of their forces, Nations retain the responsibility and legal duty of care at all times. With very few exceptions, all personnel and equipment required to conduct an operation are provided by the TCN. Nations will retain full command of their own resources until the transfer of authority to the NATO commander. Each case may be different and the specific rules regarding control authorities, responsibilities and funding need to be established early in the planning process and well before the transfer of authority. National caveats on the employment of contributions or units can significantly affect the medical support concept for a NATO operation. Upon transfer of authority, the TCNs share the responsibility for the health and welfare of their forces with the commander. Nations contributing medical capabilities must ensure the required capabilities are provided and maintained throughout the period of deployment as agreed in the combined joint statement of requirements, the theatre capability statement of requirements and transfer of authority even if they are composed of contributions from different providers.

Section 4 – Consultation and civil-military interaction in operations

3.15 Most scenarios will include the requirement for interaction with numerous non-NATO medical entities. These include coalition medical forces, HN and third nation military and civilian medical facilities, international organizations (IOs), non-governmental organizations (NGOs), and contracted support. These entities are not in any formal C2 structure; therefore, there will be a constant demand for consultation and synchronization.

3.16 As a result of lessons gathered from NATO operations, exercises, and wargames, the NATO medical community has added “consultation”¹¹² to address the need of medical support beyond the Alliance’s military capacity by interaction with other military and non-military entities.¹¹³

3.17 The evolving and complex environment of future NATO operations will increasingly require civil-military interaction (CMI). Therefore, a comprehensive approach is a strategic necessity and must be expanded in the healthcare sector to optimize use of medical resources, to improve NATO’s response to crisis and conflicts and to build a resilient health system. Consultation, based on mutual understanding and shared objectives fosters civil-military interaction and delivers the strengths of all participating actors. However, the extent of this potential interaction is, ultimately, up to each partner such as a HN, IO and NGO. NATO must

¹¹² Refer to *NATO Medical Consultation, Command and Control (Med C3) Functional Concept*.

¹¹³ Refer to AJP-3.19 Allied Joint Doctrine for Civil-Military Cooperation; Medical Civ-Mil interaction can be facilitated by J9 capabilities with JMED in support.

anticipate situations and balance risks when civil-military interaction for medical support will not be feasible e.g. due to security concerns, differences in priorities or legal restrictions.¹¹⁴

¹¹⁴ COMEDS-L-0003-2025 *Action Plan to Enhance Medical Support for Collective Defence (2024)*.

Chapter 4 – Communications and medical information management

Section 1 – Description

4.1 Medical decision-making and coordination of medical support is dependent on accurate processing and timely distribution of environmental, tactical, patient and casualty data to all authorized personnel. The security and privacy of medical information shall be ensured in accordance with NATO directives¹¹⁵, national and international regulations. Communications and information management must effectively support medical planning, health surveillance, patient tracking and patient flow management, patient care including telehealth and medical incident response coordination as well as the coordination and supply of all medical capabilities.

4.2 Medical communications and information management encompasses collection, evaluation, analysis, aggregation and distribution of information and data relevant for the medical layer of the NATO common operational picture (COP) by the means of:

- reports and returns;
- medical intelligence (MedIntel);¹¹⁶
- medical information;
- health surveillance;
- recognized medical picture (RMedP); and
- further information and data management with NATO and non-NATO entities.

Section 2 – Considerations for medical communications and information systems

4.3 **Medical communication and information system requirements.**¹¹⁷ Medical information flow for coordination, patient flow management, patient tracking, telehealth and medical logistics require large and secure data transfer capacities. Medical and J6 staffs will establish the medical communication and information system (CIS) requirements for the operation and include them in the statement of requirements. The medical CIS needs to include all medical support capabilities in theatre as well as a reach-back capability to the troop-contributing nations' medical services. Connectivity with the joint operations centre and all headquarters staff elements must also be established and maintained.

¹¹⁵ Refer to e.g. C-M(2002)49 *Security within the North Atlantic Treaty Organization*.

¹¹⁶ Refer to AJMedP-3 *Allied Joint Medical Doctrine for Medical Intelligence*.

¹¹⁷ Refer to AJMedP-5 *Allied Joint Doctrine for Medical Communications and Information Systems*.

- a. Medical CIS must interface with corresponding CIS and planning tools. It should facilitate appropriate information sharing and collaboration with non-NATO entities and the civilian health sector.
- b. Medical communications and information management requires a resilient and reliable medical CIS, capable of exchanging information and visual data with medical facilities and supporting automation technologies across the progressive spectrum of medical care and evacuation. When primary systems are not available, medical forces must have access to alternate systems or processes in order to continue to achieve the medical mission.
- c. Resilience can be improved by a redundant medical CIS that provides backup equipment, processes, pathways or systems that immediately take over the function of existing systems, functionality or processes. Plans should be sufficiently robust as to ensure all medical CIS elements including primary, alternate, contingency and emergency equipment, processes, pathways or systems.
- d. Medical CIS system needs effective protection against cyber-attacks. Cyber incidents could directly impact the health and safety of patients, disrupt patient care, and erode privacy by the loss of personal health care data. Cybersecurity strategies as well as a cyber incident response plan, including a contingency plan need to be in place and exercised.
- e. Medical CIS systems need to ensure preservation of confidentiality and integrity of patient data in compliance with national regulations.
- f. As missions build and evolve, the medial CIS must be scalable to easily scale up or down to meet the requirement. It should enable record keeping, surveillance and the full range of medical staff functions.
- g. Medical systems should be aligned with the coalition's overall cyberspace posture to ensure compliance with operational policies so that medical systems do not negatively impact the coalition's overall cyber and electromagnetic security.

4.4 Federated mission networking in the medical field is designed to support command and control and decision-making in future operations through improved information-sharing. It provides the agility, flexibility and scalability needed to manage the emerging requirements of any mission environment in future NATO operations. NATO organizations, Nations as well as non-NATO nations can become federated mission network (FMN) affiliates. This implies further development and maintenance of FMN compliant standards, to ensure CIS security and interoperability. Affiliates will set standards and principles to plan, prepare, establish, use and terminate mission networks in support of federated operations.

4.5 Telehealth.¹¹⁸ Forward projection of virtual medical expertise and clinical decision support via telehealth can be beneficial throughout the entire continuum of care. It can, if properly resourced, complement the components of medical support through direct referrals, consultations and medical practice by providing appropriate clinical advice, specialist guidance and non-clinical services such as education and training where needed. Telehealth is recognized as a mitigation strategy to preserve scarce specialist medical resources. It may increase the accessibility of interoperable capabilities to deployed forces and can facilitate the best use of available pre-hospital and hospital capabilities. Telehealth is used to strengthen and sustain force readiness and resilience at an enhanced level. The increased communications bandwidth required to support the use of telehealth must be coordinated with J6 during planning of medical support to operations.

Section 3 – Medical records

4.6 Medical records provide a systematic documentation of a patient's medical history. This includes notes from healthcare providers, recorded medical observations, referrals and prescriptions, drug or blood administration, surgery reports, x-rays or laboratory results. The maintenance of complete and accurate medical records involves obligations regarding the confidentiality of private information, legal and ethical issues. These must be respected when medical records are transferred following patient movement through the pathway of the medical support system.

4.7 The quality of medical records has a significant impact on the quality of care. In a multinational environment, medical documentation must adhere to common standards concerning language, key information, and formats to ensure interoperability throughout the medical support system and across all national contingents. Clinical records, including post-mortem reports and evidence related to deaths in the area of operations (AOO), must be maintained in accordance with medical confidentiality standards and be available for official national or international audit and boards of inquiry. It is the responsibility of medical personnel to ensure that all medical treatment is documented on official medical records and that medical confidentiality is respected.

Section 4 – Medical intelligence and medical information

4.8 Medical information¹¹⁹ contribute to the estimation, articulation and management of health risks, in addition to complementing the J2-led joint intelligence preparation of the operating environment. Medical information is essential for medical planning as well as for force health protection¹²⁰ and contributes to assessments for the adoption of no-strike lists.

¹¹⁸ Refer to AMedP-5.3 *Telemedicine for Mission Support*. Could also be applicable for the support of non-medical personnel for casualty care.

¹¹⁹ NATOTerm.

¹²⁰ Refer to AJMedP-3 *Allied Joint Medical Doctrine for Medical Intelligence*.

4.9 MedIntel¹²¹ should be relevant, actionable, and collaborative by respecting security aspects to avoid exploitation by adversaries. It supports the identification of threats and offers opportunities for exploitation by decision-makers and may require medical expertise throughout its processing within the intelligence cycle. MedIntel should not be used to exploit any medical vulnerabilities of any party. When supporting operational staffs in the conduct of strategic assessments, MedIntel must be compliant with ethical standards and relevant law, such as human rights law and data protection.

Section 5 – Health surveillance

4.10 Health surveillance¹²² aims to provide key indicators of the force's health status and an estimate of its impact on workforce and working day losses. A health surveillance capability with the required knowledge and skillset to rapidly respond, investigate and coordinate specific risk management countermeasures could be pivotal in mitigating a widespread degradation of mission readiness, particularly in suspected or actual outbreaks and illness clusters.

4.11 Health surveillance is intended to serve as a continuous and early sentinel warning system in a One Health approach to trigger further investigation, implement preventive countermeasures, or other command actions needed to reduce the adverse impacts of health threats. This includes the ability to identify a chemical, biological, radiological and nuclear (CBRN) incident.

4.12 A comprehensive analysis of disease and non-battle injury can inform the development of more effective preventive medicine measures, including recommended policy on immunization, prophylaxis, and personal health education. It can also inform the size and capability of medical resources required in different scenarios.

4.13 Health surveillance comprises the routine standardized tracking of disease and injury incidence. This includes:

- identifying the population at risk;
- identifying and assessing potential occupational and environmental health hazards;
- documenting occupational, environmental and CBRN health risks or exposures;
- striving for real time monitoring and reporting of symptoms and disease progression; and
- investigating suspected disease outbreaks or clusters of illness amongst deployed personnel.

¹²¹ NATOTerm.

¹²² Health Surveillance, Disease and Casualty Reporting are part of Force Health Protection, described in more detail in AJMedP-4 *Allied Joint Medical Force Health Protection Doctrine*, and closely related to Medical Information and Intelligence (MedIntel).

4.14 If a host nation (HN) health surveillance system is still operational, it is recommended that a close collaboration between NATO organizations, Nations, third nations and the HN's health surveillance systems be supported and implemented, with corrective actions being coordinated at all levels.

4.15 Operational Bio-Surveillance comprises the combination of medical components (diagnostics and health surveillance) and CBRN components (detection, identification and monitoring), supported by the sharing of related information and intelligence, as well as CBRN-related and defence intelligence.¹²³ It is established as required to sense, gather, integrate, analyze and communicate information and intelligence related to any operational threat or hazard affecting human, animal or environmental health and materiel integrity. Its purpose is to recognize early, respond and monitor the health aspects of an incident or outbreak, and maintain operational effectiveness.

4.16 A health surveillance system needs to be utilized in all NATO operations and exercises and managed by the medical staff at all levels. It enables the chain of command to establish a database of health surveillance information that assists medical support planning for both current and future operations.¹²⁴

Section 6 – Command and control and decision support

4.17 **Recognized medical picture** contributes along with other specialized functional recognized pictures (e.g. logistics, engineering, personnel), to the COP in order to support the decision-making process.¹²⁵

4.18 The recognized medical picture (RMedP) is the assessed situation of medical support to NATO activities within a designated AOO based on a detailed questionnaire, defined information exchange and assessment of requirements. Supreme Allied Commander Europe's area of responsibility (AOR)-wide RMedP is the compilation of all operational level RMedP, enhanced by environment specific assessments and other relevant data to inform the strategic level, to enable strategic assessment, decision-making and strategic planning.

4.19 The RMedP consists of an information structure based on the six components of medical support¹²⁶ and may be tailored for use at the strategic, operational or tactical level. Each Joint Force Command establishes the RMedP for its AOO in accordance with its roles, responsibilities and authorities. The Joint Sustainment and Enablement Command assembles all relevant RMedPs to produce a 360-degree AOR-wide RMedP at the operational level.

¹²³ Refer to MC 0693-1 NATO *Bio-Preparedness and Response Concept*.

¹²⁴ Refer to AMedP-4.1 *Deployment Health Surveillance* (STANAG 2535).

¹²⁵ Refer to AJP-4 *Allied Joint Doctrine Sustainment for Operations* (RD).

¹²⁶ Refer to Chapter 1, Section 3 Organization of Medical Support.

4.20 Reports and returns.¹²⁷ Information and data to be managed originate from medical reports, assessments, lessons and requests. Standardized NATO tools, documents and forms should be utilized in all cases as agreed by NATO nations.¹²⁸

¹²⁷ The most common being the medical situation report (MEDSITREP), the medical assessment report (MEDASSESSREP), EPINATO, the METHANE report, the 9-line MEDEVAC request and the patient movement request (PMR).

¹²⁸ Such as NATO medical standardization agreements (STANAGs) or the Bi-SC-Reporting Directive for Art. V Missions. SRD-1 to AJMedP-1 *Military Medical Reports and Return Guideline*.

Chapter 5 – Force health protection

Section 1 – Description

5.1 Force health protection (FHP)¹²⁹ comprises all medical efforts to promote or conserve physical and mental well-being, reduce or eliminate the incidence and impact of disease, injury and death and enhance operational readiness and combat effectiveness of the forces.¹³⁰ Failure or poor implementation of FHP measures may result in a significant decrease of operational readiness and fighting power.

5.2 FHP is a subset of force protection (FP)¹³¹ which is concerned with all measures and means to minimize the vulnerability of personnel, working animals, facilities, materiel, operations and activities from threats and health hazards to preserve freedom of action and operational effectiveness of the force, thereby contributing to mission success.

5.3 Whatever the nature of the operational task, military personnel will be exposed to a variety of hazards and are at risk of disease and non-battle injuries (DNBIs). DNBI can very often generate the greatest burden of morbidity upon the deployed force. FHP aims to reduce the burden of DNBI through the assessment and surveillance of hazards and risks, the implementation of FHP measures and the promotion of good health behaviours.

Section 2 – Considerations

5.4 Commanders are responsible for the health of all personnel within their command. FHP must be incorporated into operations planning and commanders' decision-making prior to deployment, continue throughout and extend well into the post-deployment period. Medical advisors are responsible for advising the commander on FHP through informed health risk assessment and management, supported by FHP subject matter experts (SMEs).

5.5 To be effective, FHP must be proactive and collaborative with the FP staff/cell and operational planning team. FHP should work closely with chemical, biological, radiological and nuclear (CBRN) medical support, environmental health, veterinary services and intelligence including MedIntel, to establish a common situational understanding and be able to jointly contribute to planning and advice to commanders. This includes FHP measures that should be implemented, such as vaccination, medical countermeasures, acclimatization, provision of special clothing or personal protective equipment, and relevant FHP training for all personnel.

5.6 Individuals must also take responsibility for their own health by complying with FHP measures and maintaining good personal health and hygiene. Personnel should receive a mission-specific briefing on relevant health hazards and FHP measures.

¹²⁹ NATOTerm.

¹³⁰ Refer to AJMedP-4 *Allied Joint Medical Force Health Protection Doctrine*.

¹³¹ Refer to AJP-3.14 *Allied Joint Doctrine for Force Protection*.

Section 3 – Force health protection approaches

5.7 MedIntel and Medical information are key enablers of FHP.¹³² Gathering and analyzing information on health hazards must be a continuous process.

5.8 **Health risk management.** The FHP risk management process must be integrated into the FP process to enable commanders to make informed decisions about health protection programs and other FHP efforts.¹³³ The risk management process requires the identification and analysis of the threats and health hazards to all personnel deployed to a particular area of operations and an assessment of vulnerability to those threats and hazards to determine a risk level. The process shall identify the full impact of health risks and advise on possible solutions and mitigations to treat the risks to a level acceptable to the commander. This process must be a continuous cycle of reassessment based on MedIntel and medical information.

5.9 **One Health approach.**¹³⁴ One Health is a World Health Organization initiative for an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. FHP operates at the intersection of human health, animal health and environmental health. By taking a One Health approach to sharing of information and expertise across these areas, medical support systems can improve health surveillance and disease control methods to better protect the force.

Section 4 – Force health protection program areas

5.10 **One Health surveillance** must be planned and implemented before, throughout and after deployment. This surveillance will track potential health risks within the force, local community and animal and vector population to create a baseline to rapidly detect disease anomalies and implement preventive medicine measures.¹³⁵

5.11 **Preventive medicine.** Preventive medicine aims to protect, promote and maintain health and well-being and to prevent disease, injury, disability and death. Preventive medicine, therefore, contributes to several FHP program areas to mitigate health risks. Preventive medicine often requires specific corresponding laboratory capabilities.

5.12 **Communicable disease control and prevention.** A variety of diseases can affect military personnel. Identification, assessment and management of communicable disease risk must begin before deployment. Good sanitation and hygiene, as well as proper surveillance during deployment, are key components.

5.13 **Biosecurity.** Biosecurity must be considered to avoid any contamination or spread of biological agents or organisms because of movement between different areas, especially cross

¹³² Refer to Chapter 4, Section 2 Medical Information and Intelligence for details.

¹³³ Refer to AJMedP-4 *Allied Joint Medical Force Health Protection Doctrine* and AJP-3.14 *Force Protection Doctrine*.

¹³⁴ World Health Organization *One Health Initiative*.

¹³⁵ Refer to Chapter 4, Section 5 Health Surveillance.

border movements. A country-by-country risk assessment should enable the implementation of appropriate biosecurity measures.¹³⁶ Animal control reduces hazards from wild, feral and domestic animals. This minimizes the spread of diseases, reduces aggressive behaviour, and prevents overpopulation, which can lead to conflicts with humans and/or animals. FHP personnel may advise commanders regarding animal related force health protection concerns.

5.14 Infection prevention and control. Infection prevention and control (IPC) is intended to prevent and control healthcare-related infections. IPC consists of appropriate organizational and structural arrangements, is based on hygiene and sanitary measures and includes surveillance for sufficient risk management, needs specific education and training for medical professionals as well as patient participation. An important example are antimicrobial resistant micro-organisms that have developed resistance to the action of one or more antimicrobial agents and can be spread by transfer between medical treatment facilities, including to the home country. In all cases, a robust IPC program should be in place to protect patients and should be sufficient, with additional precautions taken only on a case-by-case basis.

5.15 Occupational and environmental health. Occupational and environmental health (OEH) hazards are prevalent in almost all military environments. They include natural and human-made hazards as well as a variety of other threats. OEH hazards may be associated with acute and/or chronic effects and may require specialized equipment and knowledge to identify, manage, and mitigate them. OEH activities are ideally managed through a dedicated occupational health programme and may involve recording of exposure on an individual longitudinal exposure record.

5.16 Hygiene and sanitation. High levels of sanitation and hygiene protect against a variety of hazards. This includes waste management, pest control and the promotion and facilitation of personal hygiene (including oral hygiene).¹³⁷

5.17 Food and water protection. Food safety and food defence measures should be applied at all stages of procurement, storage, distribution and preparation. Safe drinking water is an operational necessity. Optimization of food and water safety requires readily available standards, processes, expertise, time and equipment.¹³⁸

5.18 Mental and physical health readiness and health promotion. Commanders at all levels, medical personnel and individuals have a responsibility to maintain and protect mental and physical health.¹³⁹ Active measures to optimize good mental and physical health, such as injury prevention programs, as well as promoting good health behaviours, addiction prevention

¹³⁶ Refer to AMedP-4.11 *Measures to Reduce Risk of Transfer of Biological Hazards During Troop and Materiel Movement* (STANAG 2557).

¹³⁷ Refer to SRD-4 to AJMedP-4, *Field Hygiene and Sanitation*.

¹³⁸ Refer to AMedP-1.11 *Requirements of Individual Operational Rations for Military Use* (STANAG 2937), *Food Safety, Defence and Production in Support of NATO Operations* (STANAG 2556), AMedP-4.9, *Requirements for Water Quality During Operations* (STANAG 2136).

¹³⁹ Refer to AMedP-8.10 *A Psychological Guide for leaders across the Deployment Cycle* (STANAG 2565) and AMedP-4.8 *Pre- and Post- Deployment Health Assessments* (STANAG 2235).

and reducing health risk behaviours will maintain and enhance well-being and contribute to operational readiness.

5.19 Oral health and dental fitness¹⁴⁰ (readiness). Oral health is an integral part of general health and contributes to operational effectiveness and mission success. Oral health is promoted throughout each phase of an operation and includes prevention, stabilization and rehabilitation.

¹⁴⁰ Refer to AMedP-4.4 *Dental Fitness Standards for Military personnel and the NATO Dental Fitness Classification System* (STANAG 2466).

Chapter 6 – Military health care

Section 1 – Description

6.1 **Military health care (MHC)** as a component, provides clinical care (clinical services and interventions), such as diagnosis and treatment, to the population at risk. MHC encompasses measures and activities to sustain or restore the health and the fighting strength of all military personnel from enlistment to retirement through the full spectrum of military duties in their home base and on deployment.

6.2 MHC is generally provided by medical personnel. Approaches to address conditions as described in this chapter may also be provided by appropriately trained, equipped, and supervised non-medical personnel.^{141 142}

Section 2 – Military health care areas

6.3 **Primary health care** encompasses integrated, accessible health care services by clinical personnel trained for comprehensive first contact and the continuing care of individuals experiencing signs and symptoms of ill health or having health concerns. Primary health care delivers care by or under supervision of accredited medical service personnel and might be supported by telehealth or other remote methods.

6.4 **Secondary health care** encompasses specialized clinical diagnosis and treatment beyond the capabilities of primary health care.¹⁴³

6.5 **Definitive health care** is the closing link of the MHC cycle. It aims to restore mental and physical capability to the highest degree possible, to enable patients to return to duty or to prepare patients for discharge from service for medical reasons.

Section 3 – Military health services

6.6 **Emergency medical care** encompasses the critical actions required for timely evacuation, resuscitation, stabilization, initial treatment and transportation of an emergency patient.¹⁴⁴

a. **Pre-hospital emergency care (PHEC)** comprises the emergency medical care delivered from the point of injury (POI) or onset of acute illness to admission to Role 2 medical treatment facility (MTF) or higher. PHEC delivers proficient resuscitative

¹⁴¹ Refer to *Tägerwilen 2 Report*: Nations should explore the current barriers to legislation, licensing, and regulations that limit the training and capacity to task transfer skills related to combat casualty care

¹⁴² Refer to Chapter 1, Section 1 Entry to the Medical Support System for details.

¹⁴³ Such as, x-ray, computed tomography scan, MRI, specialized surgery, intensive care, eye, ear nose and throat specialists, oral health care, dermatology, gynaecology, paediatrics, food chemistry, tropical and veterinary medicine.

¹⁴⁴ NATOTerm.

procedures, possibly through telehealth supervision or other nationally approved remote supervision mechanism such as standing orders and standing operating procedures, to stabilize and maintain vital physiological functions of patients in critical clinical condition.

b. **Tactical care** is a systematic approach to improve patient survival. A focus on life-saving interventions is vital to prevent combat deaths. These interventions must begin immediately at the POI.¹⁴⁵ ¹⁴⁶ Required medical training that focuses on the most common causes of preventable death on the battlefield¹⁴⁷ is needed that aligns with the accepted standards of care and timelines, for all branches of service, recognizes that at each phase of care requires additional medical capability and training.

c. **Damage control resuscitation** (DCR) is a systematic approach to dealing with major trauma combining the catastrophic bleeding, airway, breathing and circulation paradigm with a series of clinical techniques from immediate lifesaving measures up to surgical interventions in order to minimize blood loss, maximize tissue oxygenation and optimise outcome.¹⁴⁸ Delivery of DCR typically includes the administration of blood products.

d. **Damage control surgery** (DCS), a surgical approach where the completeness of immediate surgical repair is sacrificed to achieve haemorrhage and contamination control, in order to avoid a deterioration of the patient's condition. Depending on the specific and individual requirement, the aim is to be able to provide damage control surgery as soon as possible but no later than 2 hours of wounding. This may include restoring circulation and perfusion.

6.7 **Acute care** is care of patients that have either had emergency care and need to recover, or that have an acute medical condition that does not require resuscitation or stabilization but does require a period on a ward with nursing and other trained medical staff before evacuation or return to duty.

6.8 **Routine medical care** encompasses medical counselling, care and management of non-critical sick and injured personnel in anticipation of return to duty. This includes, but is not limited to, outpatient sick call, care of chronic conditions, routine screenings, medical advice, specialist care and physical rehabilitation. Primary and secondary health care are included in routine medical care.

6.9 **Rehabilitative care** delivers interventions designed to optimize physical and/or mental function and reduce disability in patient recovery illness, trauma or surgery, with the desired goal of returning to duty or even back to mission. Physiotherapy, particularly with expertise in the

¹⁴⁵ Can be achieved by Tactical Combat Casualty Care (TCCC) or equivalent.

¹⁴⁶ During combat operations, health care professionals will not always be available at the POI. Non-medical personnel should start first aid immediately.

¹⁴⁷ Such as severe bleeding, airway obstruction and tension pneumothorax considering the rapid assessment, prioritization of interventions, limited resources to stabilize casualties.

¹⁴⁸ NATOTerm.

care of military related injuries, improves treatment outcomes and accelerates the return to duty for soldiers suffering from musculoskeletal injuries.

6.10 Palliation includes medical care for people with serious injuries or illnesses, focusing on providing patients with relief from the symptoms, pain, and stress of a seriously chronic or terminal illness. It involves the medical, ethical, and where appropriate and possible spiritual and psychological support of severely injured or dying patients to alleviate pain and ensure dignity.

6.11 Care of the dying. Medical personnel will always strive in every conceivable way to prevent deaths. However, based on challenging operational conditions, it must be recognized that death is an inevitable consequence of conflict. Ensuring provision of the best possible support to dying casualties and patients should always be enabled, even with limited resources. Also, there is a requirement to provide mental health and emotional support to caregivers and witnesses.

6.12 Prolonged care is the need to provide patient care for extended periods of time when evacuation or mission requirements surpass available capabilities and/or capacity to provide that care. This may require additional equipment and training. Operational and medical planning should include prolonged care as a contingency. However, planning should seek to avoid categorizing prolonged care as a primary medical support capability or control factor during deliberate risk management.¹⁴⁹

6.13 Other healthcare services contributing to military health care.¹⁵⁰ The provision of the required military health care areas and services will be determined by the medical planning process. This ensures that required health care capabilities are available in the area of operations (AOO).

Section 4– Roles of medical support and capabilities

6.14 The role of medical support is a category that identifies the function and the capabilities of a medical unit or element and is structured into four roles (Role 1 - Role 4). Most of the capabilities of each role and the care that is provided are intrinsic to the next higher role. A MTF is a facility established for the purpose of furnishing medical¹⁵¹ and/or oral health care. Delivering the roles of medical support typically requires establishment of an MTF.

6.15 Role 1 medical support provides primary health care, elements of emergency medical care, and other various segments of MHC as required. The medical planning process determines the medical supply capabilities, personnel assigned, equipment available, and the ancillary support required. This may require additional mission-tailored elements of MHC for Role 1 medical support, such as DCR, patient holding capacity, and/or oral health care.

¹⁴⁹ An example of this is Joint Trauma System Prolonged Casualty Care Guidelines.

¹⁵⁰ Refer to AJMedP-8 *Allied Joint Medical Doctrine for Military Health Care* (STANAG 2598)

¹⁵¹ including mental health support.

- a. Role 1 medical support is delivered by health care professionals and other medically trained personnel. Medically trained persons that are not medical personnel may contribute to the delivery of Role 1 medical support in the space starting at the point of injury/illness and prior to arrival at a higher echelon of care.
- b. Role 1 medical support is intended to be easily accessible and widely available. For many patients, Role 1 medical support will be the entry point into the continuum of care; however, patients may enter the medical support system at any role.
- c. Although Role 1 medical support remains a national responsibility, when delivered in a multinational approach, collective responsibilities principles such as delivered effects and standards need to be agreed between the participating nations.

6.16 Role 2 medical support provides a capability for the reception and triage of casualties, as well as the structure to perform treatment of wounded, injured and diseased at a higher technical level than Role 1, including resuscitation and surgery.¹⁵² All Role 2 capabilities should possess the capability to deliver blood products and may include the ability to collect blood products.

- a. **Role 2 forward.** Role 2 forward (R2F) military health care capabilities are highly mobile and deployable into remote, austere, or unsecure tactical environments enabling forward projected resuscitative and surgical treatment to control bleeding, maintain circulation, restore perfusion and preserve life, limb, and function. R2F capabilities may also be deployed to augment or to enhance other medical capabilities in theatre. R2F capabilities comprise triage, essential diagnostics, DCR and DCS including the application of blood products. Their resources are limited, if not enhancing or augmenting other medical support capabilities that include patient holding and post-operative care, R2F rely on immediate medical evacuation (MEDEVAC) and resupply after treatment.
- b. **Role 2 basic.** Role 2 basic (R2B) capabilities enable life, limb, and function preserving resuscitative and surgical interventions. R2B capabilities may operate highly mobile, afloat or land based and comprise triage, essential diagnostics, DCR and DCS, short-term post-operative critical care, limited patient holding, communication and information system and medical supply. R2B capabilities may also be deployed to augment or to enhance other medical capabilities in theatre.
- c. **Role 2 enhanced.** Role 2 enhanced (R2E) capabilities should provide diagnostic, specialist and hospital care essential to stabilize and prepare patients for MEDEVAC. In addition to the capabilities of a R2B, at least includes, but is not limited to, surgery, x-ray, laboratory, blood storage and distribution, pharmacy and sterilization.

6.17 Role 3 medical support provides the structure for deployed hospitalization with the elements required to support it, including a mission-tailored variety of clinical specialties and support functions. Role 3 medical support comprises a set of deployable specialist and hospital

¹⁵² Refer to AJMedP-1 *Allied Medical Planning Doctrine*, Annex A (under revision).

care capabilities which at least includes computed tomography and oxygen-production in addition to the Role 2 capabilities listed above. Role 3 capabilities may reduce the need for repatriation of patients and enable a higher standard of care prior to MEDEVAC.

6.18 **Role 4 medical support** provides the full spectrum of definitive medical care that cannot be deployed in the theatre or is too time-consuming to be conducted there. Role 4 medical support provides highly specialized capabilities that are rarely conducted in an AOO. Examples include, but are not limited to reconstructive surgery, prosthetics and rehabilitation. Role 4 medical support is a national responsibility, normally provided in the patient's country; however, nations may make alternative arrangements.

6.19 Capabilities, operating alongside the roles of medical support but not directly related to a specific role includes but are not limited to:

- a. **Medical emergency response team**¹⁵³ is a physician-led medical team trained and equipped to provide pre-hospital emergency care, usually deployed with forward evacuation assets.
- b. **Casualty staging unit**¹⁵⁴ is a medical unit caring for in-transit patients under medical personnel supervision. Casualty staging units (CSUs) provide patient holding and nursing care capability to already stabilized patients, prepare them for transportation and follow-on transfer to a transport platform. CSUs may be augmented/enhanced with a critical care, surgical, aviation medicine or medical supply capability if required and may also be used as augmenting capacity to Role 2 or Role 3.
- c. **Rearward medical evacuation hub**.¹⁵⁵ is a patient staging area in a permissive environment, where the responsibility for patient movement is transferred from the NATO managed medical evacuation system to a host nation's health system¹⁵⁶. NATO has identified minimum and enhanced requirements of a rearward medical evacuation hub.¹⁵⁷

Section 5 – Continuum of care

6.20 Patient care follows a continuum of care in a progressive manner, from the POI through to definitive treatment, and if required, rehabilitation. The continuum of care is a medical organizational pattern and not a linear pathway. Continuity of care does not need to follow a specific sequence but should provide the correct level of care at the right time. Roles of care may be bypassed due to patients' needs and operational factors like the workload of MTFs. Patients can be returned to duty at any point along the continuum of care.

¹⁵³ NATOTerm; TTF proposal to follow.

¹⁵⁴ NATOTerm; TTF proposal on renaming as patient staging unit.

¹⁵⁵ Draft definition. TTF and capability code proposal submitted.

¹⁵⁶ Refer to ACO *Patient Flow Management Guideline* or to the NATO *Patient Flow Functional Concept*.

¹⁵⁷ see NATO Patient Flow Functional Concept.

6.21 **Continuity of care**¹⁵⁸ is a medical support principle that states that relevant, constant and progressive care must be given to a patient during their entire medical treatment, whether in a medical treatment facility or in transit. Achieving continuity of care may require collaboration between the military and civilian medical system, possibly in a multinational cooperative effort, possibly leveraging non-medical capabilities, as well as incorporating contracted support.

6.22 Evacuation through the continuum of care may be interrupted. This might require the delivery of prolonged care techniques until the continuum of care can resume in a normal fashion.

¹⁵⁸ Figure to visualize Continuum of Care, follows.

Chapter 7 – Medical evacuation

Section 1 – Description

7.1 **Medical evacuation** is conducted during military operations by designated assets able to provide in transit care in accordance with prevailing medical standards at the same or a higher level as provided by the originating unit.¹⁵⁹ Medical evacuation (MEDEVAC) can be described according to where it occurs along the continuum of care.

- a. **Forward MEDEVAC**¹⁶⁰ (Fwd MEDEVAC) is the movement of patients in a platform with medical personnel from point of injury (POI) or onset of acute illness to the first medical treatment facility (MTF).
- b. **Tactical MEDEVAC** (Tac MEDEVAC) is the intratheatre movement of patients in a platform with medical personnel between MTFs. Patients will routinely have been stabilized prior to evacuation. Tac MEDEVAC might include in-transit intensive care.
- c. **Rearward MEDEVAC** (Rwd MEDEVAC) is the NATO coordinated movement of patients by ground, water, or air, in a platform with medical personnel from an MTF/casualty staging unit (CSU) to a Rwd MEDEVAC Hub, to enable safe transfer for final destination (including home nation, other NATO countries or a temporary out-of-theatre safe area).¹⁶¹
- d. **Strategic MEDEVAC**¹⁶² (Strat MEDEVAC) is the nationally coordinated movement of patients out of or within¹⁶³ the joint operations area (JOA)¹⁶⁴, to the home nation, or other designated safe area. It is a national responsibility, but it can be fulfilled by multinational agreements. In some circumstances, civil transport such as charter aircraft might be used for strat MEDEVAC, noting there will likely be restriction of movements imposed.

7.2 **Casualty evacuation** is the non-medically supervised process of moving a person who is wounded, injured or ill. In contrast to MEDEVAC, casualty evacuation (CASEVAC) means movements of casualties not employing dedicated or designated medical capabilities. CASEVAC is neither a medical capability, nor a medical responsibility but it is an important way for casualties to be transported to the point where they enter the medical support system.

7.3 There are instances where the use of any asset of opportunity to move patients might need to be considered instead of dedicated MEDEVAC assets. This should only be considered

¹⁵⁹ MEDEVAC is described in more Detail in AJMedP-2 *Allied Joint Medical Doctrine for Medical Evacuation* (SD).

¹⁶⁰ NATOTerm.

¹⁶¹ Refer to ACO *Patient Flow Management Guideline*.

¹⁶² NATOTerm.

¹⁶³ Terminology tracking file (TTF) Proposal submitted for adding “or within” into the NATOTerm definition of Strategic MEDEVAC.

¹⁶⁴ TTF Proposal to submit changing AOO to JOA to be aligned with NATOTerm.

if it will get the person to the required MTF safely and with less delay than waiting for MEDEVAC. This might be necessary where there are restrictions or shortages of available MEDEVAC assets, when the number of patients overwhelms the MEDEVAC system or where there is a need to preserve MEDEVAC assets for higher priority activities. To cope with patient rates and a high flow of patients in large scale operations, it may be necessary to temporarily use non-medical capability for all movements that are not in critical need of in-transit medical care. Commanders and medical personnel must be aware of the implications of using non-designated platforms as they cannot display protective emblems.

Section 2 - Medical evacuation assets

7.4 While MTFs are generally categorized in terms of roles, according to their capabilities and function, MEDEVAC assets are defined by the area in which they operate along the continuum of care. If designated assets are not available, non-designated assets may be used if the movement cannot be postponed. MEDEVAC assets operating in a non-permissive or combat environment should preferably be provided with force protection element.

7.5 MEDEVAC assets can be classified by the platform used:

a. **Ground MEDEVAC assets**¹⁶⁵ can evacuate patients from the POI or a casualty collection point even in harsh conditions and out of a combat zone but also transport patients between MTFs. Forward ground MEDEVAC assets should have commensurate mobility and protection as the force they are supporting, and medical equipment, tailored to mission purposes. Ambulances are the most common type of forward ground evacuation assets.¹⁶⁶ They may be staffed and equipped to provide advanced resuscitative/critical care or to deliver basic in-transit care at a higher capacity. Tactical ground evacuation assets may include high-capacity ambulances but also platforms capable to provide in-transit critical care, trains or buses configured for the transport of patients. Ground evacuation relies on lines of communication, which can easily be interrupted.

b. **Aeromedical evacuation (AE) assets** (tilt rotor, rotary and fixed wing) can provide a significant contribution to the timeliness of MEDEVAC. The specialist personnel and equipment required for AE must be given access to the air asset in a timely manner to ensure preparation for the specific aeromedical evacuation task. The operating environment, the transport time as well as the patient's condition may require the standard AE crew to be augmented with specialized medical personnel.¹⁶⁷ AE assets can cover a bigger area and transport patients much faster than surface assets even if lines of communication are interrupted, but they are limited by capacity,

¹⁶⁵ Refer to AMedP-2.4 *Guidelines on Ground Medical Evacuation (SD)*.

¹⁶⁶ Refer to AMedP-1.14 *Minimum Medical Design Requirements for Military Motor Ambulances (STANAG 2872)*

¹⁶⁷ Refer to AAMedP-1.1 *Aeromedical Evacuation (STANAG 3204)*.

operational (e.g. lack of air superiority) and weather conditions, and should have a sufficient backup by surface MEDEVAC assets.

c. **Maritime and water surface MEDEVAC assets**¹⁶⁸ are not the primary means of MEDEVAC in maritime or amphibious operations but constitute an essential backup contingency when AE is compromised, or patient rates exceed the capacity of evacuation assets. They may be staffed and equipped to provide resuscitative/critical care or to deliver basic in transit care at a higher capacity. Usually, tilt rotor/rotary wing air assets are used for medical evacuation between maritime platforms and MTFs.

7.6 Bulk patient transport assets. In case of large-scale patient flow additional high-capacity platforms such as trains, buses or ferries must be considered. This is when the number of patients exceeds the available ground/air or maritime MEDEVAC resources. This includes, e.g. patient transportation trains and buses, as well as AE platforms.

Section 3 – Planning considerations

7.7 Successful patient treatment and transport coordination requires MEDEVAC assets with qualified and specifically trained personnel in sufficient numbers and must consider factors such as the operating environment, the weather, the length and quality of evacuation routes. The MEDEVAC system should be able to continuously ensure:

- evacuation of patients during day and night, in consideration of all weather and sea conditions, in any terrain and any operational circumstances;¹⁶⁹
- provision of appropriate emergency and critical care throughout the evacuation;
- patient flow management to the most appropriate MTFs; and
- real-time/near real-time patient tracking through the entire continuum of care.

Section 4 – MEDEVAC responsibilities

7.8 Nations are responsible to provide the required availability of MEDEVAC capabilities and to harmonize their MEDEVAC procedures and capabilities based on agreed NATO standards. The NATO medical defence planning capability statements provide an agreed standard for the minimum requirements of MEDEVAC capabilities and can be used as a planning reference. Commanders are responsible for the operational integration, coordination and employment of the MEDEVAC system and its assets.

7.9 Detailed MEDEVAC plans need to be established in close cooperation with the personnel staff (J1), operations (J3), the logistics (J4) and communications (J6) staff at all levels of command for the respective area of responsibility balanced against the force strength and the

¹⁶⁸ No dedicated MEDEVAC asset exists for maritime operations; therefore any “Lift of Opportunity” will be used and/or a MEDEVAC asset will be designated. A patient evacuation team will likely coordinate.

¹⁶⁹ Acknowledging that the evacuation could be significantly influenced by environmental and operational factors.

exposure to risk. National caveats, multinational agreements and the accountability for MEDEVAC must be reflected in the operation plan.

7.10 NATO commanders and their medical staff need to ensure the best possible and most effective use of national MEDEVAC assets and activities in the area of operations (AOO) by establishing a patient evacuation coordination cell.

Section 5 – Patient flow management

7.11 Patient flow management (PFM) is an ongoing process during peacetime through crisis to conflict and hence pre-planned. It is the active process of directing, controlling and coordinating the transfer of patients within and outside a JOA from the point of injury or onset of illness through the continuum of care, in order to facilitate the most effective use of medical treatment and evacuation resources, and to ensure that the patient receives appropriate care in a timely manner.^{170,171}

7.12 Critical factors to be considered for patient flow management include, but not limited to:

- clinical need of the individual patient;
- location, number and clinical condition of patients;
- availability of medical capabilities for MEDEVAC;
- variant and range of MEDEVAC assets;
- location and capacities of MTFs, their specialist capabilities, medical equipment status and staffing levels;
- current bed occupancy status at each MTF, including any surgical backlog;
- communication management in the medical emergency response chain;
- operating and natural environment, including road and weather conditions;
- tactical situation associated risk to patients or evacuation assets; and
- patient return policy.

7.13 The flow of patients should follow the continuum of care. Timely evacuation should be to the most appropriate medical treatment facility primarily based on clinical imperatives, but also tempered by the operation's environment, noting that the most appropriate facility may not necessarily be the closest. Operational imperatives (such as the patient load in major joint operations) may necessitate contingency and emergency plans and procedures for prolonged care and MEDEVAC.

7.14 MEDEVAC of patients with known, suspected or highly contagious infections may be severely impeded due to international health regulations or nationally imposed restrictions of movement even if patient movement would be required to safeguard the force. The employment

¹⁷⁰ ACO Patient Flow Management Guideline.

¹⁷¹ NATO Patient Flow Functional Concept.

of specialist teams and equipment such as isolators, may reduce the risk of contaminating critical infrastructure and resources and of spreading contagious diseases to an acceptable minimum.¹⁷² Close coordination between the commander's staff and civil authorities as well as force and public health protection will be required for infectious patient evacuation, notably in outbreak response.

7.15 Long distance MEDEVAC of patients which can only be stabilized for a limited time may require specific capabilities, such as in-transit surgery and critical care. Resources, staffing and procedures might be limited by the characteristics of the available platform and differ between the Nations. Therefore, patient evacuation planning and management must consider respective alternative evacuation routes and treatment protocols.

¹⁷² Refer to AJMedP-7 *Allied Joint Chemical, Biological, Radiological and Nuclear (CBRN) Medical Support Doctrine*.

Intentionally blank

Chapter 8 – Medical logistics

Section 1 – Description

8.1 Medical logistics (MEDLOG)¹⁷³ embraces planning, procurement, storage, movement, distribution, maintenance and disposal of health care products, and medical materiel in order to provide effective medical support. Legislation, regulations and responsibilities related to medical logistics may differ between Nations.

8.2 MEDLOG ensures the efficient and effective delivery of medical support. Although primarily a national responsibility, some aspects might be suitable for collective and coordinated efforts or common funded approaches.

Section 2 – Considerations for medical logistics

8.3 Specific considerations for MEDLOG are:

- a. **Protected status.** Medical supplies are protected under the terms of the Geneva Conventions, when properly marked and separately stored, processed and distributed from combat supplies.¹⁷⁴
- b. **Regulatory aspects.** The accounting, transportation, administration and use of medical supplies, in particular controlled pharmaceuticals and blood products are governed by national, host nation, and international regulations. Also, there may be strict legal environmental requirements for the disposal of biomedical waste. The consumption and disposal of medical materiel must be recorded for legal, environmental and asset control reasons.
- c. **Handling requirements.** The nature of medical supplies requires rigorous control and management by specialists due to their technical and perishable characteristics, especially their limited shelf life and vulnerability to storage, handling, transportation and environmental conditions.¹⁷⁵
- d. **Importance.** The availability of medical materiel, even items that may seem insignificant, can be of vital importance and impact mission success. The MEDLOG system must contain expertise for the potential implications of medical materiel shortfalls and delays and need to respond effectively to unexpected demands.

8.4 **Specific medical materiel.** The nature of specific medical materiel requires that certain functions of MEDLOG are regulated in a particular way. This includes, but is not limited to:

¹⁷³ A TTF for MEDLOG to be submitted to add the abbreviation to the NATO definition of Medical Logistics.

¹⁷⁴ Refer to AMedP-1.5 *Identification of Medical Material for Field Medical Installations*.

¹⁷⁵ Refer to AMedP-1.20 *Military Good Distribution Practice for Medical Materiel*.

- a. **Blood products.** The supply of blood products is a critical function within MEDLOG. Availability of blood products is mandatory for all roles of medical support with a surgical capability and should be considered for all resuscitative capabilities. As the supply of blood products is primarily a national responsibility, in order to ensure that national and international agreed minimum standards are met, it is more practical and feasible to set up multinational support arrangements.¹⁷⁶
- b. **Medical gases.**¹⁷⁷ Parameters and characteristics for common use medical gas cylinders, such as standard colour code system for the identification of the content, facilitate interchangeability and ease the resupply.
- c. **Medical waste.** Standards and procedures for handling and disposal of regulated medical waste must be incorporated in the medical logistic support plan across the theatre. It should consider all necessary aspects to prevent pollution, protect the environment, comply with regulatory guidance and policy, protect the deployed force as well as the local population, and follow host nation laws. An environmental protection officer should be consulted for general waste-management planning.¹⁷⁸
- d. **Stretchers.**¹⁷⁹ Standards for stretchers, bearing brackets and attachment supports should have standardized dimensions to facilitate cross-servicing between NATO forces for transportation of patients by land, air and maritime assets.

8.5 In order to meet the Alliance's ambitions regarding MEDLOG, interoperability and burden sharing should be focused by adopting and implementing agreed standards, professional guidelines and reflecting best practice. This includes labelling, usage of metric units and standardized colour coding for self-injection devices.¹⁸⁰

8.6 Nations providing medical material, including pharmaceuticals, to other nations or entities are responsible for appropriate storage, handling and transportation until the point of handover. A memorandum of understanding or similar agreement should cover this exchange.

Section 3 – Planning considerations and conduct of medical logistics

8.7 The MEDLOG system needs to ensure the sustainability of medical support under all operational and environmental conditions. The scale and scope of this system will be mission specific. If activated, a Joint Logistics Support Group¹⁸¹ will coordinate third line MEDLOG support to troop-contributing nations in the area of operation.¹⁸² This can include intermediate

¹⁷⁶ Refer to AMedP-1.1 *Minimum Requirements for Blood, Blood Donors and Associated Equipment* (STANAG 2939).

¹⁷⁷ Refer to AMedP-1.19 *Cross-servicing of medical gas cylinders*.

¹⁷⁸ Refer to AJepP-2 *Environmental Protection for Military camps in NATO Operations* (STANAG 2582).

¹⁷⁹ Refer to AMedP-2.1 *Stretchers, Bearing Brackets and Attachment Supports* (STANAG 2040).

¹⁸⁰ Refer to AMedP-1.12 *Medical and Dental Supply Procedures* (STANAG 2128).

¹⁸¹ *NATOTerm*.

¹⁸² Refer to AJP-4.1 *Allied Joint Doctrine for Logistics*.

storage and distribution of medical supplies in order to increase sustainment efficiency and burden sharing between nations.

8.8 Close coordination with other sustainment functions especially with logistics is required for overall planning and executing of MEDLOG. In order to sustain the medical support to the forces, it is necessary to adapt to and to feed into the existing logistics systems and procedures as much as possible.¹⁸³

8.9 MEDLOG links the industrial base providing materiel and services to NATO forces. It is expected that various medical consumables are not readily available on day zero. Therefore, it is important to consider and address the potential disruptive impacts of long lead times, extended delivery timelines and vulnerability to supply chains.¹⁸⁴

8.10 The MEDLOG system must be straightforward, reliable and capable of delivering medical supplies rapidly throughout the theatre. It must enable national contributions to be self-sufficient from deployment, throughout the duration of the mission until redeployment, as specified by the planning staff to apply all necessary mitigating measures to comply as closely as possible with the principles of good distribution practice (GDP).¹⁸⁵

8.11 **Medical maintenance and repair.** In view of the limited stockpile capacity for medical supplies, it is essential to ensure the maintenance and repair of medical equipment to reduce losses and failures, as well as to ensure the safe and swift return of equipment to full functionality when required. Medical equipment maintenance and repair supports the readiness of medical elements. Sustaining medical systems and equipment as effectively, responsively, economically, and as close to the point of use as the operation permits, ensures the readiness of medical support elements. National legal regulations on medical device law must be observed accordingly.

8.12 **Medical stockpile planning.**¹⁸⁶ Medical stockpile planning must ensure that adequate medical supplies and resources are assigned for the support of NATO forces. This includes the establishment and maintenance of minimum medical materiel, as well as independent production capabilities for critical resources. Medical stockpile requirements are expressed in terms of medical days of supply (MDOS), with the exception for specific categories of medical material where certain endstate stockpiles reflect time-independent needs. The range and quantity of MDOS should be determined in accordance with national regulations as part of the planning process.

¹⁸³ Refer to AJP-4 *Allied Joint Doctrine Sustainment of Operations*

¹⁸⁴ NATO distinguishes between production and consumer logistics. Refer to Lexicon for details.

¹⁸⁵ Refer to AMedP-1.20 *Military Good Distribution Practice for Medical Material*. In Europe, GDP is an internationally accepted quality warranty system. In the USA, GDP is based on the Code of Federal Regulations (CFR) 21 CFR 210/211, and United States Pharmacopeia (USP) 1079. In Canada GDP, is based on Health Canada Good Manufacturing Practices for Drug Products GUI-0001 and Guidelines for Environmental Control of Drug Products during Storage and Transportation GUI-0069.

¹⁸⁶ Refer to MC 55/5 NATO *Logistic readiness and Sustainment Policy* (WD, under development).

8.13 Medical prepositioning. The strategic placement of medical supplies will ensure that vital resources are readily available and promptly deployed to the most affected areas by the NATO operation, thereby minimizing response time. This may require pre-stocking warehouses, storage facilities for medical supplies or establishing mobile medical units. Pre-positioning may involve additional civil and military GDP measures.

Annex A – Medical doctrine architecture

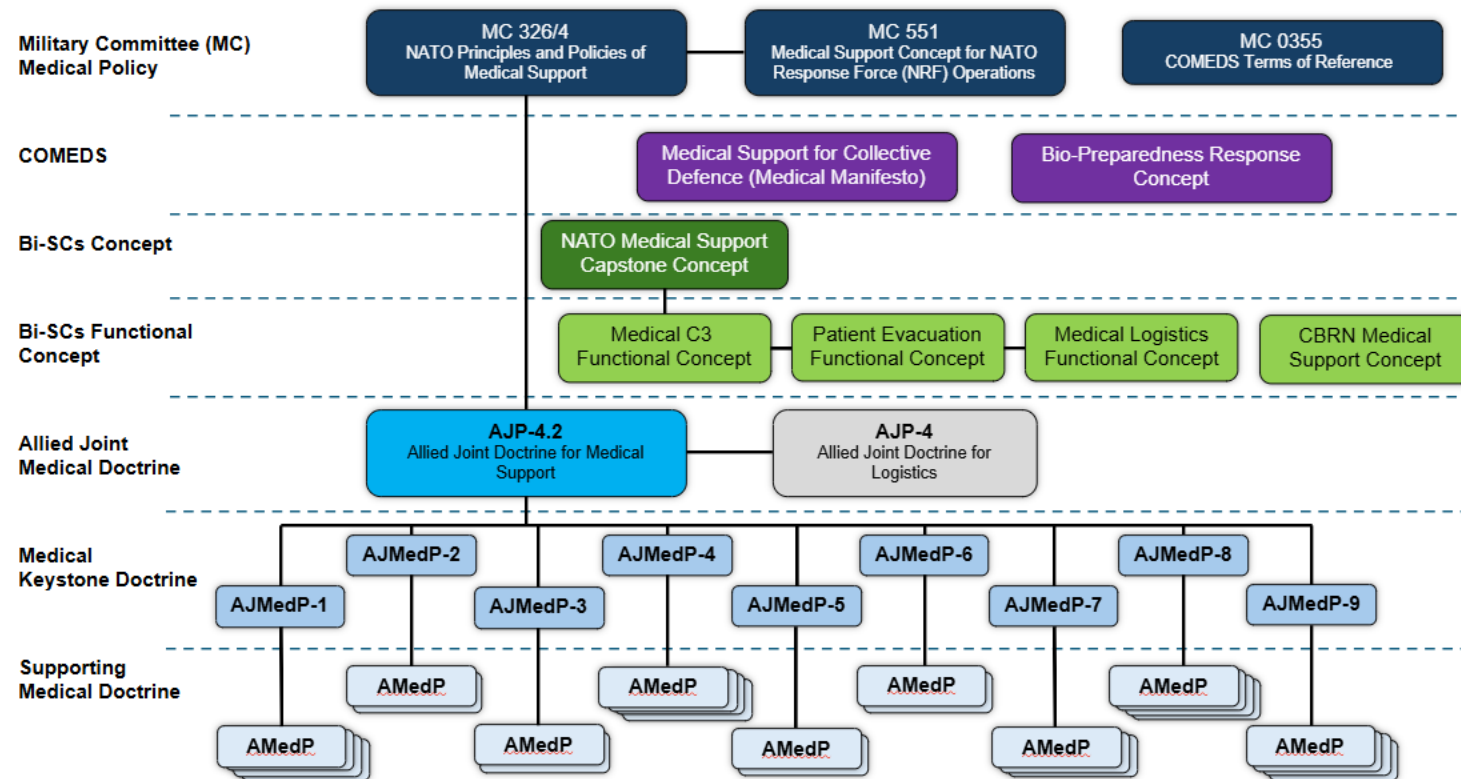


Figure A.1 – Medical Doctrine Architecture

Intentionally blank

Annex B – Considerations for special populations at risk

Principles of medical care to persons deprived of their liberty

1. Their physical and mental health and the integrity of their person/these persons shall not be endangered.
2. All necessary measures shall be taken to prevent epidemics in detention facilities.
3. They shall be provided with an adequate and, if possible, culturally appropriate diet.
4. Their general health state shall be examined by medical personnel as soon as possible after deprivation of liberty and thereafter at least once a month.
5. They shall not to be denied presenting themselves to the medical authorities for examination at any time.
7. Where their state of health requires it, they shall be transferred to specialized establishments for special treatment or surgery.
8. Medical procedures, not indicated by the patient's state of health, particularly experiments on persons deprived of their liberty who are sick, and wounded are illegal and strictly forbidden.

Principles of medical care for non-combatant/civilian patients

1. Medical support for non-combatants/civilians shall provide emergency care up to life, limb or function preserving surgery to all patients that require it and are presented to a military facility only restricted by the medical treatment facility's means, capabilities and its primary task to provide medical support to the military population at risk.
2. Medical support for non-combatants/civilians shall limit periods of hospitalization of patients to the minimum necessary to ensure an effective capacity to accept and treat new patients is maintained.
3. Medical support for non-combatants/civilians shall adapt therapeutic protocols to the local health situation. It may not be appropriate to undertake a course of treatment if the HN's clinical infrastructure does not have the capability to successfully complete the treatment after discharge from the military medical system.
4. Medical support for non-combatants/civilians should respect cultural and religious practices and preferences.
5. Medical support for non-combatants/civilians should return the lead for provision of treatment to the HN' health care system as early as possible.

Intentionally blank

Lexicon

Part 1 – Acronyms and Abbreviations

A

AE	aeromedical evacuation
AJP	Allied joint publication
AJMedP	Allied joint medical publication
AMedP	Allied medical publication
AOR	area of responsibility
AOO	area of operations

B

BC	battle casualty
----	-----------------

C

C2	command and control
CASEVAC	casualty evacuation
CBRN	chemical, biological radiological, nuclear
CIHSO	continuous improvement in healthcare support on operations
CIS	communication and information system
CJMED	combined joint medical
COP	common operating picture
CMI	civil-military interaction
CSU	casualty staging unit

D

DCR	damage control resuscitation
DCS	damage control surgery
DNBI	disease and non-battle injury

E

F

FHP	force Health protection
FP	force protection

G

GDP	good distribution practice
-----	----------------------------

H

HN	host nation
HNS	host nation support

I

IO International Organisation
IPC infection prevention and control

J

JOA joint operations area
JLSG Joint Logistics Support Group
JMED joint medical
JOA joint operations area

L

LI lessons identified
LL lessons learned

M

MAG Medical Advisory Group
MASCAL mass casualty
MDO multi-domain operations
MDOS medical days of supply
MEDAD medical advisor
MEDASSESSREP medical assessment report
MEDDIR medical director
MEDEVAC medical evacuation
MedIntel medical intelligence
MEDSITREP medical situation report
MHC military health care
MILMED COE Centre of Excellence for Military Medicine
MMI major medical incident
MRoE medical rules of eligibility
MTF medical treatment facility
MWA military working animals

N

NCS NATO Command Structure
NGO Non-Governmental Organization
NRM NATO Response Measures

O

OEH occupational and environmental health
OPP operations planning process

P

PAR population at risk
PECC patient evacuation coordination cell
PHEC pre-hospital emergency care
POI point of injury
PR personnel recovery

R

R2B	role 2 basic
R2F	role 2 forward
RmedP	recognized medical picture
RSN	reinforcement and sustainment network

S

SACEUR	Supreme Allied Commander Europe
SHAPE	Supreme Headquarters Allied Powers Europe
SME	subject matter expert
SOF	special operations forces

T

TCCC	tactical combat casualty care
TCN	troop-contributing nation
TTF	terminology tracking file

U

W

WHO	World Health Organization
-----	---------------------------

Part 2 – Terms and definitions

A

aeromedical evacuation: The movement of patients under medical supervision by air transport to and between medical treatment facilities as an integral part of the treatment continuum.

all hazard approach: A comprehensive threat agnostic¹⁸⁷ framework which addresses operational hazards that may affect the health of the force or the population at risk.

Allied joint medical publication: An Allied medical publication containing doctrine applicable to NATO and NATO-led operations involving more than one service.

Allied joint publication: An Allied publication containing doctrine applicable to NATO and NATO-led operations involving more than one service.

area of operations: An area within a joint operations area defined by the joint force commander for conducting tactical level operations.

area of responsibility: For a given level of command, an area assigned to a commander to plan and conduct operations.

aviation medicine: The special field of medicine which is related to the biological and psychological problems of flight.

B

battle casualty: A casualty incurred as the direct result of hostile action, sustained in combat or relating thereto or sustained going to or returning from a combat mission. Examples: battle stress cases (BSC), captured in action (CIA), died of wounds (DOW), killed in action (KIA), missing in action (MIA), nuclear, biological, chemical, and radiological casualties (CBRN), and wounded in action (WIA).

C

casualty collection point: A specific location where casualties are assembled to be transported to a medical treatment facility.

casualty staging unit: A medical unit caring for in-transit patients under medical personnel supervision.

civil-military interaction: Activities between NATO military bodies and non-military actors to foster mutual understanding that enhances effectiveness and efficiency in crisis management and conflict prevention and resolution.

¹⁸⁷ Refer to AJP-3.8 *Allied Joint Doctrine for Comprehensive Chemical, Biological, Radiological, and Nuclear Defence*.

computed tomography: A form of tomography in which a computer controls the motion of the X-ray source and detectors, processes the data, and produces the image.

D

damage control resuscitation: A systematic approach to dealing with major trauma combining the catastrophic bleeding, airway, breathing and circulation paradigm with a series of clinical techniques from immediate life-saving measures up to surgical interventions in order to minimize blood loss, maximize tissue oxygenation and optimise outcome.

damage control surgery: A surgical intervention where the completeness of the immediate surgical repair is sacrificed to achieve haemorrhage and contamination control, in order to avoid a deterioration of the patient's condition.

disaster relief: Services made available to individuals and communities that have experienced losses due to disasters (Source OED)

doctrine: Fundamental principles by which the military forces guide their actions in support of objectives. It is authoritative but requires judgement in application.

F

force health protection: All medical efforts to promote or conserve physical and mental well-being, reduce or eliminate the incidence and impact of disease, injury and death and enhance operational readiness and combat effectiveness of the forces.

force protection: All measures and means to minimize the vulnerability of personnel, facilities, equipment and operations to any threat and in all situations, to preserve freedom of action and the operational effectiveness of the force, thereby contributing to mission success.

forward MEDEVAC: The movement of patients in a platform with medical personnel from point of injury or onset of acute illness (POI) to the first medical treatment facility (MTF)

G

good distribution practice: GDP ensures that the quality of a pharmaceutical product is maintained by means of adequate control of the numerous activities which occur during the distribution process and secures the distribution system from counterfeits, unapproved, illegally imported, stolen, counterfeit, substandard, adulterated, and/or misbranded pharmaceutical products. (WHO Definition – Source UN Lexicon)

H

health and medical support: A set of actions which contribute to the preparation and preservation of the human potential by full and coherent care.

health service support: All services provided directly or indirectly to contribute to the health and well-being of patients or a population

host nation: A country that, by agreement:

- a. receives forces and materiel of NATO member states or other countries operating on/from or transiting through its territory;
- b. allows materiel and/or NATO and other organizations to be located on its territory; and/or
- c. provides support for these purposes.

host nation support: Civil and military assistance rendered in peace, crisis or war by a host nation to NATO and/or other forces and NATO organizations that are located on, operating on/from, or in transit through the host nation's territory.

humanitarian assistance: As part of an operation, the use of available military resources to assist or complement the efforts of responsible civil actors in the operational area or specialized civil humanitarian organizations in fulfilling their primary responsibility to alleviate human suffering.

I

intelligence: The product resulting from the directed collection and processing of information regarding the environment and the capabilities and intentions of actors, in order to identify threats and offer opportunities for exploitation by decision-makers

international organisation: An intergovernmental, regional or global organization governed by international law and established by a group of states, with international juridical personality given by international agreement, however characterized, creating enforceable rights and obligations for the purpose of fulfilling a given function and pursuing common aims.

J

joint operations centre: Element of a joint force commanders headquarters established for planning, monitoring, and guiding the execution of the commander's decisions.

L

lines of Communication: All the land, water, and air routes that connect an operating military force with one or more bases of operations, and along which supplies and reinforcements move.

M

Medical Advisor: The senior medical staff officer in a formation headquarters responsible for ensuring that the commander and his staff are properly aware of the

health and medical implications of their actions and any related issues connected to an operation.

medical assessment report: A report in a standardized format used to provide NATO commands with an overall assessment of the medical and health services situation for in-place and reinforcing forces together with any remedial action taken or planned.

Medical Director: the functional head of the medical services in a formation or theatre of operations.

medical emergency response team: A physician-led medical team trained and equipped to provide pre-hospital emergency medical care, usually deployed with forward air evacuation assets. Medical is deleted to be consistent and coherent with the definition within the area of emergency medical care. TTF needs to follow.

medical evacuation current NATO Term: The medically supervised process of moving any person who is wounded, injured or ill to and/or between medical treatment facilities as an integral part of the treatment continuum.

medical evacuation TTF proposal: Medical evacuation (MEDEVAC) is the movement of a patient who is wounded, injured, or ill to and/or between medical treatment facilities under the supervision of personnel trained and equipped to provide appropriate medical care.

medical service: 1. Activities related to all professional, technical, and related functions performed by physicians and/or other health care provided under the direction of a physician or another medical professional. 2: Those organizational branches of the military that provide those professional, technical, and related functions performed by military medical personnel. 3. In a military organization, all professional, technical, and related functions performed by medical professionals.

medical intelligence: A specialized intelligence product derived from medical, bio-scientific, epidemiological, environmental and other information related to human or animal health.

medical situation report: A report in a standardized format used to inform higher echelons of the medical and health services about the medical and health services situation of friendly forces.

medical support: A function encompassing the full range of medical planning and provision of medical and health services to maintain the force strength through disease prevention, evacuation, rapid treatment of the diseased, injured and wounded, their recovery and return to duty.

military health care: Measures and activities to sustain or restore the health and the fighting strength of all military personnel from enlistment to retirement through the full spectrum of military duties in garrison and on deployment.

multinational medical unit: A unit formed when two or more nations agree to provide medical support.

N

Non-Governmental Organization: A private, not for profit, voluntary organization with no governmental or intergovernmental affiliation, established for the purpose of fulfilling a range of activities, in particular development-related projects or the promotion of a specific cause, and organized at local, national, regional or international level.

O

one health approach: Is a World Health Organization (WHO) initiative for an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.

operational command: The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational and/or tactical command and/or tactical control as the commander deems necessary.

operational control: The authority delegated to a commander to direct assigned forces to accomplish specific missions or tasks that are usually limited by function, time, or location; to deploy units concerned, and to retain or assign tactical command or control of those units.

operation plan: A plan for a single or series of connected operations to be carried out simultaneously or in succession. Notes:

- 1 – It is the form of directive employed by higher authority to permit subordinate commanders to prepare supporting plans and orders.
- 2 – The designation 'plan' is usually used instead of 'order' in preparing for operations well in advance.
- 3 – An operation plan may be put in effect at a prescribed time, or on signal, and then becomes the operation order.

P

population at risk: A group of individuals exposed to conditions which may cause injury or illness.

patient evacuation team: The patient evacuation team is a coordinating element for patient movement in missions ashore by ground or/and air. It usually consists of two Marine Radio Operators and two Patient Evacuation Officers (PEO), trained in patient movement.

point of injury: The place where injuries occurred, acute symptoms or the onset of illness were reported first.

primary health care: The provision of integrated, accessible health care services by clinical personnel trained for comprehensive first contact and the continuing care of

individuals experiencing signs and symptoms of ill health or having health concerns (including health promotion, disease prevention, patient education and counselling, and the diagnosis and treatment of acute and chronic illness).

R

restriction of movement: A measure for controlling the spread of contagious disease by restricting contact between healthy groups of personnel and those who either have, or are suspected of having contracted a contagious disease.

role of medical support: Category that identifies the functions and capabilities of medical elements. Notes: 1. Medical care is categorized into four roles (role 1, role 2, role 3, role 4). 2. Most of the care capabilities of each role are intrinsic to the next higher role.

reinforcement and sustainment network: A strategic construct that facilitates reinforcement by forces and sustainment flow to enable the whole of SACEUR's AOR. It links all physical elements such as zones, facilities and bases and functional elements such as governance, stakeholders, networks, processes and agreements.

S

secondary health care: The provision of specialised clinical care requiring training and equipment levels beyond that which could normally be provided at the level of primary health care.

standard operating procedure: A document that outlines a standardized internal procedure. Notes: A standard operating procedure is used as a guide for the preparation of standard operating instructions

strategic MEDEVAC: Inter-theatre medical evacuation.

T

transfer of authority: Within NATO, an action by which operational command or operational control of designated forces and/or resources, if applicable, is passed between national and NATO commands or between commanders in the NATO chain of command.

W

World Health Organization: A specialized agency of the United Nations to direct international health within the United Nations' system and to lead partners in global health responses.

AJP-4.2(A)(1)